GANZ

CCTV PRODUCT CATALOGUE
09-10

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FOREWORD

Dear Customers, Business Partners and Interested Parties,

In this catalogue you will find on 134 pages our entire product portfolio from optical components to electronic products. This revised edition both with a new register and a new structure will serve you as a well-arranged reference book in which you can find the wide variety of CBC products quickly and easily.

Video surveillance or closed circuit television (CCTV) has now become commonplace in many areas of public and industrial life. Here, CBC is in demand with its wide range of products.

With the computar brand – the CBC Group is one of the world's top three lens manufacturers – the company offers a comprehensive range of high-performance lenses with many features. CBC has specialised in meeting industrial demands especially with its new megapixel lenses. These high-quality lenses are characterised by precision and image quality and ensure the correct angle of view even in arduous conditions.

The GANZ brand has been the trademark of all electronic products and cameras since 1999. It combines video management, integrated camera systems, components as well as IT and transmission technology. The latest member of the GANZ family in the field of flat panel speakers is the GANZ Audio Division.

With VSoIP, video surveillance over Internet protocol, CBC launched a high-performance video management system on the market which permits both the use of existing network structures and the integration of IP-ready and analog components into a comprehensive video surveillance solution.

The GANZ product range also includes the C-AllView camera. It offers professional video surveillance for demanding security areas and the highest requirements. For areas with particularly high demands on image quality, this camera is also available as a combined video and thermal camera or with ground radar for the parallel control of up to five C-AllViews.

CBC (Deutschland) GmbH is a Japanese wholesaler founded in 1925. 27 branches in Europe, America and Asia supply the numerous high-quality products all over the world. Our German headquarters is located in Düsseldorf. Video surveillance technology is the largest division at this location alongside chemicals, medical devices and flooring.

New challenges and the development of innovative sales markets are an important factor for our motivation. Our overriding objective is the continual improvement and new development of all products in order to be able to meet your requirements and demands at all times.

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MANUAL LENSES

1/3" & 1/2" lenses with manual iris

● **Fixed focal length**

● **Manual iris**

● **Manual focus**

● **CS mount**

Manual iris

The light incidence is regulated in lenses using the iris and the iris setting. To be able to optimally regulate the light, the lenses from computar offer three possibilities of setting the iris. Depending on the field of application, you can choose a manual setting or automatic control electronics optionally in the lens (video) or in the camera (DC). Whereas automatic iris control should be used outdoors owing to the unavoidable fluctuations in lighting, lenses with a manual iris are only suitable for areas with constant light conditions.

Model	T2314FICS	T2616FICS	T0412FICS	T0812FICS	H1214FICS
Format	1/3"	1/3"	1/3"	1/3"	1/2"
Lens mount	CS	CS	CS	CS	CS
Focal length	2.3 mm	2.6 mm	4.0 mm	8.0 mm	12.0 mm
F-stop [F]	1.4 – 16C	1.6 – 11C	1.2 – 16C	1.2 – 16C	1.4 – 16C
Angle of view (HOR)	113.3°	99.6°	63.9°	34.7°	30.4°
M.L.D.	0.2 m	0.3 m	0.2 m	0.2 m	0.3 m
Filter thread at front (ØM x P)	–	–	–	–	–
Dimensions (Ø x H)	34.5 x 35.4 mm	34.5 x 34.7 mm	34.5 x 33.0 mm	34.5 x 33.0 mm	34.5 x 33.0 mm
Weight	43 g	45 g	36 g	37 g	33 g

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LENSES WITH DC IRIS

1/3" lenses with DC iris

- ● **Automatic iris (DC)**
- ● **Fixed focal length**
- ● **Manual focus**
- ● **CS mount**

Auto-iris (DC & video-controlled)
There are various types of auto-iris: DC, video and motor-controlled. The DC irises are regulated directly by the camera (DC iris = galvanometer). The video-controlled iris is controlled by the electronics of the lens. The camera supplies the lens with the operating voltage and the video signal for balance. Motorised irises are still sometimes used with motorised zoom lenses and so the iris can be manually controlled via an external control without having to come into contact with the lens itself.

Model	TG2314FCS	TG2616FCS	TG0412FCS
Format	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS
Focal length	2.3 mm	2.6 mm	4.0 mm
F-stop [F]	1.4 – 360C	1.6 – 360C	1.2 – 360C
Angle of view (HOR)	113.3°	99.6°	63.9°
M.L.D.	0.2 m	0.3 m	0.2 m
Filter thread at front (ØM x P)	–	–	–
Dimensions (Ø x H x W)	32.0 mm x 39.8 mm x 35.4 mm	32.0 mm x 39.8 mm x 34.7 mm	32.0 mm x 39.8 mm x 33.0 mm
Weight	45 g	47 g	38 g

Model	TG0812FCS	HG0614FCS-31	HG1214FCS
Format	1/3"	1/2"	1/2"
Lens mount	CS	CS	CS
Focal length	8.0 mm	6.0 mm	12.0 mm
F-stop [F]	1.2 – 360C	1.4 – 360C	1.4 – 360C
Angle of view (HOR)	34.7°	58.3°	30.4°
M.L.D.	0.2 m	0.2 m	0.3 m
Filter thread at front (ØM x P)	–	–	–
Dimensions (Ø x H x W)	32.0 mm x 39.8 mm x 33.0 mm	32.0 mm x 39.8 mm x 33.0 mm	32.0 mm x 39.8 mm x 33.0 mm
Weight	39 g	37 g	39 g

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LENSES WITH VIDEO-CONTROLLED IRIS

1/3" & 1/2" lenses with fixed focal length

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- ● **Automatic iris (video)**
- ● **Fixed focal length**
- ● **Manual focus setting**
- ● **CS mount**

With lenses with a fixed focal length the iris setting is regulated by automatic control electronics in the lens. A 4-pin connector which can be directly connected to the iris output of the camera is used on all lenses for connection. The focus is set manually.

Model	TG2314AFCS	TG2616AFCS	TG0412AFCS
Format	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS
Focal length	2.3 mm	2.6 mm	4.0 mm
F-stop [F]	1.4 – 360C	1.6 – 360C	1.2 – 360C
Angle of view (HOR)	113.3°	99.6°	63.9°
M.L.D.	0.2 m	0.3 m	0.2 m
Filter thread at front (ØM x P)	–	–	–
Dimensions (Ø x H x W)	32.0 mm x 39.8 mm x 35.4 mm	32.0 mm x 39.8 mm x 34.7 mm	32.0 mm x 39.8 mm x 33 mm
Weight	48 g	50 g	42 g

Model	TG0812AFCS	HG0614AFCS	HG1214FCS
Format	1/3"	1/2"	1/2"
Lens mount	CS	CS	CS
Focal length	8.0 mm	6.0 mm	12.0 mm
F-stop [F]	1.2 – 360C	1.4 – 360C	1.4 – 360C
Angle of view (HOR)	34.7°	58.3°	30.4°
M.L.D.	0.2 m	0.2 m	0.3 m
Filter thread at front (ØM x P)	–	–	–
Dimensions (Ø x H x W)	32.0 mm x 39.8 mm x 33.0 mm	32.0 mm x 39.8 mm x 33.0 mm	32.0 mm x 39.8 mm x 33.0 mm
Weight	43 g	41 g	35 g

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Varifocal lenses

- Manual iris
- Manual focus
- Manually adjustable focal length
- CS mount
- IR-corrected varifocal lenses
- 1/3" and 1/2" models

Varifocal lenses: Thanks to the variable focal length, you no longer require a whole host of fixed focal lengths (4.0 mm; 8.0 mm, …) but you can cover most applications with one single lens (e.g. 3.5 mm – 8.0 mm). Moreover, they are used when the required focal length for an application is not known in advance. The relevant connection cable is available in lengths of 9 or 31 cm.

Model	T2Z1816CS	T2Z3514CS	T3Z2910CS	T3Z2910CS-IR	T3Z3510CS
Format	1/3"	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS	CS
Focal length	1.8 – 3.6 mm	3.5 – 8.0 mm	2.9 – 8.2 mm	2.9 – 8.2 mm	3.5 – 10.5 mm
F-stop [F]	1.6 – 16C	1.4 – 16C	1.0 – 16C	1.0 – 16C	1.0 – 16C
Angle of view (HOR)	144.2° – 79.4°	77.6° – 35.4°	98.3° – 35.2°	95.0° – 35.6°	81.6° – 27.2°
M.L.D.	0.2 m	0.4 m	0.5 m	0.5 m	0.3 m
Filter thread at front (ØM x P)	–	–	–	–	–
Dimensions (Ø x H)	37.4 x 51.0 mm	34.0 x 43.5 mm	36.5 x 44.3 mm	33.5 x 46.6 mm	41.6 x 48.8 mm
Weight	68 g	38 g	41 g	44 g	63 g

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MANUAL VARIFOCAL LENSES

1/3" & 1/2" varifocal lenses with manual iris

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Model	T3Z3510CS-IR	T4Z2813CS-IR	T4Z2813CS-IR	T5Z8513IR
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	3.5 mm – 10.5 mm	2.8 mm – 12.0 mm	2.8 mm – 12.0 mm	8.5 mm – 40.0 mm
F-stop [F]	1.0 – 16C	1.3 – 16C	1.3 – 16C	1.3 – 16C
Angle of view (HOR)	81.8° – 27.2°	102.2° – 23.7°	102.2° – 23.7°	33.5° – 7.1°
M.L.D.	0.3 m	0.3 m	0.3 m	0.8 m
Filter thread at front (ØM x P)	–	–	–	37.5 mm × 0.5 mm
Dimensions (Ø x H)	41.6 mm x 48.8 mm	40.7 mm x 56.0 mm	40.7 mm x 56.0 mm	47.0 mm x 62.9 mm
Weight	63 g	63 g	64 g	126 g

Model	T10Z0513CS	H2Z4516CS	H3Z4512CS-IR	H3Z1014CS
Format	1/3"	1/2"	1/2"	1/2"
Lens mount	CS	CS	CS	CS
Focal length	5.0 mm – 50.0 mm	4.5 mm – 10.0 mm	4.5 mm – 12.5 mm	10.0 mm – 30.0 mm
F-stop [F]	1.3 – 16C	1.6 – 16C	1.2 – 16C	1.4 – 16C
Angle of view (HOR)	51.8° – 5.6°	81.3° – 38.2°	83.7° – 30.1°	35.8° – 12.5°
M.L.D.	0.8 m	0.3 m	0.3 m	0.6 m
Filter thread at front (ØM x P)	37.5 mm × 0.5 mm	–	35.5 mm × 0.5 mm	37.5 mm × 0.5 mm
Dimensions (Ø x H)	47.0 mm x 57.7 mm	34.0 mm x 43.5 mm	41.6 mm x 48.8 mm	47.0 x 57.7 mm
Weight	125 g	40 g	66 g	125 g

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VARIFOCAL LENSES WITH DC IRIS

1/3" lenses with DC iris

- ● **Automatic iris (DC)**
- ● **Manually adjustable focal length**
- ● **Manually adjustable focus**
- ● **IR-corrected varifocal lenses available**
- ● **1/3" and 1/2" versions**
- ● **CS mount**

With the further development of the DSPs in the cameras, the direct controls (DC-direct control) became more efficient and were equipped with additional properties which video-controlled irises did not have. DC-controlled lenses should always be used in WDR cameras so that the iris does not start to oscillate (undesirable vibrations) in certain light conditions. Connection cables are available as 9 or 31 cm version.

Model	TG2Z1816FCS	TG2Z3514FCS	TG3Z2312FCS	TG3Z2910FCS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	1.8 mm – 3.6 mm	3.5 mm – 8.0 mm	2.3 mm – 6.0 mm	2.9 mm – 8.2 mm
F-stop [F]	1.6 – 360C	1.4 – 360C	1.2 – 360	1.0 – 360C
Angle of view (HOR)	144.2° – 79.4°	77.6° – 35.4°	11.8° – 48.2°	98.3° – 35.2°
M.L.D.	0.2 m	0.4 m	0.3 m	0.5 m
Filter thread at front (ØM x P)	–	–	–	–
Dimensions (Ø x H x W)	37.4 x 42.6 x 51.0 mm	33.5 x 42.6 x 43.5 mm	38.5 x 48.0 x 48.8 mm	33.5 x 46.6 x 44.3 mm
Weight	78 g	48 g	76 g	47 g

Model	TG3Z2910FCS-IR	TG3Z3510FCS	TG3Z3510FCS-IR	TG4Z2813FCS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	2.9 mm – 8.2 mm	3.5 mm – 10.5 mm	3.5 mm – 10.5 mm	2.8 mm – 12.0 mm
F-stop [F]	1.0 – 360C	1.0 – 360	1.0 – 360	1.3 – 360C
Angle of view (HOR)	95.0° – 35.6°	81.6° – 27.2°	81.6° – 27.2°	98.2° – 23.8°
M.L.D.	0.5 m	0.3 m	0.3 m	0.3 m
Filter thread at front (ØM x P)	–	–	–	–
Dimensions (Ø x H x W)	33.5 x 46.6 x 44.3 mm	38.5 x 48.0 x 48.8 mm	38.5 x 48.0 x 48.8 mm	37.5 x 48.0 x 56.0 mm
Weight	50 g	65 g	65 g	69 g

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VARIFOCAL LENSES WITH DC IRIS

1/3" lenses with DC iris

Model	TG4Z2813FCS-IR	TG5Z8513FCS-IR	TG10Z0513FCS	HG2Z4516FCS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	2.8 mm – 12.0 mm	8.5 mm – 40.0 mm	5.0 mm – 50.0 mm	4.5 mm – 10.0 mm
F-stop [F]	1.3 – 360C	1.3 – 360	1.3 – 360C	1.6 – 360C
Angle of view (HOR)	102.2° – 23.7°	33.5° – 7.1°	51.8° – 5.6°	81.3° – 38.2°
M.L.D.	0.3 m	0.8 m	0.8 m	0.3 m
Filter thread at front (ØM x P)	–	–	37.5 mm × 0.5 mm	–
Dimensions (Ø x H x W)	37.5 x 48.0 x 56.0 mm	41.7 x 57.5 x 62.9 mm	41.7 x 57.5 x 57.7 mm	33.5 x 42.6 x 43.5 mm
Weight	71 g	114 g	140 g	54 g

Model	HG3Z4512FCS-IR	HG3Z1014FCS
Format	1/3"	1/3"
Lens mount	CS	CS
Focal length	4.5 – 12.5 mm	10.0 – 30.0 mm
F-stop [F]	1.2 – 360	1.4 – 360C
Angle of view (HOR)	83.7° – 30.1°	35.8° – 12.5°
M.L.D.	0.3 m	0.6 m
Filter thread at front (ØM x P)	35.5 mm × 0.5 mm	37.5 mm × 0.5 mm
Dimensions (Ø x H x W)	38.5 x 47.5 x 48.8 mm	41.7 x 57.5 x 57.7 mm
Weight	68 g	120 g

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VARIFOCAL LENSES WITH VIDEO-CONTROLLED IRIS

1/3" & 1/2" varifocal lenses with variable focal length

- ● **Automatic iris (video)**
- ● **Manually adjustable focal length**
- ● **Manually adjustable focus**
- ● **IR-corrected varifocal lenses available**
- ● **1/3" and 1/2" versions**
- ● **CS mount**

Varifocal lenses are a flexible and practical solution if the picture detail of the camera can only be finally established on site or during installation. Thanks to the variable, manually adjustable focal length, a wide range of applications can be covered with one single lens.

Model	TG2Z1816AFCS	TG2Z3514AFCS	TG3Z2910AFCS	TG3Z2910AFCS-IR
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	1.8 mm – 3.6 mm	3.5 mm – 8.0 mm	2.9 mm – 8.2 mm	2.9 mm – 8.2 mm
F-stop [F]	1.6 – 360C	1.4 – 360C	1.0 – 360C	1.0 – 360C
Angle of view (HOR)	144.2° – 79.4°	77.6° – 35.4°	98.3° – 35.2°	95.0° – 35.6°
M.L.D.	0.2 m	0.4 m	0.5 m	0.5 m
Filter thread at front (ØM x P)	–	–	–	–
Dimensions (Ø x H x W)	37.4 x 42.6 x 51.0 mm	33.5 x 42.6 x 43.5 mm	33.5 x 46.6 x 44.3 mm	33.5 x 46.6 x 44.3 mm
Weight	78 g	53 g	47 g	50 g

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VARIFOCAL LENSES WITH VIDEO-CONTROLLED IRIS

1/3" & 1/2" varifocal lenses with variable focal length

Model	TG3Z3510AFCS	TG3Z3510AFCS-IR	TG4Z2813AFCS
Format	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS
Focal length	3.5 mm – 10.5 mm	3.5 mm – 10.5 mm	2.8 mm – 12.0 mm
F-stop [F]	1.0 – 360	1.0 – 360	1.3 – 360C
Angle of view (HOR)	81.6° – 27.2°	81.6° – 27.2°	98.2° – 23.8°
M.L.D.	0.3 m	0.3 m	0.3 m
Filter thread at front (ØM x P)	–	–	–
Dimensions (Ø x H x W)	38.5 mm x 48.0 mm x 48.8 mm	38.5 mm x 48.0 mm x 48.8 mm	37.5 mm x 48.0 mm x 56.0 mm
Weight	65 g	65 g	72 g

Model	TG4Z2813AFCS-IR	TG5Z8513AFCS-IR	TG10Z0513AFCS
Format	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS
Focal length	2.8 mm – 12.0 mm	8.5 mm – 40.0 mm	5.0 mm – 50.0 mm
F-stop [F]	1.3 – 360C	1.3 – 360	1.3 – 360C
Angle of view (HOR)	102.2° – 23.7°	33.5° – 7.1°	51.8° – 5.6°
M.L.D.	0.3 m	0.8 m	0.8 m
Filter thread at front (ØM x P)	–	–	37.5 mm × 0.5 mm
Dimensions (Ø x H x W)	37.5 mm x 48.0 mm x 56.0 mm	41.7 mm x 57.5 mm x 62.9 mm	41.7 mm x 57.5 mm x 57.7 mm
Weight	71 g	114 g	140 g

Model	HG2Z4516AFCS	HG3Z4512AFCS-IR	HG3Z1014AFCS
Format	1/2"	1/2"	1/2"
Lens mount	CS	CS	CS
Focal length	4.5 mm – 10.0 mm	4.5 mm – 12.5 mm	10.0 mm – 30.0 mm
F-stop [F]	1.6 – 360C	1.2 – 360	1.4 – 360C
Angle of view (HOR)	81.3° – 38.2°	83.7° – 30.1°	35.8° – 12.5°
M.L.D.	0.3 m	0.3 m	0.6 m
Filter thread at front (ØM x P)	–	35.5 mm × 0.5 mm	37.5 mm × 0.5 mm
Dimensions (Ø x H x W)	33.5 mm x 42.6 mm x 43.5 mm	38.5 mm x 47.5 mm x 48.8 mm	41.7 mm x 57.5 mm x 57.7 mm
Weight	54 g	68 g	120 g

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MANUAL ZOOM LENSES

1/3" & 1/2" zoom lenses with manual iris

- **Manual iris**
- **Manually adjustable focal length**
- **Manually adjustable focus**
- **1/3", 1/2" and 2/3" versions**
- **CS or C mount**

Zoom lenses (manually controlled and motorised)

Zoom lenses are one of the most complicated types of lenses to manufacture. They exhibit a very variable focal length range. The difference to varifocal lenses is that you always obtain a sharply focused image when the lens is correctly adapted to the camera, regardless of the focal length. This is not possible with varifocal lenses as the sharpness (focus) always has to be reset when the focal length is changed. This type of lens is available as a manual or motorised version.

Model	T6Z5710-CS	H6Z0812	M6Z1212
Format	1/3"	1/2"	2/3"
Lens mount	CS	C	C
Focal length	5.7 mm – 34.2 mm	8.0 mm – 48.0 mm	2.5 mm – 75.0 mm
F-stop [F]	1.0 – 16C	1.2 – 16C	1.2 – 16C
Angle of view (HOR)	45.9° – 8.1°	44.6° – 8.0°	38.3° – 6.7°
M.L.D.	1.2 m	1.2 m	1 m
Filter thread at front (ØM x P)	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	55.0 mm × 0.75 mm
Dimensions (Ø x H)	55.2 mm × 82.5 mm	51.8 mm × 97.0 mm	59.9 mm × 114.5 mm
Weight	290 g	305 g	475 g

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MANUAL ZOOM LENSES WITH AUTOMATICALLY CONTROLLED IRIS

1/3" & 1/2" zoom lenses with automatically controlled iris

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- ● **Automatic iris (DC or video)**
- ● **Manually adjustable focal length**
- ● **Manually adjustable focus**
- ● **1/3" and 1/2" versions**
- ● **CS or C mount**

Iris

The light incidence is regulated in lenses using the iris and the iris setting. To be able to optimally regulate the light, the lenses from computar offer three possibilities of setting the iris. Depending on the field of application, you can choose a manual setting or automatic control electronics optionally in the lens (video) or in the camera (DC). Whereas automatic iris control should be used outdoors owing to the unavoidable fluctuations in lighting, lenses with a manual iris are only suitable for areas with constant light conditions.

Model	T6Z5710AIDC-CS	H6Z0812AIDC
Format	1/3"	1/2"
Lens mount	CS	C
Iris control	DC	DC
Focal length	5.7 mm – 34.2 mm	8.0 mm – 48.0 mm
F-stop [F]	1.0 – 360C	1.2 – 560C
Angle of view (HOR)	45.9° – 8.1°	44.6° – 8.0°
M.L.D.	1.2 m	1.2 m
Filter thread at front (ØM x P)	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm
Dimensions (Ø x H x W)	53.0 mm × 64.0 mm × 82.5 mm	52.6 mm × 64.0 mm × 97.0 mm
Weight	295 g	300 g

Model	T6Z5710AIVD-CS	H6Z0812AIVD
Format	1/3"	1/2"
Lens mount	CS	C
Iris control	Video-controlled	Video-controlled
Focal length	5.7 mm – 34.2 mm	8.0 mm – 48.0 mm
F-stop [F]	1.0 – 360C	1.2 – 560C
Angle of view (HOR)	45.9° – 8.1°	44.6° – 8.0°
M.L.D.	1.2 m	1.2 m
Filter thread at front (ØM x P)	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm
Dimensions (Ø x H x W)	53.0 mm × 64.0 mm × 82.5 mm	52.6 mm × 64.0 mm × 97.0 mm
Weight	295 g	300 g

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MOTORISED ZOOM LENSES

1/3" motorised zoom lenses

- ● **Motorised focal length**
- ● **Motorised focus**
- ● **Automatic (DC, video) or motorised iris**
- ● **IR-corrected models**
- ● **1/3" or 1/2" versions**
- ● **Models prepared for controlling fixed positions**
- ● **Override models**

H16Z7516-IR

H30Z1015

Motorised zoom lenses offer the possibility of changing the focal length and focus position using electric motors. The focal length range is indicated in line with the smallest and largest picture detail that can be obtained with this lens (e.g. 5–30 mm). Zoom lenses not only excel with their variable focal length ranges but also with sharply focused pictures, regardless of the focal length. Whereas with varifocal lenses the focus always has to be regulated if the focal length changes, this process is motorised in zoom lenses.

Model	T6Z5710M-CS	T6Z5710MS-CS	T6Z5710MP-CS	T6Z5710MSP-CS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	5.7 mm – 34.2 mm	5.7 mm – 34.2 mm	5.7 mm – 34.2 mm	5.7 mm – 34.2 mm
F-stop [F]	1.0 – 16C	1.0 – 360C	1.0 – 16C	1.0 – 360C
Angle of view (HOR)	45.9° – 8.1°	45.9° – 8.1°	45.9° – 8.1°	45.9° – 8.1°
M.L.D.	1.2 m	1.2 m	1.2 m	1.2m
Filter thread at front (ØM x P)	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm
Dimensions (Ø x H x W)	68.5 × 76.3 × 82.5 mm	68.5 × 76.3 × 82.5 mm	68.5 × 76.3 × 82.5 mm	68.5 × 76.3 × 82.5 mm
Weight	430 g	430 g	470 g	470 g

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MOTORISED ZOOM LENSES

1/3" motorised zoom lenses

Model	T6Z5710AMS-CS	T6Z5710AMSP-CS	T6Z5710DC-CS	T6Z5710PDC-CS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	5.7 mm – 34.2 mm	5.7 mm – 34.2 mm	5.7 mm – 34.2 mm	5.7 mm – 34.2 mm
F-stop [F]	1.0 – 360C	1.0 – 360C	1.0 – 360C	1.0 – 360C
Angle of view (HOR)	45.9° – 8.1°	45.9° – 8.1°	45.9° – 8.1°	45.9° – 8.1°
M.L.D.	1.2 m	1.2 m	1.2 m	1.2 m
Filter thread at front (ØM x P)	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm
Dimensions (Ø x H x W)	68.5 × 76.3 × 82.5 mm	68.5 × 76.3 × 82.5 mm	68.5 × 76.3 × 82.5 mm	68.5 × 76.3 × 82.5 mm
Weight	450 g	490 g	440 g	480 g

Model	T10Z5712M-CS	T10Z5712MS-CS	T10Z5712MP-CS	T10Z5712MSP-CS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	5.7 mm – 57.0 mm	5.7 mm – 57.0 mm	5.7 mm – 57.0 mm	5.7 mm – 57.0 mm
F-stop [F]	1.2 – 22C	1.2 – 560C	1.2 – 22C	1.2 – 560C
Angle of view (HOR)	44.6° – 4.8°	44.6° – 4.8°	44.6° – 4.8°	44.6° – 4.8°
M.L.D.	1.8 m	1.8 m	1.8 m	1.8 m
Filter thread at front (ØM x P)	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm
Dimensions (Ø x H x W)	68.5 × 76.3 × 88.0 mm	68.5 × 76.3 × 88.0 mm	68.5 × 76.3 × 88.0 mm	68.5 × 76.3 × 88.0 mm
Weight	450 g	450 g	490 g	490 g

Model	T10Z5712AMS-CS	T10Z5712AMSP-CS	T10Z5712DC-CS	T10Z5712PDC-CS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	5.7 mm – 57.0 mm	5.7 mm – 57.0 mm	5.7 mm – 57.0 mm	5.7 mm – 57.0 mm
F-stop [F]	1.2 – 560C	1.2 – 560C	1.2 – 560C	1.2 – 560C
Angle of view (HOR)	44.6° – 4.8°	44.6° – 4.8°	44.6° – 4.8°	44.6° – 4.8°
M.L.D.	1.8 m	1.8 m	1.8 m	1.8 m
Filter thread at front (ØM x P)	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm
Dimensions (Ø x H x W)	68.5 × 76.3 × 88.0 mm	68.5 × 76.3 × 88.0 mm	68.5 × 76.3 × 88.0 mm	68.5 × 76.3 × 88.0 mm
Weight	470 g	510 g	460 g	500 g

Model	T21Z5816M-CS	T21Z5816MS-CS	T21Z5816MP-CS	T21Z5816MSP-CS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	5.8 mm – 121.8 mm	5.8 mm – 121.8 mm	5.8 mm – 121.8 mm	5.8 mm – 121.8 mm
F-stop [F]	1.6 – 22C	1.6 – 560C	1.6 – 22C	1.6 – 560C
Angle of view (HOR)	44.8° – 2.3°	44.8° – 2.3°	44.8° – 2.3°	44.8° – 2.3°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm
Dimensions (Ø x H x W)	70.0 × 81.0 × 126.5 mm	70.0 × 81.0 × 126.5 mm	70.0 × 81.0 × 126.5 mm	70.0 × 81.0 × 126.5 mm
Weight	665 g	665 g	700 g	700 g

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MOTORISED ZOOM LENSES

1/3" and 1/2" motorised zoom lenses

Model	T21Z5816AMS-CS	T21Z5816AMSP-CS	T21Z5816DC-CS	T21Z5816PDC-CS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	5.8 mm – 121.8 mm	5.8 mm – 121.8 mm	5.8 mm – 121.8 mm	5.8 mm – 121.8 mm
F-stop [F]	1.6 – 560C	1.6 – 560C	1.6 – 560C	1.6 – 560C
Angle of view (HOR)	44.8° – 2.3°	44.8° – 2.3°	44.8° – 2.3°	44.8° – 2.3°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm
Dimensions (Ø x H x W)	70.0 × 81.0 × 126.5 mm	70.0 × 81.0 × 126.5 mm	70.0 × 81.0 × 126.5 mm	70.0 × 81.0 × 126.5 mm
Weight	700 g	740 g	650 g	690 g

Model	T34Z5518AMS-CS	T34Z5518AMSP-CS	T34Z5518AMSR-CS	T34Z5518AMSPR-CS
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	5.5 mm – 187.0 mm	5.5 mm – 187.0 mm	5.5 mm – 187.0 mm	5.5 mm – 187.0 mm
F-stop [F]	1.8 – 560C	1.8 – 560C	1.8 – 560C	1.8 – 560C
Angle of view (HOR)	46.6° – 1.5°	46.6° – 1.5°	46.6° – 1.5°	46.6° – 1.5°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	77.0 mm × 0.75 mm	77.0 mm × 0.75 mm	77.0 mm × 0.75 mm	77.0 × 0.75
Dimensions (Ø x H x W)	82.0 × 97.4 × 160.0 mm	82.0 × 97.4 × 160.0 mm	82.0 × 97.4 × 160.0 mm	82.0 × 97.4 × 160.0 mm
Weight	1,160 g	1,190 g	1,150 g	1,180 g

Model	T34Z5518DC-CS	T34Z5518PDC-CS
Format	1/3"	1/3"
Lens mount	CS	CS
Focal length	5.5 mm – 187.0 mm	5.5 mm – 187.0 mm
F-stop [F]	1.8 – 560C	1.8 – 560C
Angle of view (HOR)	46.6° – 1.5°	46.6° – 1.5°
M.L.D.	1.5 m	1.5 m
Filter thread at front (ØM x P)	77.0 mm × 0.75 mm	77.0 mm × 0.75 mm
Dimensions (Ø x H x W)	82.0 × 97.4 × 160.0 mm	82.0 × 97.4 × 160.0 mm
Weight	1,110 g	1,150 g

Model	H6Z0812M	H6Z0812MS	H6Z0812MP	H6Z0812MSP
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	8.0 mm – 48.0 mm	8.0 mm – 48.0 mm	8.0 mm – 48.0 mm	8.0 mm – 48.0 mm
F-stop [F]	1.2 – 16C	1.2 – 560C	1.2 – 16C	1.2 – 560C
Angle of view (HOR)	44.6° – 8.0°	44.6° – 8.0°	44.6° – 8.0°	44.6° – 8.0°
M.L.D.	1.2 m	1.2 m	1.2 m	1.2 m
Filter thread at front (ØM x P)	49.0 × 0.75	49.0 × 0.75	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm
Dimensions (Ø x H x W)	66.0 × 73.5 × 97.0 mm	66.0 × 73.5 × 97.0 mm	66.0 × 73.5 × 97.0 mm	66.0 × 73.5 × 97.0 mm
Weight	400 g	400 g	440 g	440 g

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MOTORISED ZOOM LENSES

1/2" motorised zoom lenses

Model	H6Z0812AMS	H6Z0812AMSP	H10Z0812M	H10Z0812MS
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	8.0 mm – 48.0 mm	8.0 mm – 48.0 mm	8.0 mm – 80.0 mm	8.0 mm – 80.0 mm
F-stop [F]	1.2 – 560C	1.2 – 560C	1.2 – 22C	1.2 – 560C
Angle of view (HOR)	44.6° – 8.0°	44.6° – 8.0°	44.0° – 4.7°	44.0° – 4.7°
M.L.D.	1.2 m	1.2 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	49.0 mm × 0.75 mm	49.0 mm × 0.75 mm	62.0 mm x 0.75 mm	62.0 mm x 0.75 mm
Dimensions (Ø x H x W)	66.0 × 73.5 × 97.0 mm	66.0 × 73.5 × 97.0 mm	70 x 81 x 123.5 mm	70 x 81 x 123.5 mm
Weight	420 g	460 g	635 g	635 g

Model	H10Z0812MP	H10Z0812MSP	H10Z0812AMS	H10Z0812AMSP
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	8.0 mm – 80.0 mm	8.0 mm – 80.0 mm	8.0 mm – 80.0 mm	8.0 mm – 80.0 mm
F-stop [F]	1.2 – 22C	1.2 – 560C	1.2 – 560C	1.2 – 560C
Angle of view (HOR)	44.0° – 4.7°	44.0° – 4.7°	44.0° – 4.7°	44.0° – 4.7°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	62.0 mm x 0.75 mm	62.0 mm x 0.75 mm	62.0 mm x 0.75 mm	62.0 mm x 0.75 mm
Dimensions (Ø x H x W)	70 x 81 x 123.5 mm	70 x 81 x 123.5 mm	70 x 81 x 123.5 mm	70 x 81 x 123.5 mm
Weight	670 g	670 g	670 g	670 g

Model	H10Z1218M	H10Z1218MS	H10Z1218MP	H10Z1218MSP
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	12.0 mm – 120.0 mm	12.0 mm – 120.0 mm	12.0 mm – 120.0 mm	12.0 mm – 120.0 mm
F-stop [F]	1.8 – 22C	1.8 – 560C	1.8 – 22C	1.8 – 560C
Angle of view (HOR)	29.4° – 3.1°	29.4° – 3.1°	29.4° – 3.1°	29.4° – 3.1°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm
Dimensions (Ø x H x W)	70.0 × 81.0 × 123.5 mm	70.0 × 81.0 × 123.5 mm	70.0 × 81.0 × 123.5 mm	70.0 × 81.0 × 123.5 mm
Weight	635 g	635 g	670 g	670 g

Model	H10Z1218AMS-2	H10Z1218AMSP-2	H10Z1218DC	H10Z1218PDC
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	12.0 mm – 120.0 mm	12.0 mm – 120.0 mm	12.0 mm – 120.0 mm	12.0 mm – 120.0 mm
F-stop [F]	1.8 – 560C	1.8 – 560C	1.8 – 560C	1.8 – 560C
Angle of view (HOR)	29.4° – 3.1°	29.4° – 3.1°	29.4° – 3.1°	29.4° – 3.1°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm	62.0 mm × 0.75 mm
Dimensions (Ø x H x W)	70.0 × 81.0 × 123.5 mm	70.0 × 81.0 × 123.5 mm	70.0 × 81.0 × 123.5 mm	70.0 × 81.0 × 123.5 mm
Weight	670 g	710 g	630 g	670 g

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MOTORISED ZOOM LENSES

1/2 " motorised zoom lenses

Model	H16Z7516MP	H16Z7516MSP	H16Z7516AMS	H16Z7516AMSP
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm
F-stop [F]	1.6 − 22C	1.6 − 560C	1.6 − 560C	1.6 − 560C
Angle of view (HOR)	46.6° − 3.2°	46.6° − 3.2°	46.6° − 3.2°	46.6° − 3.2°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	72.0 mm × 0.75 mm	72.0 mm × 0.75 mm	72.0 mm × 0.75 mm	72.0 mm × 0.75 mm
Dimensions (Ø x H x W)	82.0 × 97.4 × 149.0 mm	82.0 × 97.4 × 149.0 mm	82.0 × 97.4 × 149.0 mm	82.0 × 97.4 × 149.0 mm
Weight	1,090 g	1,090 g	1,050 g	1,090 g

Model	H16Z7516AMSR	H16Z7516AMSPR	H16Z7516DC	H16Z7516PDC
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm
F-stop [F]	1.6 − 560C	1.6 − 560C	1.6 − 560C	1.6 − 560C
Angle of view (HOR)	46.6° − 3.2°	46.6° − 3.2°	46.6° − 3.2°	46.6° − 3.2°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	72.0 mm × 0.75 mm	72.0 mm × 0.75 mm	72.0 mm × 0.75 mm	72.0 mm × 0.75 mm
Dimensions (Ø x H x W)	82.0 × 97.4 × 149.0 mm	82.0 × 97.4 × 149.0 mm	82.0 × 97.4 × 149.0 mm	82.0 × 97.4 × 149.0 mm
Weight	1,040 g	1,070 g	1,010 g	1,050 g

Model	H16Z7516AMS-IR	H16Z7516AMSP-IR	H16Z7516AMSR-IR	H16Z7516AMSPR-IR
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm	7.5 mm − 120.0 mm
F-stop [F]	1.6 − 560C	1.6 − 560C	1.6 − 560C	1.6 − 560C
Angle of view (HOR)	47.0° − 3.1°	47.0° − 3.1°	47.0° − 3.1°	47.0° − 3.1°
M.L.D.	1.5 m	1.5 m	1.5 m	1.5 m
Filter thread at front (ØM x P)	77.0 mm × 0.75 mm	77.0 mm × 0.75 mm	77.0 mm × 0.75 mm	77.0 mm × 0.75 mm
Dimensions (Ø x H x W)	82.0 × 97.4 × 161.5 mm	82.0 × 97.4 × 161.5 mm	82.0 × 97.4 × 161.5 mm	82.0 × 97.4 × 161.5 mm
Weight	1,160 g	1,180 g	1,185 g	1,215 g

Model	H30Z1015AMS	H30Z1015AMSP	H30Z1015AMSR	H30Z1015AMSPR
Format	1/2"	1/2"	1/2"	1/2"
Lens mount	C	C	C	C
Focal length	10.0 mm − 300.0 mm	10.0 mm − 300.0 mm	10.0 mm − 300.0 mm	10.0 mm − 300.0 mm
F-stop [F]	1.5 − 560C	1.5 − 560C	1.5 − 560C	1.5 − 560C
Angle of view (HOR)	35.5° − 1.25°	35.5° − 1.25°	35.5° − 1.25°	35.5° − 1.25°
M.L.D.	2.2 m	2.2 m	2.2 m	2.2 m
Filter thread at front (ØM x P)	100.0 mm × 1.0 mm	100.0 mm × 1.0 mm	100.0 mm × 1.0 mm	100.0 mm × 1.0 mm
Dimensions (Ø x H x W)	125.0 × 144.5 × 246.5 mm	125.0 × 144.5 × 246.5 mm	125.0 × 144.5 × 246.5 mm	125.0 × 144.5 × 246.5 mm
Weight	3,170 g	3,220 g	3,175 g	3,225 g

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PINHOLE LENSES

1/3" pinhole lenses

- ● **Wide-angle (83.2°) pinhole lens**
- ● **Tapered opening, 4.8 mm**
- ● **1/3" format**
- ● **CS mount**
- ● **Iris control manual, DC or video-controlled**

A pinhole lens is always used where only small observation openings are available, for example for concealed surveillance or in the production of goods.

With the automatically controlled iris, pinhole lenses can be used where large differences in brightness occur. The CS mount also permits the use of high-quality CS-mount cameras.

Model	T2625CS-P	TG2625FCS-P	TG2625FCS-P31	TG2625AFCS-P
Format	1/3"	1/3"	1/3"	1/3"
Lens mount	CS	CS	CS	CS
Focal length	2,6 mm	2,6 mm	2,6 mm	2,6 mm
F-stop [F]	2,5 – 32C	2,5 – 360C	2,5 – 360C	2,5 – 360C
Angle of view (HOR)	83,2°	83,2°	83,2°	83,2°
M.L.D.	0,2 m	0,2 m	0,2 m	0,2 m
Filter thread at front (ØM x P)	–	–	–	–
Dimensions (Ø x H x W)	34,5 × 39,8 × 73,5 mm	34,5 × 39,8 × 73,5 mm	34,5 × 39,8 × 73,5 mm	34,5 × 39,8 × 73,5 mm
Weight	80 g	82 g	85 g	85 g

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MEGAPIXEL LENSES

1/2" & 2/3" megapixel lenses

- Lenses with up to 2 megapixel resolution
- Fixed or variable focal lengths
- Manual or DC iris
- 1/2" or 2/3" format
- C-mount connection
- Macro lens in megapixel resolution

Megapixel lenses are used together with cameras which have a higher resolution than standard CCTV cameras (approx. 450,000 pixels). This MP series has a resolution of 2 MP in the centre and 1 MP in the corners. The lenses are available in 2/3" or 1/2" format. If a 1/2" camera with 2 MP is used, the 2/3" lens can be deployed. Moreover, the combination of the MP lenses with 5 MP cameras is possible.

Model	H0514-MP	H2Z0414C-MP	HG2Z0414FC-MP	M0814MP	M1214MP
Format	1/2"	1/2"	1/2"	2/3"	2/3"
Lens mount	C	C	C	C	C
Focal length	5.0 mm	4.0 – 8.0 mm	4.0 – 8.0 mm	8.0 mm	12.0 mm
F-stop [F]	1.4 – 16C	1.4 – 16C	1.4 – 360	1.4 – 16C	1.4 – 16C
Angle of view (HOR)	65.5°	90.4° – 47.0°	90.4° – 47.0°	56.3°	40.4°
M.L.D.	0.1 m	0.5 m	0.5 m	0.1 m	0.15 m
Filter thread at front (ØM x P)	43.0 × 0.75 mm	–	–	30.5 × 0.5 mm	30.5 × 0.5 mm
Dimensions (Ø x H)	44.5 × 45.5 mm	41.6 × 48.8 mm	38.5 × 48.0 × 48.8 mm	33.5 × 28.2 mm	33.5 × 28.2 mm
Weight	107 g	72 g	75 g	70 g	65 g

Model	M1614MP	M2514MP	M5018MP	M3Z1228MP	MLM-3XMP
Format	2/3"	2/3"	2/3"	2/3"	2/3"
Lens mount	C	C	C	C	C
Focal length	16.0 mm	25.0 mm	50.0 mm	12.0 mm – 36.0 mm	12.0 mm – 36.0 mm
F-stop [F]	1.4 – 16C	1.4 – 16C	1.8 – 16C	2.8 – 16C	4.5 – 22C
Angle of view (HOR)	30.8°	20.0°	10.5°	41.0° – 13.6°	11.8° – 2.78°
M.L.D.	0.3 m	0.3 m	0.5 m	0.2 m	0.09 m
Filter thread at front (ØM x P)	30.5 × 0.5 mm	30.5 × 0.5 mm	30.5 × 0.5 mm	35.5 × 0.5 mm	34.0 × 0.5 mm
Dimensions (Ø x H)	33.5 × 28.2 mm	33.5 × 36.0 mm	33.5 × 38.1 mm	41.6 × 53.0 mm	36.5 × 79.5 mm
Weight	65 g	75 g	90 g	105 g	150 g

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FA LENSES

1/2", 1" & 2/3" FA lenses

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- ● **1/2", 2/3" and 1" formats**
- ● **Macro and telecentric lenses**
- ● **C mount**
- ● **Manual iris**

In industry it's generally not a question of keeping people under surveillance but monitoring production. Cameras are used with image processing systems to quickly check the products. The lenses should exhibit as little distortion as possible for such applications. Telecentric lenses are also used for this purpose. In the meantime an increasing number of small-format sensors are also being increasingly used and the 1" lenses are still deployed as in this way only the centre of the lenses are required and therefore there are no distortions in the image.

Model	MLH10XC	MLH10XCS	V2513	V5013	TECM55
Format	1/2"	1/2"	1"	1"	2/3"
Lens mount	C	CS	C	C	C
Focal length	13.0 mm – 130 mm	13.0 mm – 130 mm	25.0 mm	50.0 mm	55.0 mm
F-stop [F]	5.6 – 32C	5.6 – 32C	1.3 – 16C	1.3 – 16C	2.8 – 32C
Angle of view (HOR)	18.0 ° – 3.6 °	18.0 ° – 3.6 °	29.2 °	14.6 °	9.2 °
M.L.D.	0.1524 m	0.1524 m	0.4 m	1 m	0.14 m
Filter thread at front (ØM x P)	46.0 mm x 0.75 mm	46.0 mm x 0.75 mm	40.5 mm x 0.5 mm	46.0 mm x 0.75 mm	43.0 mm x 0.75 mm
Dimensions (Ø x H)	48.0 mm x 98.5 mm	48.0 mm x 98.5 mm	43.0 mm x 38 mm	48.0 mm x 51.5 mm	53.0 mm x 92.9 mm
Weight	223 g	223 g	105 g	201 g	320 g
Note	Macro zoom	Macro zoom	–	–	Telecentric lens

Model	TECM55-20	TECM55-75
Description	Converter 2.0x (developed for TECM55)	Converter 0.75x (developed for TECM55)
Application	Mounted between the lens and camera – changes the focal length by a factor of 2	Mounted between the lens and camera – changes the focal length by a factor of 0.75

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MEGAPIXEL LENSES WITH M12 X 0.5 MOUNT

1/2" megapixel lenses

- **Lenses with up to 2 megapixel resolution**
- **Various fixed focal lengths**
- **Up to 180° angle of view (fish-eye)**
- **Fixed iris**
- **1/2" format**
- **M12 x 0.5 mount**

Megapixel lenses are used together with cameras which have a higher resolution than standard CCTV cameras (approx. 450,000 pixels). This MP series has a resolution of 2 MP in the centre and 1 MP in the corners. As cameras have become ever smaller in recent years, the lenses are now following suit so that this camera feature can also be used. The fish-eye offers a 180° angle of view. In contrast to the normal fish-eye lenses, this one is a stereotype with almost no distortions at the edge.

Model	H1328KP	H0320KP	H0624KP
Format	1/2"	1/2"	1/2"
Lens mount	M12 x 0.5	M12 x 0.5	M12 x 0.5
Focal length	1.27 mm	3 mm	6 mm
F-stop [F]	2.8	2	2.4
Angle of view (HOR)	180°	104.3°	59.1°
Dimensions (Ø x H)	23.5 mm x 29.13 mm	18.5 mm x 27.19 mm	17 mm x 20.5 mm

Model	H0924KP	H1620KP	H2520KP
Format	1/2"	1/2"	1/2"
Lens mount	M12 x 0.5	M12 x 0.5	M12 x 0.5
Focal length	9 mm	16 mm	25 mm
F-stop [F]	2.4	2	2
Angle of view (HOR)	39.6°	22.6°	14.5°
Dimensions (Ø x H)	17.0 mm x 20.7 mm	17.0 mm x 21.4 mm	17.0 mm x 23.8 mm

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LENS ACCESSORIES

Accessories for CCTV lenses

VM100

VM300

VM400

EX1.5CS

EX1.5C

EX2CS

EX2C

- ● **Adapter rings**
- ● **Test filters**
- ● **Extenders**
- ● **Viewfinders**

Mounting accessories for a host of applications are available for the CCTV lenses. The required focal length can be determined with a viewfinder, a 5 mm adapter ring (VM400) permits the adaptation of the C-mount lenses to CS-mount cameras and an extender increases the focal length of the lenses (by a factor of 1.5 or 2).

Model	VM100	VM300	VM400
Description	Extension ring kit 40; 20; 10; 5; 1; 0.5 mm	Viewfinder	5 mm adapter ring
Application	Attachment between lens and camera – reduces the minimum lens distance (M.L.D.)	Adjustable angle of view – helps in determining the focal length required	Attachment between lens and camera – adapts C-mount lenses to CS-mount cameras

Model	EX1.5CS	EX1.5C	EX2CS	EX2C
Description	1.5x extender for CS mount	1.5x extender for C mount	2x extender for C mount	2x extender for C mount
Application	Attachment between lens and camera – changes the focal length by a factor of 1.5	Attachment between lens and camera – changes the focal length by a factor of 1.5	Attachment between lens and camera – doubles the focal length	Attachment between lens and camera – doubles the focal length

Model	FSK	LP1
Description/ Application	Filter set for matching camera/lens	4-pin plug connector for auto-iris lenses

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CAMERA SERIES 1/3" (ECONOMY)

CAMERAS

FC/YC series, 1/3" cameras YC (colour) FC (black/white)

FC/YC series

- **Large range of models for all applications**
- **Rugged and compact design**
- **1/3" IT CCD**
- **CS mount**
- **Mains synchronisation with phase adjustment, automatic white balance, backlight compensation, automatic gain control**
- **Four-pin standard jack for auto-iris lenses**
- **All models with high-resolution or standard CCD**

The classic FC/YC series comprises high-quality b/w and colour cameras. Lenses with a DC, video or manual iris can be used. The cameras have a sturdy and compact housing. The models are attached at the top or bottom with a ¼" screw. The cameras can be configured with the DIP switches.

Model	FC-25C/FC-30C	FCH-25C/FCH-30C	YC-25P/YC-30P	YCH-25P/YCH-30P
Video system	CCIR	CCIR	PAL	PAL
Operating voltage	FC-25C/FCH-25C: 12 VDC/24 VAC FC-30C/FCH-30C: 230 VAC (50 Hz)		YC-25P/YCH-25P: 12 VDC/24 VAC YC-30P/YCH-30P: 230 VAC (50 Hz)	
Power consumption	FC-25C/FC-30C: 3.3 W FCH-25C/FCH-30C: 3.5 W		3.5 W	3.5 W
Lens mount	CS mount	CS mount	CS mount	CS mount
Image sensor	1/3", 500 x 582 Pixel	1/3", 752 x 582 Pixel	1/3", 500 x 582 Pixel	1/3", 752 x 582 Pixel
Horizontal resolution TVL	380 lines	570 lines	330 lines	480 lines
Min. illumination	0.09 lux (F 1.2)	0.18 lux (F 1.2)	0.8 lux (F 1.2)	1.6 lux (F 1.2)
Iris control	Video signal, voltage, standard jack		Video signal, voltage, standard jack	
Operating environment	-10 °C ~ +50 °C (<85 % rel. humidity)		-10 °C ~ +50 °C (<85 % rel. humidity)	
Weight	FC/FCH-25: approx. 280 g, FC/FCH-30: approx. 410 g		YC/YCH-25: approx. 280 g, YC/YCH-30: approx. 410 g	
Dimensions (W × H × D)	FC-25C/FCH-25C: 55 mm x 40 mm x 102 mm FC-30C/FCH-30C: 55 mm x 40 mm x 112 mm		YC-25P/YCH-25P: 55 mm x 40 mm x 102 mm YC-30P/YCH-30P: 55 mm x 40 mm x 112 mm	

GANZ

CAMERA SERIES 1/3"

ZC-F series, b/w cameras ZC-F11C

ZC-F11C

- **Rugged and compact design**
- **1/3" IT CCD (SONY), high resolution or standard**
- **Power supply optionally 230 VAC or 24 VAC/12 VDC**
- **CS mount**
- **Mains synchronisation with phase adjustment, backlight compensation, automatic gain control**
- **Four-pin standard jack for auto-iris lenses**

The ZC-F11C black/white camera series permits the use of DC, video-signal-controlled or manual lenses and is ideal for use in professional, commercial and industrial CCTV systems for indoor and outdoor surveillance. The cameras have a sturdy and compact housing and can be easily configured with DIP switches. Attachment is made at the top or bottom with a 1/4" screw. Standard and high-resolution models are available.

Model	ZC-F11C	ZC-F11CH
Video system	CCIR	CCIR
Operating voltage	C3: 230 VAC (50 Hz) C4: 12 VDC, 24 VAC	CH3: 230 VAC (50 Hz) CH4: 12 VDC, 24 VAC
Power consumption	C3: 4 W C4: 3 W	CH3: 4 W CH4: 3 W
Lens mount	CS-Mount	CS-Mount
Image sensor	1/3", 500 x 582 Pixel	1/3", 752 x 582 Pixel
Horizontal resolution TVL	380 lines	570 lines
Min. illumination	0.09 lux (F 1,2)	0.18 lux (F 1,2)
Iris control	All models: Video signal, voltage, standard jack	
Operating environment	All models: -10 °C ~ +50 °C (< 85 % rel. humidity)	
Weight	C3: approx. 600 g C4: approx. 300 g	CH3: approx. 600 g CH4: approx. 300 g
Dimensions (W × H × D)	60.0 mm x 54.0 mm x 103.3 mm	60.0 mm x 54.0 mm x 103.3 mm

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ZC-Y11P cameras

- **Rugged and compact design**
- **1/3" IT CCD (SONY), high-resolution or standard**
- **Power supply optionally 230 VAC or 24 VAC/12 VDC**
- **CS mount**
- **Mains synchronisation with phase adjustment, auto. white balance, backlight compensation, automatic gain control**
- **Four-pin standard jack for auto-iris lenses**

The ZC-Y11P camera series is based on a highly sensitive 1/3" IT CCD which offers numerous functions with optimum adaptation to the appropriate high-performance DSP. For example, difficult light conditions can be largely offset thanks to the AGC and BLC functions. The cameras is suitable for the use of DC, video-signal-controlled or manual lenses and excel through their ease of handling and installation thanks to readily accessible DIP switches and control dials.

Low-volt cameras with 12 VDC and 24 VAC or the version with an integrated power supply unit and Euro connector are available. The high quality of the colour images and the outstanding reliability make this camera series an excellent choice for professional, commercial and industrial CCTV systems for indoor and outdoor surveillance.

Model	ZC-Y11P3	ZC-Y11P4
Video system	PAL	PAL
Operating voltage	230 VAC (50 Hz)	12 VDC, 24 VAC
Power consumption	4.5 W	3.5 W
Lens mount	CS	CS
Image sensor	1/3", 500 × 582 pixels	1/3", 500 × 582 pixels
Horizontal resolution TVL	330 lines	330 lines
Min. illumination	0.6 lux (iris 1.2)	0.6 lux (iris 1.2)
Iris control	Both models: Video signal, voltage, standard jack	
Operating environment	Both models: -10 ~ +50 °C (< 85% rel. humidity)	
Weight (net)	approx. 600 g	approx. 300 g
Dimensions (W × H × D)	60 × 54 × 103.3 mm	60 × 54 × 103.3 mm

GANZ

CAMERA SERIES 1/3"

Colour cameras ZC-Y12

ZC-Y12 series

- **Rugged and compact design**
- **HQ1 technology**
- **1/3" IT CCD (high-resolution) – with 540 TV lines**
- **Optionally with UTP signal transmission**
- **Electronic day/night toggling**

The ZC-Y12 colour camera series has an HQ1 image sensor with a resolution of 540 TV lines and permits the use of lenses with DC, video or manual iris. The cameras have a sturdy and compact housing. Attachment is made at the bottom or top with a 1/4" screw. The ZC-Y12 series can be easily configured with the DIP switches.

The models are available as 12/24 Volt and 230 Volt versions. The PH5 model is supplied with an integrated twisted-pair transmitter (passive). As a result, the video signal can be transmitted via coaxial or twisted-pair cables.

Model	ZC-Y12PH3	ZC-Y12PH4	ZC-Y12PH5
Video system	PAL	PAL	PAL
Image sensor	1/3" IT CCD, mosaic filter	1/3" IT CCD, mosaic filter	1/3" IT CCD, mosaic filter
Horizontal resolution TVL	540 lines	540 lines	540 lines
Min. illumination	1.2 lux (F1.2/50 IRE) colour mode / 0.8 lux (F1.2/50 IRE) b/w mode 0.62 lux (F1.2/30 IRE) colour mode / 0.8 lux (F1.2/50 IRE) b/w modes		
Lens mount	CS mount	CS mount	CS mount
Iris control	DC/AES/VIDEO (Vp-p = 12 VDC, 50 mA, max. Signal = 0.7 Vp-p, high impedance)		
Power supply	230 VAC/50 Hz	12 VDC +/- 10 %; 24 VAC +/- 10 % (50 Hz +/- 1 %)	
Power consumption	5.3 W	4.5 W	4.5 W
Operating environment	-10°C ~ +50°C; 85% humidity (non-condensing)		
Weight (net)	240 g	240 g	240 g
Dimensions (W x H x D)	60 mm x 54 mm x 103.3 mm	60 mm x 54 mm x 103.3 mm	60 mm x 54 mm x 103.3 mm

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WDR COLOUR CAMERA 1/3"

WDR day/night camera ZC-YHW702P

ZC-YHW702P

● **HQ1 quality by means of 520 lines CCD**

● **Wide dynamic range (WDR) function**

● **Internal 60 dB signal processor**

● **Mechanical day/night toggling**

● **OSD control and RS-485 interface**

● **Low-light mode by means of slow scan/frame integration**

● **Motion detection and privacy masking**

The WDR camera (wide dynamic range) is optimally suited for foyers or entrance halls, i.e. particularly in areas where not only the people entering but also the outdoor area has to be observed. The camera is set via the OSD with buttons and it can also be configured via the RS-485 interface using a PC. This "all-inclusive camera" also provides outstanding images in other fields of application, such as in casinos (with Casino Mode) or in day/night deployment.

Model	ZC-YHW702P
Video system	PAL
Image sensor	1/3" IT CCD
Horizontal resolution TVL	510 lines (colour); 520 lines (b/w)
Min. illumination	0.8 lux (colour); 0.1 lux (b/w) 0.025 lux (SENSup x 40 colour @ F 1.2 - 50 IRE)
Lens mount	CS mount
Iris control	DC/AES (Vp-p = 12 VDC, 60 mA max. signal = 0.7 Vp-p, high impedance)
Backlight compensation	Wide dynamic/on/off
Dynamic range	60 dB (wide dynamic on)
Power supply	12 VDC +/- 15 %; 24 VAC +/- 15 %
Power consumption	270 mA (24 VAC); 390 mA (12 VDC), 5 W
Operating environment	-10 °C ~ +50 °C (90 % humidity, non-condensing)
Weight (net)	330 g
Dimensions (W x H x D)	60 mm x 66 mm x 123 mm

GANZ

DAY/NIGHT CAMERAS 1/3"

1/3" day/night cameras ZC-NH258P

ZC-NH258P

- **High-resolution 1/3" camera for day/night mode with 540 TV lines**
- **Brilliant colour pictures in daylight, high-contrast b/w pictures**
- **Fast manual day/night toggling**
- **Auto-iris control via DC or video signal**
- **Internal or mains synchronisation with phase adjustment**
- **Compact design and easy installation**

The ZC-NH258P is a simple and uncomplicated day/night camera. The (mechanical) day/night toggling within one second is an advantage. This model is given preference for applications in corridors and stairwells where rapid colour and b/w toggling is required.
The camera can also be switched to night mode via an external contact. It remains in b/w mode until the contact is no longer closed.
Synchronisation can be selected and backlight compensation activated with the DIP switches.

Model	ZC-NH258P
Video system	PAL
Image sensor	1/3" IT CCD, mosaic filter
Horizontal resolution TVL	540 lines
Min. illumination	0.08 lux (F 1.2/50 IRE) b/w mode 0.04 lux (F 1.2/30 IRE) b/w mode
Lens mount	CS mount
Iris control	DC/AES/Video (Vp-p = 12 VDC, 50 mA max. signal = 0.7 Vp-p, high impedance)
Power supply	12 VDC +/- 10 %; 24 VAC +/- 10 % (50 Hz +/- 1 %)
Power consumption	4.5 W
Operating environment	-10 °C ~ +50 °C (85 % humidity, non-condensing)
Weight (net)	240 g
Dimensions (W x H x D)	60 mm x 540 mm x 103.3 mm

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DAY/NIGHT CAMERAS 1/3"

1/3" day/night cameras ZC-NH405P/405PE

ZC-NH405P/405PE

- High-resolution 1/3" cameras for automated day/night mode
- Brilliant colour images in daylight, high-contrast b/w images
- Auto-iris control
- Options for automatic white balance
- Innovative design
- Power supply optionally 12 VDC/24 VAC or 230 VAC
- Configuration using on-screen menus
- Changing to night mode optionally using external contact

These day/night cameras have an OSD menu for camera settings. The menu is operated using a control pad which is located under a side cover.

A lens with a 31 cm control cable is required as the connection for the iris control is situated on the rear.

With these models 20-30 seconds are needed for toggling between day and night mode. This prevents immediate changeover to the colour mode where brief brightness differences frequently occur. These cameras are preferably used at entrances and exits.

Model	ZC-NH405P	ZC-NH405PE
Video system	PAL	PAL
Image sensor	1/3" IT CCD, 768 x 582 pixels	1/3" IT CCD, 768 x 582 pixels
Horizontal resolution TVL	540 lines	540 lines
Min. illumination	F 1.2; 50 IRE; 0.06 lux b/w F 1.2; 30 IRE; 0.03 lux b/w	F 1.2; 50 IRE; 0.06 lux b/w F 1.2; 30 IRE; 0.03 lux b/w
Lens mount	CS mount	CS mount
Iris control	DC/AES/VIDEO	DC/AES/VIDEO
Interface	RS-485 two-way communication	RS-485 two-way communication
Betriebsspannung	12VDC +/- 20 %; 24 VAC +/- 20 %, 50Hz	230 VAC
Operating voltage	5 W	5 W
Operating environment	-10 °C ~ +50 °C (85 % humidity)	-10 °C ~ +50 °C (85 % humidity)
Weight (net)	450 g	450 g
Dimensions (W x H x D)	73 mm x 61 mm x 123 mm	73 mm x 61 mm x 123 mm

GANZ

AUTO-FOCUS ZOOM CAMERAS 1/4"

1/4" auto-focus cameras ZC-AF16 (colour camera); ZC-NAF27 (day/night camera)

ZC-AF16/ZC-NAF27

- **Auto-focus cameras with 27x motorised zoom (ZC-NAF27) or 16x motorised zoom (ZC-AF16)**
- **ZC-NAF27 with mechanical day/night toggling**
- **High-resolution 1/4" CCD with up to 470 TV lines**
- **Digital zoom as add-on feature**
- **Remote control possible**
- **Compact design for installation in small outdoor housings**

Thanks to the auto-focus module, this popular camera series greatly facilitates set-up. No ND or IR filter is required, the camera is correctly set in just a few minutes. It can be used for almost all applications owing to the large focal length range. It can also be configured via a serial interface or a resistance matrix.

Model	ZC-AF16	ZC-NAF27
Video system	PAL	PAL
Operating voltage	12 VDC, special jack	12 VDC, screw-type terminals
Power consumption	4.7 W maximal	5.3 W maximal
Image sensor	1/4" IT CCD, 795 × 596 pixels	1/4" IT CCD, 795 × 596 pixels
Focal length	3.9 mm – 63.0 mm	3.25 mm – 88.0 mm
Zoom	16x optical, 8x digital	27x optical, 10x digital
Horizontal resolution TVL	440 lines	470 lines
Min. illumination	2.0 lux (F-stop 1.6)	Colour mode: 2.5 lux (50 IRE) B/w mode: 0.4 lux (50 IRE)
Remote control	1 × interface RS-232	1 × interface RS-422/-485, RJ-45
Operating environment	-10 ~ +50 °C (0 ~ 80% rel. humidity	0 ~ +45 °C (0 ~ 60% rel. humidity)
Weight	350 g	500 g
Dimensions (W x H x D)	59.4 mm × 61.2 mm × 95.0 mm	57.0 mm × 68.9 mm × 111.5 mm

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MINI FINGER CAMERA 1/4"

1/4" CCD colour camera MTC-36

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MTC-36

- **Inconspicuously small**
- **Discreet close-up surveillance**
- **Versatile use in the private sector**
- **Automatic electronic shutter**
- **Automatic gain control**
- **Rapid installation thanks to pre-wiring and mounting accessories**

The splashwater-proof compact camera monitors cellars, house entrances, gardens or terraces at a glance. Its high-quality painted housing also permits deployment in covered outdoor areas. The MTC-36 integrates a lens with a 3.6 mm focal length for close-up surveillance. The electronic shutter readily copes with changing light conditions and ensures well-balanced image brightness. In addition, the mini finger camera offers automatic white balance. It can be screwed onto ceilings or flat surfaces. The ball joint made of stainless steel connects the housing and the bracket and permits free and permanent alignment of the camera.

Model	MTC-36
Video system	PAL
Image sensor	1/4" CCD, 512 × 582 pixels
Horizontal resolution TVL	330 lines
Video output	1 × composite signal, 1.0 Vp-p, 75 Ohm, BNC
Operating voltage	12 VDC ± 10%
Power consumption	90 mA
Focal length	3.6 mm
Min. illumination	2.0 lux (F-stop 2.0)
Electronic shutter	1/50 to 1/100.000 s
Horizontal angle of view	70°
Operating environment	-10 ~ +50 °C (< 80% rel. humidity)
Weight (net)	305 g
Dimensions (Ø × H)	26 mm x 85 mm

GANZ

COMPACT CAMERA SPOT-CAM

1/4" CCD colour camera SPOT-CAM ZC-L

ZC-L1210PHA

- **High-resolution colour camera with fast varifocal lens**
- **DIP switches for**
  - backlight compensation
  - synchronisation mode
- **DC iris**
- **Locking screws for focus and focal length**
- **Mains synchronisation with phase adjustment**
- **Compatible with commercially available filters**
- **Optional bracket ZCA-LB101 for concealed cable routing**

The "SPOT-CAM" owes its name to the design of a spotlight and, as a new edition of the successful LC camera series, combines time-tested features and innovation. The model has a 1/4" CCD and a high-perform-ance digital signal processor. The high-quality, 4x varifocal lens coves a focal length range from 2.8 to 10.0 mm. Locking screws permanently secure the focus and focal length settings once they have been made. The housing pane can be replaced for special surveillance tasks with numerous commercially available filters with a diameter of 52 mm. In this way ND cut filters or polarisation filters frequently ensure more effective video surveillance.

Model	ZC-L1210PHA	ZCA-LB101
Video system	PAL	–
Operating voltage	12 VDC/24 VAC +/- 10 %, 50 Hz +/- 1 Hz	12 VDC/24 VAC +/- 10 %, 50 Hz +/- 1 Hz
Power consumption (12 VDC)	2.0 W	–
Power consumption (24 VDC)	2.1 W; 180 mA	–
Horizontal resolution TVL	480 lines	–
Focal length	2.8 mm – 10.0 mm	–
Min. illumination (50 IRE)	1,5 Lux	–
Iris control	DC	–
Operating environment	-10 °C ~ +50 °C (<85 % rel. humidity, non-condensing)	-10 °C ~ +50 °C (<85 % rel. humidity, non-condensing)
Weight	approx. 200 g	approx. 180 g
Dimensions (Ø x L)	61 mm x 122 mm	90 mm x 110 mm

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IR COMPACT OUTDOOR CAMERAS

Colour/day/night outdoor cameras

ZC-B series/MTC-EX4

● **Compact design with wall bracket**

● **IR illumination >15 m**

● **Automatic day/night function (electronic or mechanical)**

● **Pre-wired with connector holder**

● **Fixed or varifocal versions available**

● **350 TV line, 480 TV line or 540 TV line models**

● **Protection class up to IP66**

The compact cameras in the outdoor housing with LEDs combine a compact design and a variety of functions in a smart housing which can also be used discreetly in private areas. The MTC-EX4 is fitted with a wide-angle lens of 4.0 mm and offers a resolution of 350 TV lines.

For the ZC-B models there are two camera versions and two varifocal lens versions with a DC iris. The 3039 models have a focal length of 3 – 9 mm and a resolution of 480 TV lines. With the 4312 models the focal length is 3.3 – 12 mm with a resolution of 540 TV lines. With the electronic day/night toggling only the colour burst is activated or de-activated. The mechanical day/night toggling also removes the IR cut filter in front of the image sensor. The mechanical day/night models also provide perfect colour images in direct sunlight.

The bracket included in the scope of delivery permits mounting on ceilings and walls. Thanks to the sunshield which is already integrated, the cameras are protected against overheating from direct sunlight.

GANZ

IR COMPACT OUTDOOR CAMERAS

Colour/day/night outdoor cameras

Model	MTC-EX4	ZC-BT3039PHA	ZC-BNT3039PHA	ZC-BNX3039PHA
Image sensor	1/4" IT CCD, PAL	1/3" IT CCD, PAL	1/3" IT CCD, PAL	1/3" IT CCD, PAL
Horizontal resolution TVL	>350 lines	>480 lines	>480 lines	>480 lines
Focal length	4.0 mm	3.0 mm – 9.0 mm	3.0 mm – 9.0 mm	3.0 mm – 9.0 mm
Angle of view (horiz.)	80°	90.30° – 31.90°	90.30° – 31.90°	90.30° – 31.90°
Iris control	–	DC	DC	DC
IR illumination	12 IR-LEDs	16 IR LEDs	16 IR LEDs	16 IR LEDs
Day/night toggling	Yes, electronic	Yes, electronic	Yes, mechanical	Yes, mechanical
Operating voltage	12 VDC	12 VDC ± 10 %; 24 VAC ± 10 %, 50 ± 1 Hz	12 VDC ± 10 %; 24 VAC ± 10 %, 50 ± 1 Hz	12 VDC ± 10 %; 24 VAC ± 10 %, 50 ± 1 Hz
Power consumption: at 12 VDC at 24 VAC	4.5 W –	6.5 W 8.0 W/430 mA	6.5 W 8.0 W/430 mA	6.5 W 8.0 W/430 mA
Operating environment	-10 °C ~ +50 °C max. 85 % RH	-10 °C ~ +50 °C max. 85 % RH	-10 °C ~ +50 °C max. 85 % RH	-10 °C ~ +50 °C max. 85 % RH
IP protection class	IP57	IP66	IP66	IP55
Dimensions (Ø x H)	65 mm x 105 mm	84 mm x 117 mm (including sunshield)	84 mm x 117 mm (including sunshield)	84 mm x 117 mm (including sunshield)

Model	ZC-BT4312PHA	ZC-BNT4312PHA	ZC-BNX4312PHA
Image sensor	1/3" IT CCD, PAL	1/3" IT CCD, PAL	1/3" IT CCD, PAL
Horizontal resolution TVL	540 lines	540 lines	540 lines
Focal length	3.3 mm – 12.0 mm	3.3 mm – 12.0 mm	3.3 mm – 12.0 mm
Angle of view (horiz.)	89.80° – 23.90°	89.80° – 23.90°	89.80° – 23.90°
Iris control	DC	DC	DC
IR illumination	20 IR LEDs	20 IR LEDs	20 IR LEDs
Day/night toggling	Yes, electronic	Yes, mechanical	Yes, mechanical
Operating voltage	12 VDC ± 10 %; 24 VAC ± 10 %, 50 ± 1 Hz	12 VDC ± 10 %; 24 VAC ± 10 %, 50 ± 1 Hz	12 VDC ± 10 %; 24 VAC ± 10 %, 50 ± 1 Hz
Power consumption: at 12 VDC at 24 VAC	6 W 5.5 W	6 W 5.5 W	6 W 5.5 W
Operating environment	-10 °C ~ +50 °C max. 85 % RH	-10 °C ~ +50 °C max. 85 % RH	-10 °C ~ +50 °C max. 85 % RH
IP protection class	IP66	IP66	IP55
Dimensions (Ø x H)	84 mm x 117 mm (including sunshield)	84 mm x 117 mm (including sunshield)	84 mm x 117 mm (including sunshield)

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

MINI DOME CAMERAS

Compact cameras in the mini dome housing, MD series

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

MD series

- **Smallest dome housing with complete compact camera**
- **Easy integration into almost any indoor environment**
- **Fixed focal length 3.6 mm**
- **Colour camera with automatic white balance**
- **1/3" or 1/4" CCD chip**
- **Up to 480 TV lines**

The MDC-P36S is a compact dome camera with an integrated fixed lens. The focal length of 3.6 mm and more than 330 TV lines guarantee a good overview at all times. The high min. illumination of the high-quality 1/3" CCD (SONY) still produces a good image even in low-light conditions. The MDCH-P36S contains a high-resolution (480 TV lines) camera module. The colour camera MDC-36 has a high-quality SONY CCD in the format ¼". Its automatic white balance levels colour temperatures which frequently fluctuate in the course of a day. The MD series can be integrated into almost any indoor environment for discreet surveillance owing to its small size.

Model	MDC-36	MDC-P36S	MDCH-P36S
Video system	PAL	PAL	PAL
Operating voltage	12 VDC	12 VDC +/-10 %	12 VDC +/-10 %
Power consumption	90 mA	100 mA	150 mA
Focal length	3.6 mm	3.6 mm	3.6 mm
Image sensor	1/4" CCD	1/3" CCD	1/3" CCD
Horizontal resolution TVL	350 lines	>330 lines	>480 lines
Min. illumination	1.0 lux/F 2,0	1.6 lux/F 2,0 (50 IRE)	3 lux/F 2,0 (50 IRE)
Operating environment	-10 °C ~ +50 °C	-10 °C ~ +50 °C	-10 °C ~ +50 °C
Weight	approx. 100 g	126 g	126 g
Dimensions (Ø x H)	75 mm x 54 mm	96 mm x 75 mm	96 mm x 75 mm

GANZ

DOME CAMERAS (ECONOMY)

Dome cameras 2000 series

ZC-D2000 series

- ● **Two high-quality dome cameras**
- ● **Optionally as indoor and outdoor domes**
- ● **Varifocal lenses with focal length 3.0 – 9.0 mm or 3.3 – 12.0 mm IR-corrected**
- ● **Outdoor model with built-in LEDs**

The new camera pair is suitable for a host of application conditions. The ZC-D2039PHA is an indoor dome with electronic toggling between colour and b/w. This toggling feature produces a better image in low light than in the colour mode. However, if there is no lighting, the second model, the ZC-DT2312PHA-IR, is ideal.

This is an outdoor dome, additionally vandalism-proof, with integrated LEDs. It, too, has an electronic toggling feature. Even in complete darkness a clear image is provided by the LEDs which reproduce the IR light required.

Model	ZC-D2039PHA	ZC-DT2312PHA-IR
Description	Indoor dome	Outdoor dome in vandalism-proof housing
Image sensor	1/3" Sony CCD	1/3" Sony CCD
Video system	PAL	PAL
Horizontal resolution TVL	480 lines	480 lines
Lens	3.0 mm ~ 9.0 mm (F = 1.2)	3.3 mm – 12.0 mm
Iris control	DC	DC
AGC	On/Off	On/Off
BLC	On (central)/Off	On (central)/Off
Day/night	–	Auto (electronic)
Min. illumination	0.2 lux (AGC on) @ 30 IRE	0 lux (IR on)
S/N Ratio	50 dB @ AGC off	50 dB @ AGC off
Power supply	12 VDC/24 VAC ± 10 %	12 VDC/24 VAC
Power consumption	3 W (max.)	5.5 W (max.)
Dimensions (Ø x H)	120 mm x 108 mm	140 mm x 108 mm

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ®

DOME CAMERA ZC-D

Dome camera ZC-D3210CHA

ZC-D3210CHA

- **High-resolution b/w camera with integrated varifocal lens**

- **DIP switches for backlight compensation**

- **Gain control**

- **Flicker reduction**

- **Quick and easy setting of angle of view and focus**

- **Housing protected against unauthorised opening without external screws**

The black/white camera in the dome housing permits effective and inconspicuous surveillance. With its 3D mechanism it can be mounted both on ceilings, walls and inclined surfaces. The varifocal lens offers the possibility of adapting the angle of view to the application. The elegant housing fits well into any environment. This high-resolution (580 TVL) b/w model offers an outstanding image even in low light.

Model	ZC-D3210CHA
Video system	CCIR
Image sensor	1/4" IT CCD, 752 x 582 pixels
Horizontal resolution TVL	580 lines
Min. illumination	0.48 lux (50 IRE)
Focal length	2.8 mm – 10.0 mm
Operating voltage	24 VAC +/- 10 %, 50 Hz +/- 1 Hz
Power consumption (12 VDC)	1.5 W
Power consumption (24 VDC)	2.0 W, 155 mA
Operating environment	-10 °C ~ +50 °C (<85 % rel. humidity)
Weight	approx. 400 g
Dimensions (Ø x H)	128 mm x 101 mm

GANZ

DOME CAMERA 4039 SERIES

Mini cameras in dome housing with varifocal lenses

4039 series

- **Mini cameras integrated in a dome housing**
- **IR varifocal lenses with a focal length of 3.0 – 9.0 mm**
- **Flexible Installation thanks to 3-axis module**
- **Convenient mounting and adjustment**
- **In an indoor or vandalism-proof outdoor housing**

Thanks to integrated Pixim sensors, the ZC-DW4039PHA camera models offer optimum contrast compensation for indoor and the ZC-DWT4039PHA for outdoor applications. The WDR version masters even the most difficult light conditions and automatically calculates the ideal values and so a high-definition video image of top quality is produced at all times. High-resolution recordings in perfect b/w presentation (up to 0.08 lux with an aperture of F 1.2), even in the dark, are guaranteed by the day/night model ZC-DNT4039PHA.

Model	ZC-DW4039PHA	ZC-DWT4039PHA	ZC-DNT4039PHA
Image sensor	Pixim sensor, PAL	Pixim sensor, PAL	1/3" IT CCD, PAL
Horizontal resolution TVL	520 lines	520 lines	540 lines
Min. illumination	1.3 Lux @ F 1.2 (AGC - AN)	1.3 Lux @ F 1.2 (AGC - AN)	0.08 Lux @ F 1.4
Focal length	3.0 mm – 9.0 mm	3.0 mm – 9.0 mm	3.0 mm – 9.0 mm
Iris control	DC	DC	DC
Wide dynamic range	Yes, 120 dB/17 Bit	Yes, 120 dB/17 Bit	–
Day/night toggling	Yes, electronically activated	Yes, electronically activated	Yes, mechanical
Power supply	12 VDC/24 VAC	12 VDC/24 VAC	12 VDC/24 VAC
Power consumption	3 W	3 W	4.3 W
Operating environment	-10 °C ~ +50 °C (85 % RH max.)	-10 °C ~ +50 °C (85 % RH max.)	-10 °C ~ +50 °C (85 % RH max.)
IP protection class	–	from IP55	from IP55
Types of attachment	Surface-mounted	Surface or flush-mounted	Surface or flush-mounted
Weight (net)	300 g	600 g	600 g
Dimensions (Ø x H)	120 mm x 100 mm	140 mm x 100 mm	140 mm x 100 mm

Lenses
Cameras
Protection housings
Monitors
Recording equipment
IP systems and transmission
Switchers and matrix
Pan-and-tilt heads
Motion detectors
Infrared lighting
Accessories and service

DOME CAMERAS 4312 SERIES

Mini cameras in dome housing with varifocal lenses

4312 series

- Camera module integrated in dome housing
- Colour or day/night camera
- IR varifocal lenses with 3.3 mm – 12 mm focal length
- Flexible installation thanks to 3-axis module
- Comprehensive accessories
- Wide range of mounting options
- For indoor and outdoor applications with vandalism-proof features

The dome cameras of the 4312 series are available as colour or day/night cameras (with mechanical swivel-type IR cut filter), optionally with an indoor or vandalism-proof outdoor housing. An IR-corrected varifocal lens with DC iris and a variable focal length of 3.3 mm – 12.0 mm is integrated in both camera modules.

All camera modules of this series have a high-resolution 1/3" CCD sensor with 540 TV lines. Thanks to the 3-axis mechanism inside the dome, the desired position for the camera module can be set, whether for wall, ceiling or inclined installations. The use of the DC iris prevents the camera from overloading in the event of major light fluctuations (e.g. outdoors) producing too bright an image. Owing to the IR-corrected varifocal lens, the day/night dome always produces a sharp image when infrared light is used.

Model	ZC-D4312PHA	ZC-DT4312PHA	ZC-DN4312PHA	ZC-DNT4312PHA
Image sensor	1/3" CCD, PAL	1/3" CCD, PAL	1/3" CCD, PAL	1/3" IT CCD, PAL
Horizontal resolution TVL	540 lines	540 lines	540 lines	540 lines
Min. illumination	1.4 lux (F 1.4)	1.4 lux (F 1.4)	0.08 lux (F 1.4)	0.08 lux (F 1.4)
Focal length	3.3 mm – 12.0 mm	3.3 mm – 12.0 mm	3.3 mm – 12.0 mm	3.3 mm – 12.0 mm
Iris control	DC	DC	DC	DC
Angle of view (horiz.)	89.8° – 23.9°	89.8° – 23.9°	89.8° – 23.9°	89.8° – 23.9°
Day/night toggling	Yes, electronically activated	Yes, electronically activated	Yes, mechanical	Yes, mechanical
Power supply	12 VDC/24 VAC	12 VDC/24 VAC	12 VDC/24 VAC	12 VDC/24 VAC
Power consumption	4 W	4 W	4.3 W	4.3 W
Operating environment	-10 °C ~ +50 °C, 85 % RH max.	-10 °C ~ +50 °C, 85 % RH max.	-10 °C ~ +50 °C, 85 % RH max.	-10 °C ~ +50 °C, 85 % RH max.
IP protection class	–	from IP55>IP66	–	from IP55
Types of attachment	Surface-mounted	Surface or flush-mounted	Surface-mounted	Surface or flush-mounted
Weight (net)	350 g	650 g	300 g	600 g
Dimensions (Ø x H)	120 mm x 100 mm	140 mm x 100 mm	120 mm x 100 mm	140 mm x 100 mm

GANZ

ACCESSORIES FOR INDOOR INSTALLATION OF THE 4000 SERIES

Rapid-installation adapter (ZCA-QIP400)
The clever technology of the ZCA-QIP400 adapter facilitates the installation of the indoor dome cameras in suspended ceilings. Fold-out locking arms which can be moved into the right position using a screwdriver dispense with removing the ceiling plates during mounting.

Adapter for pendant mounting (ZCA-DMA400W)
A water pipe with a 1" thread can be screwed to the adapter.

Fastening plate for a 4s box (ZCA-BMA400W)
Adapter to connect the camera to 4S boxes

Corner mounting adapter (ZCA-CMA400W)
For mounting into the top corner (2x wall, 1x ceiling)

Adapter for installation in suspended ceilings (ZCA-FMA400W)
After installation only the cover of the dome camera can be seen thanks to this adapter.

Service cable (ZCA-SM400)
Serves to pick off the video signal via the service jack. The coaxial cable connected does not have to be removed. A new angle of view or the focus of the camera can be set using a service monitor.

Passive twisted-pair transmitter for installation in the housing (ZCA-UTP400)
This module permits the video signal to be transmitted through a twisted-pair cable (e.g. UTP or CAT cable). The module is installed in the dome housing in such a way that no other connection boxes are required. Depending on the receiver, the signal can be transmitted up to 225 m (passive receiver) or 1,000 m (active receiver).

Wall bracket for pendant mounting (ZCA-GN400)
The ZCA-GN400 is used when the dome is not to be installed directly on the wall. The adapter ZCA-DMA4000W is required for this purpose.

Tinted cover with fastening ring (ZCA-DCS40)
The tinted cover permits discreet surveillance as the camera direction cannot be seen.

Dummy dome housing (ZC-D4000MM)
The appearance of this dummy is exactly like the indoor version of the 4000 series with tinted cover but it has no internals.

ZCA-QIP400

ZCA-BMA400W
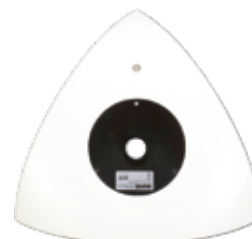
ZCA-CMA400W

ZCA-FMA400W

ZCA-UTP400

ZCA-DCS40

Lenses

Cameras

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Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ACCESSORIES FOR OUTDOOR INSTALLATION OF THE 4000 SERIES

ZCA-DMA400W-T

ZCA-CMA400W-T

ZCA-SM400

ZCA-UTP400-T

ZCA-GN400

ZCA-DCS40-T

Adapter for pendant mounting (ZCA-DMA400W-T)
A water pipe with a 1" thread can be screwed to the adapter.

Fastening adapter for a 4s box, white (ZCA-BMA400W-T)
To cover flush-mounted boxes

Corner mounting adapter (ZCA-CMA400W-T)
For mounting into the top corner (2x wall, 1x ceiling)

Service cable (ZCA-SM400)
Serves to pick off the video signal via the service jack. The coaxial cable connected does not have to be removed. A new angle of view or the focus of eh camera can be set using a service monitor.

Passive twisted-pair transmitter for installation in the housing (ZCA-UTP400-T)
The adapter permits the transmission of the video signal through twisted cables (e.g. CAT5). With a passive receiver the transmission range is up to 225 m, if an active receiver is used, up to 1,000 m. Furthermore, interference with the video signal is avoided as a result of the twisted-pair technology.

Wall bracket for pendant mounting (ZCA-GN400)
The ZCA-GN400 is used when the dome is not to be installed directly on the wall. The adapter ZCA-DMA4000W is required for this purpose.

Tinted cover with fastening ring (ZCA-DCS40-T)
The tinted cover permits discreet surveillance as the camera direction cannot be seen.

GANZ

DOME CAMERAS ZC-D5000 SERIES

Mini cameras in dome housing with varifocal lenses

ZC-D5000 series

- ● **HQ1 image resolution of 540 TV lines**
- ● **Day/night toggling (manual or electronic)**
- ● **Various CS-mount varifocal lenses**
- ● **Outdoor use also possible using accessories**

The ZC-D5000 series is also ideally suited for video surveillance in difficult light conditions thanks to its min. illumination of up to 0.83 lux and an F-stop of 1.0. A host of varifocal lenses are available for this camera series. They range from a focal length of 5 – 50 mm down to a wide-angle lens with a focal length of 2.9 – 8.2 mm. The 5000 cameras are fitted with a sensitive 1/3" IT CCD light sensor which has a resolution of at least 540 lines. Moreover, the varifocal lenses of the day/night versions ZC-DN are IR-corrected.

Model	ZC-D5029PHA	ZC-DN5029PHA	ZC-D5212PHA
Image sensor	1/3" IT CCD, PAL	1/3" IT CCD, PAL	1/3" IT CCD, PAL
Horizontal resolution TVL	>540 lines	>540 lines	>540 lines
Min. illumination	1.25 lux (50 IRE D-D/N off) 0.83 lux (50 IRE D-D/N on)	0.07 lux (50 IRE D-D/N off) 0.03 lux (30 IRE)	1.41 lux (50 IRE D-D/N off) 0.94 lux (50 IRE D-D/N on)
Focal length	2.9 mm – 8.2 mm	2.9 mm – 8.2 mm	2.8 mm – 12.0 mm
Iris control	DC	DC	DC
Day/night toggling	Yes, electronic	Yes, mechanical	Yes, electronic
Power supply	12 VDC/24 VAC	12 VDC/24 VAC	12 VDC/24 VAC
Power consumption	3 W (DC)/4.2 W (AC), 250 mA (AC)	3 W (DC)/4.2 W (AC), 250 mA (AC)	3 W (DC)/4.2 W (AC), 250 mA (AC)
Operating environment	-10 °C ~ +50 °C (85 % RH max.)	-10 °C ~ +50 °C (85 % RH max.)	-10 °C ~ +50 °C (85 % RH max.)
Types of attachment	Surface-mounted; flush-mounted	Surface-mounted; flush-mounted	Surface-mounted; flush-mounted
Weight (net)	470 g	470 g	490 g
Dimensions (Ø x H)	144 mm x 110 mm	144 mm x 110 mm	144 mm x 110 mm

Model	ZC-DN5212PHA	ZC-D5550PHA	ZC-DN5840PHA
Image sensor	1/3" IT CCD, PAL	1/3" IT CCD, PAL	1/3" IT CCD, PAL
Horizontal resolution TVL	>540 lines	>540 lines	>540 lines
Min. illumination	0.11 lux (50 IRE) 0.05 lux (30 IRE)	1.41 lux (50 IRE D-D/N off) 0.94 lux (50 IRE D-D/N on)	0.11 lux (50 IRE) 0.05 lux (30 IRE)
Focal length	2.8 mm – 12.0 mm	5.0 mm – 50.0 mm	8.0 mm – 40.0 mm
Iris control	DC	DC	DC
Day/night toggling	Yes, mechanical	Yes, electronic	Yes, mechanical
Power supply	12 VDC/24 VAC	12 VDC/24 VAC	12 VDC/24 VAC
Power consumption	3 W (DC)/4.2 W (AC), 250 mA (AC)	3 W (DC)/4.2 W (AC), 250 mA (AC)	3 W (DC)/4.2 W (AC), 250 mA (AC)
Operating environment	-10 °C ~ +50 °C (85 % RH max.)	-10 °C ~ +50 °C (85 % RH max.)	-10 °C ~ +50 °C (85 % RH max.)
Types of attachment	Surface-mounted; flush-mounted	Surface-mounted; flush-mounted	Surface-mounted; flush-mounted
Weight (net)	490 g	560 g	550 g
Dimensions (Ø x H)	144 mm x 110 mm	144 mm x 110 mm	144 mm x 110 mm

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

DOME CAMERA ZC-DT5000 SERIES

Vandalism-proof outdoor cameras in dome housing

Lenses

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Monitors

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IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ZC-DT5000 series

- **Vandalism-proof and weatherproof housing**
- **Protection class IP66**
- **Rugged cast aluminium material**
- **Colour camera and mechanical day/night camera module**
- **HQ1 resolution with 540 TV lines**
- **Comprehensive mounting accessories**
- **CS-mount varifocal lenses**

In addition to the features of the 5000 series, these dome cameras have a vandalism-proof and weatherproof cast aluminium housing. This housing corresponds to the IP66 protection class and is prepared and pre-wired for surface mounting. Optionally, cable routing through a wall or ceiling or through a side thread connection is possible. With the optional heater, the dome camera can be used at down to -30 °C.

Model	ZC-DT5029PHA	ZC-DT5212PHA	ZC-DT5550PHA
Image sensor	1/3" CCD, PAL	1/3" CCD, PAL	1/3" CCD, PAL
Horizontal resolution TVL	540 lines	540 lines	540 lines
Min. illumination	1.25 lux (F 1.0)	1.41 lux (F 1.3)	1.41 lux (F 1.3)
Focal length	2.9 mm – 8.2 mm	2.9 mm – 12.0 mm	5.0 mm – 50.0 mm
Iris control	DC	DC	DC
Day/night toggling	Yes, electronic	Yes, electronic	Yes, electronic
Power supply	12 VDC/24 VAC	12 VDC/24 VAC	12 VDC/24 VAC
Power consumption	250 mA (AC) 3 W (12 VDC)/4.2 W (24 VAC)	250 mA (AC) 3 W (12 VDC)/4.2 W (24 VAC)	250 mA (AC) 3 W (12 VDC)/4.2 W (24 VAC)
Operating environment	-10 °C ~ +50 °C	-10 °C ~ +50 °C	-10 °C ~ +50 °C
Types of attachment	Surface-mounted	Surface-mounted	Surface-mounted
Weight (net)	1.5 kg	1.5 kg	1.5 kg
Dimensions (Ø x H)	170 mm x 125 mm	170 mm x 125 mm	170 mm x 125 mm

Model	ZC-DNT5029PHA	ZC-DNT5212PHA	ZC-DNT5840PHA
Image sensor	1/3" CCD, PAL	1/3" CCD, PAL	1/3" CCD, PAL
Horizontal resolution TVL	540 lines	540 lines	540 lines
Min. illumination	0.07 Lux (F 1.0)	0.11 Lux (F 1.3)	0.11 Lux (F 1.3)
Focal length	2.9 mm – 8.2 mm	2.8 mm – 12.0 mm	8.5 mm – 40.0 mm
Iris control	DC	DC	DC
Day/night toggling	Yes, mechanical	Yes, mechanical	Yes, mechanical
Power supply	12 VDC/24 VAC	12 VDC/24 VAC	12 VDC/24 VAC
Power consumption	250 mA (AC) 3 W (12 VDC)/4,2 W (24 VAC)	250 mA (AC) 3 W (12 VDC)/4,2 W (24 VAC)	250 mA (AC) 3 W (12 VDC)/4,2 W (24 VAC)
Operating environment	-10 °C ~ +50 °C	-10 °C ~ +50 °C	-10 °C ~ +50 °C
Types of attachment	Surface-mounted	Surface-mounted	Surface-mounted
Weight (net)	1,5 kg	1,5 kg	1,5 kg
Dimensions (Ø x H)	170 mm x 125 mm	170 mm x 125 mm	170 mm x 125 mm

GANZ

ACCESSORIES FOR INDOOR INSTALLATION OF THE 5000 SERIES

Adapter for pendant mounting (ZC5-PM1)
A water pipe with a 1" thread can be screwed to the adapter.

Wall mount for pendant mounting (ZC5-WM1)
The wall mount consists of the adapter for pendant mounting and matching bracket.

Passive twisted-pair transmitter for installation in the housing (ZC5-NVT)
The adapter permits the transmission of the video signal through twisted cables (e.g. CAT5). With a passive receiver the range is up to 225 m, if an active receiver is used, up to 1,000 m. Moreover, interference withzthe video signal is avoided with the twisted-pair technology.

ZC5-WM1

ACCESSORIES FOR OUTDOOR INSTALLATION OF THE 5000 SERIES

The above-mentioned adapter, wall mount for pendant mounting and passive twisted-pair transmitter are also available for outdoor installation in the camera housing. In addition, there are other accessories for outdoor installation:

Vandalism-proof outdoor housing (ZC-OH5)
With this housing the 5000 series corresponds to the protection class IP66.

ZC5-WM2

Tinted cover for the vandalism-proof housing (ZCA-DCS50)
As the alignment of the camera cannot be seen with a tinted cover, this accessory permits more discreet surveillance.

24 VAC heater for installation in the housing (ZC5-HTR)
Fitted with this heater, the 5000 cameras are also reliably equipped for use in extreme winter temperatures.

Adapter for pole mounting (PMA1)
Pole-mounting adapter for the bracket for pendant mounting

Adapter (ZC5-PM2)
Adapter for pendant mounting

Wall bracket (ZC5-WM2)
Wall bracket for pendant mounting, incl. ZC5-PM2

Passive twisted-pair transmitter (ZC5-NVT)
Passive twisted-pair transmitter for installation in the camera housing

Lenses

Cameras

Protection housings

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IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

MOTORISED DOME CAMERA SYSTEM ZC-PT

Motorised dome camera series for indoor and outdoor applications

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ZC-PT223P

ZC-PT226PXT

ZC-PT

- **Five high-quality camera models with a 12x, 22x, 23x, 26x and 35x optical zoom**

l **Position control for up to 256 fixed positions**

l **Auto-pan, tour and cruise at up to 32.4 km/h (moving to fixed position)**

l **Control using joystick controllers (e.g. ZCA-SC201, C-KBD2) or DVRs**

l **Housing without external screw fittings**

l **Variety of options for mounting on ceilings, walls and in corners**

l **Protection class IP66**

The ZC-PT series is a complete motorised dome series for indoor and outdoor applications with a 12x to 35x optical zoom. Various camera modules offer a range of functions, from day/night toggling through a WDR function down to privacy masking.
All domes have alarm inputs which can be triggered via a preset function or tour. This series can be equipped for all applications thanks to extensive accessories.

GANZ

MOTORISED DOME CAMERA SYSTEM ZC-PT

Motorised dome camera series for indoor and outdoor applications

Model	ZC-P212P/ZC-P212P-XT	ZC-PT222P/ZC-PT222P-XT	ZC-PT223P/ZC-PT223P-XT
Horizontal resolution TVL	470 lines	480 lines	540 lines
Scanning system	PAL	PAL	PAL
Min. illumination	1 lux	1 lux	0.01 lux (b/w mode)
Focal length	4 mm ~ 48 mm	4 mm ~ 88 mm	3.6 mm – 82.8 mm
Zoom range	12x optical	22x optical	23x optical
Implemented protocols	GANZ-S, GANZ-PT, Pelco-D/-P, VCL, Philips, AD-422 etc.		
Pan range	720°	360° (endless)	360° (endless)
Day/night: IR cut filter	Yes (outdoor model)/ No (indoor model)	–	Yes
Operating environment	Indoor: 0 °C ~ 40 °C Outdoor: -30 °C ~ 45 °C	Indoor: 0 °C ~ 40 °C Outdoor: -30 °C ~ 45 °C	Indoor: 0 °C ~ 40 °C Outdoor: -30 °C ~ 45 °C
Protection class	IP66 standard (only outdoor version)	IP66 standard (only outdoor version)	IP66 standard (only outdoor version)
Dimensions (Ø x H) Indoor Outdoor	131 mm x 173 mm 190 mm x 260 mm	131 mm x 226 mm 262 mm x 305 mm with sun-shield	131 mm x 226 mm 262 mm x 305 mm with sun-shield

Model	ZC-PT226P/ZC-PT226P-XT	ZC-PT235P/ZC-PT235P-XT
Horizontal resolution TVL	480 lines	540 lines
Scanning system	PAL	PAL
Min. illumination	0.01lux (b/w mode)	0.01 lux (b/w mode)
Focal length	3.5 mm ~ 91 mm	3.4 mm ~ 119 mm
Zoom range	26x optical	35x optical
Implemented protocols	GANZ-S, GANZ-PT, Pelco-D/-P, VCL, Philips, AD-422 etc.	
Pan range	360° (endless)	360° (endless)
Day/night: IR cut filter	Yes	Yes
Operating environment	Indoor: 0 °C ~ 40 °C Outdoor: -30 °C ~ 45 °C	Indoor: 0 °C ~ 40 °C Outdoor: -30 °C ~ 45 °C
Protection class	IP66 standard (only outdoor version)	IP66 standard (only outdoor version)
Dimensions (Ø x H) Indoor Outdoor	131 mm x 226 mm 262 mm x 305 mm with sun-shield	131 mm x 226 mm 262 mm x 305 mm with sun-shield

Lenses

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Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ   **51**

ACCESSORIES FOR THE SYSTEM ZC-PT

ZCA-TB200 ZCA-HC200

ZCA-GT200, ZCA-ST25, ZCA-ST50

ZCA-PTB, ZCA-PWB, ZCA-PWDM

ZCA-CBXT, ZCA-SBXT, ZCA-IPA

ZCA-CST

ZCA-RS422-485

CBC has developed a wide range of mounting options for the ZC-PT system. Both pole, ceiling and corner mounting as well as pendant mounting in high ceilings are possible – optionally indoors or outdoors.

Model	ZCA-SC201	ZCA-TB200	ZCA-TB200A	ZCA-HC200
Description/ Application	Control unit (3-axis) for ZC-PT dome series, max. 223 dome cameras, control by MPX and DVR	Adapter for installation in suspended ceilings	Adapter for installation in suspended ceilings for ZC-PT212P	Adapter for use under "hard ceilings"

Model	ZCA-GT100	ZCA-GT200	ZCA-ST25	ZCA-ST50
Description/ Application	Simple bracket for holding the indoor and outdoor housings	"Swan-neck" brackets for adaptation to wall, corner or pole mounting adapters for holding the indoor and outdoor housings	Tube extensions for pendant installation, 25 cm, for holding the indoor and outdoor housings	Tube extensions for pendant installation, 50 cm, for holding the indoor and outdoor housings

Model	ZCA-PTDM	ZCA-PWDM	ZCA-PTB	ZCA-PWB
Description/ Application	Pole mounting plate, narrow (232 x 136 mm), without distributor function for holding the ZCA-GT200	Pole mounting plate, wide (270 x 170 mm), without distributor function for holding the ZCA-GT200	Pole mounting box, narrow (291 x 170 x 250 mm) for holding the ZCA-GT200 and direct cabling on the pole	Pole mounting box, wide (270 x 168 x 150 mm) for holding the ZCA-GT200 and direct cabling on the pole

GANZ

ACCESSORIES FOR THE SYSTEM ZC-PT

Model	ZCA-CST	ZCA-CTB	ZCA-CWB	ZCA-CB54	ZCA-SB54
Description/ Application	Corner mounting plate for holding the ZCA-GT200, without distributor function	Corner mounting box – narrow (300 x 164 x 222 mm) for holding the ZCA-GT200 and direct cabling	Corner mounting box – wide (232 x 234 x 210 mm) for holding the ZCA-GT200 and direct cabling	Indoor dome cover, transparent, 5.4"	Indoor dome cover, tinted, 5.4"

Model	ZCA-220-1.5A	ZCA-220-3.0A	ZCA-CBXT	ZCA-SBXT	ZCA-PSU220
Description/ Application	Power supply unit for indoor mounting for ZC-PT series, 24 VAC, 1.5 A	Power supply unit for indoor mounting for ZC-PT series, 24 VAC, 3.0 A	Outdoor dome cover, transparent	Outdoor dome cover, tinted	Outdoor power supply unit (IP66) with alarm and connection distributor, 24 VAC, 3.1 A

Model	ZCA-RS422-485	ZCA-RS232-485	ZCA-BP485	ZCA-IPA	ZCA-IPA2
Description/ Application	Protocol converter RS-422/RS-485	Protocol converter RS-232/RS-485	Protocol converter biphase RS-485	Adapter for holding the indoor housings to the outdoor accessories ZCA-GT100/200 and ZCA-ST25/50	Adapter for holding the ZC-PT212P for the outdoor accessories ZCA-GT100/200 and ZCA-ST25/50

Lenses

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Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ

C-ALLVIEW HIGH SPEED PTZ

PTZ speed day/night camera in outdoor housing

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

C-AllView

● **Day/night camera**

● **High-speed, pan-and-tilt system**

● **18x and 36x zoom**

● **Vandalism-proof**

● **Protection class IP67**

● **Built-in wiper unit**

● **Control using joystick controllers (e.g. ZCA-SC201, C-KBD2) or DVRs**

Equipped with a high speed pan and tilt head, the C-AllView can overlook more than 180° per second in continuous rotation, can tilt up to 290° and can respond as fast as lightning from every position. The day/night camera comes with a zoom lens with a focal length from 4.1 mm – 73.8 mm. With this 18x zoom option you can catch essential pictures in excellent quality. Moreover it is also available in a 36x zoom version with a focal length of 3.4 mm – 122.4 mm. A wiper for cleaning the screen is included in the scope of delivery while a washer is available as an option.

Model	C-ADN3X18PT-W/C-ADN3X18PT-B	C-ADN3X36YPT-W/C-ADN3X36YPT-B
Image sensor	1/4" IT CCD (ExView), PAL	1/4" IT CCD (ExView), PAL
Horizontal resolution TVL	480 lines	530 lines
Min. illumination (colour)	0.7 lux	1.0 lux (50 IRE)
Min. illumination (b/w)	0.01 lux	0.015 lux (50 IRE)
Focal length	4.1 mm – 73.8 mm	3.4 mm – 122.4 mm
Horizontal angle of view	48° – 2.7°	57.8° – 1.7°
Zoom	18x optical, 12x digital	36x optical, 12x digital
Focus	Automatic, manual	Automatic, manual
Pan range	Continuous 360°	Continuous 360°
Position accuracy	(0.1°) 14 bit resolution of the encoder	(0.1°) 14 bit resolution of the encoder
Fixed positions	32	32
Fixed position tour	8 fast, 8 slow tours	8 fast, 8 slow tours
Individual camera run	4 x 1 minute individual camera start	4 x 1 minute individual camera start
Privacy zones	24 (max. 8 simultaneously in the image, E-Flip deactivated)	
Implemented protocols	Pelco-D/-P, BBV Coaxial, VTC, Sensormatic (RS-422), Samsung SCC300, Kalatel, C-Dome	
Control interface	RS-485 Data transmission half duplex	RS-485 Data transmission half duplex
Protection class	IP67	IP67
Housing colour	Matt black or RAL9002	Matt black or RAL9002
Operating voltage	20-36 VDC/14-26 VAC	20-36 VDC/14-26 VAC
Power consumption	Max. 30 W	Max. 30 W
Operating environment	-20 °C ~ +50 °C	-20 °C ~ +50 °C
Weight	7 kg	7 kg
Dimensions (Ø x H)	Max. 220 mm x 268,13 mm	Max. 220 mm x 268,13 mm

GANZ

C-ALLVIEW THERMAL HIGH SPEED PTZ

PTZ speed thermal camera in outdoor housing

C-AllView Thermal

- ● **Surveillance with and without additional lighting**
- ● **Identification of people (thermal) up to 1,000 m**
- ● **High-resolution day/night camera**
- ● **Dual principle (thermal/optical)**
- ● **Angle of pan 360 degrees**
- ● **36x optical zoom**
- ● **Built-in wiper unit**
- ● **Flat front glass to prevent distortion**
- ● **Protection class IP67**

As a combined video and thermal camera, the C-AllView Thermal also permits a thermal image in addition to a video image with 36x zoom function – even under arduous vision conditions or in complete darkness. As a result, it is ideally suited for professional video surveillance in the short and long ranges, both for challenging environments with the highest demands as well as for outdoor use in extreme weather conditions.

Model	C-ATDNX36H-50-B	C-ATDNX36H-25-B	C-ATDNX36H-12-B
Material, structure & sensor format	Microbolometer made of amorphous silicon (320 x 240 pixels)	Microbolometer made of amorphous silicon (320 x 240 pixels)	Microbolometer made of amorphous silicon (320 x 240 pixels)
Spectral reaction	7 – 14 micrometer (filter bandwidth)	7 – 14 micrometer (filter bandwidth)	7 – 14 micrometer (filter bandwidth)
Refresh rate	25 Hz in real time (subject to licence), 9 Hz (no licence required)	25 Hz in real time (subject to licence), 9 Hz (no licence required)	25 Hz in real time (subject to licence), 9 Hz (no licence required)
Horizontal angle of view	50°	25°	12°
Identification of people	up to approx. 200 m	up to approx. 600 m	up to approx. 1,000 m
Analog output	PAL	PAL	PAL
Accessories	incl. wiper unit, bracket and external power supply unit (230 VAC/24 VAC) in weatherproof housing	incl. wiper unit, bracket and external power supply unit (230 VAC/24 VAC) in weatherproof housing	incl. wiper unit, bracket and external power supply unit (230 VAC/24 VAC) in weatherproof housing

For other technical details, see C-AllView C-ADN3X36YPT

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ACCESSORIES C-ALLVIEW

Lenses

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Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

C-PM-B   C-PM-W

C-WM-B   C-PPM-B

Screen washer nozzle for C-AllView (C-AWN)
Screen washer nozzle with supply line, for mounting between C-AllView and bracket

Screen washer pump with 5-litre tank (C-AWA5L)
Pump with 5-litre tank for the screen washer, operating voltage 24 VAC

Screen washer pump with 25-litre tank (C-AWA25L)
Pump with 5-litre tank for the screen washer, operating voltage 24 VAC

Swan-neck bracket for pendant mounting (C-PM-B)
Swan-neck bracket for pendant mounting, e.g. mounting on pole, black

Swan-neck bracket for pendant mounting (C-PM-W)
Swan-neck bracket for pendant mounting, e.g. mounting on pole, matt white

Wall mounting bracket (C-WM-B)
Wall mounting bracket for suspended or upright installation of the C-AllView, approx. 285 mm, black

Wall mounting bracket (C-WM-W)
Wall mounting bracket for suspended or upright installation of the C-AllView, approx. 285 mm, matt white

Ceiling mount for pendant mounting (C-PPM-W)
Ceiling mount for pendant mounting, 1 m long, matt white

Ceiling mount for pendant mounting (C-PPM-B)
Ceiling mount for pendant mounting, 1 m long, black

Spare cable for the C-AllView (C-10m)
Multi-core spare cable for C-AllView, with plug connection, 10 m long

Spare power supply unit (C-EXTPSU24VAC)
Spare power supply unit in weatherproof housing, 230 VAC/24 VAC, IP65

Wall mounting arm (PTB)
Wall mounting arm for upright mounting, approx. 458 mm long, RAL9002

Joystick controller (C-KBD2)
Control unit with 3-axis joystick and multi-protocol control, for controlling C-AllViews, ZC-PTs and DVRs; with three independent RS-485 outputs and large display on the control unit.

GANZ

Thermal cameras

- ● **Surveillance without additional lighting**
- ● **Surveillance in all weathers (in fog, rain, snow, smoke)**
- ● **Identification of people up to 700 m**
- ● **Available as dome version and in cylindrical housing**
- ● **Protection class IP67**
- ● **Angle of view: 12°, 25° and 50°**

Thermal cameras are ideally suited to satisfy growing security demands in a wide field of applications, e.g. for general security purposes, major industrial works, bridges, airports, underground railways and similar sectors. In contrast to conventional video technology, they have the advantage that there is no need for low light or infrared spotlights. Moreover, objects can be easily identified by their heat signature even during the day. Thermal cameras produce clear and sharp video images even in slight fog, rain or smoke.

Model	ZT-0830P	C-0350NHT	C-HT0312	C-HT0325	C-HT0350
Sensor	Uncooled microbolometer sensor 8 – 14 µm, 320 x 240 resolution		Uncooled microbolometer sensor 7 – 14 µm, 320 x 240 resolution		
Identification of people	150 m	150 m	700m	500m	250m
Image refresh rate	25 Hz (no licence required)	25 Hz (no licence required)	9 Hz	9 Hz	9 Hz
Horizontal angle of view	50°	50°	12°	25°	50°
Power supply	8 – 14 VDC/1.5A	5 – 15 VDC/2.5A	8 – 32 VDC/3A	8 – 32 VDC/3A	8 – 32 VDC/3A
Type of housing/Material	Dome/ Aluminium	Cylindrical/ Aluminium	Cylindrical/ Aluminium	Cylindrical/ Aluminium	Cylindrical/ Aluminium
Protection class	IP67	IP67	IP67	IP67	IP67

Lenses

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Pan-and-tilt heads

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Accessories and service

GANZ **57**

DUMMIES

Dummy cameras and lenses

These dummy cameras are identical to the original models, the only difference being that they have no internals. They therefore merely serve to deter potential thieves, and are suitable, for example, for kiosks and supermarkets.

Model	ZC-F00	ZC-YH212MM	DL-00	ZC-D5000MM	ZC-D4000MM
Description/ Application	Dummy camera, without lens, comparable with the ZC-F11C series	Dummy camera, without lens, comparable with the ZC-Y12PH/NH258	Manual dummy lens, C/CS	Dummy dome camera, comparable with the 5000 indoor dome series	Dummy dome camera, comparable with the 4000 indoor dome series

WALL MOUNTINGS FOR CAMERAS

Wall brackets for mounting indoors

Various wall brackets are available for easy mounting. The ZP-B10 plastic bracket was developed for quick installation, especially of compact cameras indoors. Fitted with a ball joint, this bracket permits simple manual alignment of the camera without any tools. The internal cable routing ensures clean installation.

The BK140 and BCV140 brackets are made of sturdy aluminium and have a wall mount made of plastic. Both brackets are suitable for ceiling and wall mounting and permit rapid manual alignment of the camera by means of a ball joint.

Model	ZP-B10	BK140	BCV140	BKX	ZCA-LB101
Description/ Application	Bracket 18 cm, made of plastic, white, optionally grey, internal cable routing, adjustment without tools	Bracket 14 cm, made of metal, optionally white, adjustment with tools	Bracket 14 cm, made of metal, black, optionally white, adjustment without tools using union nut	Extension for BK/ BCV, 50 mm, black, optionally white	Only for SPOT-CAM 12 VDC/24 VAC: bracket 9 cm, made of plastic, grey, internal cable routing

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Accessories and service

GANZ

POWER SUPPLY UNITS

Power supply units for supplying 12 VDC, 24 VAC or 28 VAC

Power supply units

- **Reliable power supply**
- **230 VAC input voltage**
- **12 VDC, 24 VAC or 28 VAC output voltage**
- **Plug-type, flush-mounted, fixed and rack installation power supply units**

A selection of power supply units is available to operate the cameras with different power supplies. They offer optionally a power supply of 12 VDC, 24 VAC or 28 VAC. The power supply units CV12-II and CV24-II are particularly suitable for fixed mounting. Two bores for screws (8 mm) permit rapid attachment to walls. All power supply units for fixed mounting offer thermal overvoltage protection.

The power supply unit CV12P is a plug-type power supply unit. It is made of space-saving SMD components.

Moreover, a flush-mounted power supply unit is available, ideally suited for concealed mounting when used in building automation, from telecommunications as well as security and surveillance technology down to light technology applications. It is optimally suited for decentralised power supply, e.g. in building automation, and has an output power of 12 W with 12 VDC output voltage.

Model	CV12P	CV12UP	CV12-II	CV24-II
Description/ Application	Power supply unit, 12 VDC, 1,000 mA	Compact, fully encapsulated power supply unit with connection wires, suitable for installing in flush-mounted boxes on plane surfaces	Power supply unit for fixed mounting, 12 VDC, 800 mA	Power supply unit for fixed mounting, 24 VAC, 400 mA

Model	CV2408-6A	CV2416-12A
Description/ Application	19" rack installation, primary input reversible; 110/230 VAC 2.4/1.2 A, 8 secondary outputs, 24/28 VAC, 1 A max. per camera, 6 A together, colour function display (LED) for each channel	19" rack installation, primary input reversible; 110/230 VAC 4.8/2.4 A, 16 secondary outputs, 24/28 VAC, 1 A max. per camera, 12 A together, function display (LED) for each channel

Lenses

Cameras

Protection housings

Monitors

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IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

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Infrared lighting

Accessories and service

Protection
housings

INDOOR HOUSINGS V4FCD

Housings for indoor installation

Lenses

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Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

V4FCD

- **Elegant housing in dome shape**
- **Easy mounting in suspended ceilings**
- **Cover of various designs**
- **Camera alignment can be changed horizontally and vertically**
- **Space for compact varifocal lenses**

The V4FCD series consists of indoor dome housings for mounting in suspended ceilings for CS/C-mount cameras. These models are available with a cover in white, black, smoked and mirrored. The housings are fitted with a flexible nylon fabric as a rear cover to protect against dust. This resilient fabric also permits the use of a large number of camera/lens combinations.

Model	V4FCD-W	V4FCD-B	V4FCD-M	V4FCD-S
Field of application	Indoors	Indoors	Indoors	Indoors
Inside dimensions (Ø x H)	125 mm Ø x 62.5 mm	125 mm Ø x 62.5 mm	125 mm Ø x 62.5 mm	125 mm Ø x 62.5 mm
Dimensions (Ø x H)	175 mm Ø x 65 mm (visible part)	175 mm Ø x 65 mm (visible part)	175 mm Ø x 65 mm (visible part)	175 mm Ø x 65 mm (visible part)
Cover colour	White with viewing slot	Black with viewing slot	Mirrored	Smoked
Weight	0.56 kg	0.56 kg	0.56 kg	0.56 kg
Tilt range	36° – 90°	36° – 90°	36° – 90°	36° – 90°
Pan range	360° max.	360° max.	360° max.	360° max.
Dimensions camera (H x W)	60 mm x 60 mm max.	60 mm x 60 mm max.	60 mm x 60 mm max.	60 mm x 60 mm max.
Dimensions lens (Ø x W)	50 mm Ø x 55 mm	50 mm Ø x 55 mm	50 mm Ø x 55 mm	50 mm Ø x 55 mm

GANZ

INDOOR HOUSING GH-FI

Housing for indoor installation

GH-FI

- ● **Dust-proof housing (IP66) of the GH-FAST series**
- ● **User-friendly operation**
- ● **External and concealed cable routing**
- ● **High resistance (IK10)**

Made of polycarbonate, the GH-FI housing is not only lighter than an aluminium or stainless steel housing, it is also considerably more resistant to scratches or deformation. It retains its durability owing to the plastic coating even when exposed to high loads.

Model	GH-FI
Heater	No
Maximum power inside	20 W (-20 °C ~ +50 °C)
Operating environment	0 °C ~ +55 °C
Storage environment	-30 °C ~ +55 °C RH 85 % non-condensing
Sunshield	No
Material of the pane	Polycarbonate
Pre-wired bracket	No
High-strength cable glands PG9	2
PG11	1
Attachment points for accessories/Opening possibility	2x M5 left & right
Vandalism resistance class IK	IK10 as per EN50102
Self-extinguishing fire behaviour	V2 as per UL94
Weight	1.46 kg

Lenses

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Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

OUTDOOR HOUSINGS GH

Protection housings for outdoor applications

Lenses

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Switchers and matrix

Pan-and-tilt heads

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Infrared lighting

Accessories and service

GH series

● **Complete housing incl. wall bracket with ball joint (KIT), sunshield and heater**

● **Pre-wired with internal cable routing**

● **Protection class IP67**

● **Simple mounting and positioning**

● **Fold-up sunshield and rapid-action locks for great ease of maintenance**

The outdoor housings of the GH-KIT series offer protection against extreme weather conditions. The internal cable routing dispenses with the complicated sealing of high-strength cable glands to maintain the protection class IP67. The GH-KIT is designed as a complete housing and permits easy mounting. A sunshield prevents the housing from overheating. The heater with thermostat keeps the temperature inside the housing constant and protects the front pane from fogging up. The protection housings of the GH-KIT series are available in three different designs for different power supplies (12 VDC, 24 VAC, 230 VAC).

The GH housing is supplied without a wall bracket (GH-WM) and the cables are introduced into the housing through the high-strength cable glands. Otherwise, the GH housing corresponds to the GH-KIT. With an additional adapter, the housing fits onto all common pan-and-tilt heads.

Model	GH-12	GH-24	GH-230
Protection class	IP66	IP66	IP66
Inside dimensions (L × W × H)	310 mm x 105 mm x 105 mm	310 mm x 105 mm x 105 mm	310 mm x 105 mm x 105 mm
Operating temperature	-20 °C ~ +50 °C	-20 °C ~ +50 °C	-20 °C ~ +50 °C
Operating voltage	12 VDC	24 VAC	230 VAC
Wall bracket	Not enclosed	Not enclosed	Not enclosed
Power consumption	<700 mA	<350 mA	<40 mA
Dimensions (L × W × H)	395 mm x 145 mm x 130 mm	395 mm x 145 mm x 130 mm	395 mm x 145 mm x 130 mm
Weight	1.66 kg	1.66 kg	1.66 kg

Model	GH-KIT12	GH-KIT24	GH-KIT230
Protection class	IP67	IP67	IP67
Inside dimensions (L × W × H)	310 mm x 105 mm x 105 mm	310 mm x 105 mm x 105 mm	310 mm x 105 mm x 105 mm
Operating temperature	-20 °C ~ +50 °C	-20 °C ~ +50 °C	-20 °C ~ +50 °C
Operating voltage	12 VDC	24 VAC	230 VAC
Wall bracket	Included in scope of delivery	Included in scope of delivery	Included in scope of delivery
Power consumption	<700 mA	<350 mA	<40 mA
Dimensions (L × W × H)	395 mm x 145 mm x 130 mm	395 mm x 145 mm x 130 mm	395 mm x 145 mm x 130 mm
Weight	2.11 kg	2.11 kg	2.11 kg

GANZ

OUTDOOR HOUSINGS GH-FAST

Weatherproof housing series GH-FAST

GH-FAST series

- ● **Outdoor housings with sunshield and heater**
- ● **Protection class IP66**
- ● **User-friendly operation (can be opened on both sides)**
- ● **External and concealed cable routing**
- ● **High resistance**
- ● **Also available as compact housings with wall bracket**

The GH-FAST weatherproof housing series offers reliable protection of the cameras against dust, water and even brief flooding and therefore has the protection class IP66. Fitted with a sunshield and built-in heater, the housings are also equipped to withstand extreme weather conditions, optionally also down to -40 °C by means of a double heater. The innovative housing series consists of resistant, plastic-coated polycarbonate, can be installed either with external or concealed cable routing (internal cable duct through the wall bracket) and is available in three voltage versions.

GH-FWC: With wall bracket and internal cable routing (voltage and coax-cables)

Model	GH-FWC12	GH-FWC24	GH-FWC230	GH-FWCAT230
Operating voltage	12 VDC	24 VAC	230 VAC	230 VAC
Heater	Yes; 8.4 W	Yes; 8.4 W	Yes; 8.4 W	Yes; 8.4 W
Operating environment	-20 °C ~ +55 °C with 17 W total power	-20 °C ~ +55 °C with 17 W total power	-20 °C ~ +55 °C with 17 W total power	-20 °C ~ +55 °C with 17 W total power
Sunshield	Yes	Yes	Yes	Yes
Material of the pane	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Pre-wired bracket	Yes (mains and oax-cables)	Yes (mains and coax-cables)	Yes (mains and coax-cables)	Yes (mains and ¬ CAT5 cables)
High-strength cable glands PG9	2 (not included in scope of delivery)	2 (not included in scope of delivery)	2 (not included in scope of delivery)	2
PG11	1 (not included in scope of delivery)	1 (not included in scope of delivery)	1 (not included in scope of delivery)	1
IP class	IP66	IP66	IP66	IP66
Vandalism resistance class IK	IK10 as per EN50102	IK10 as per EN50102	IK10 as per EN50102	IK10 as per EN50102
Self-extinguishing fire behaviour	V2 as per UL94	V2 as per UL94	V2 as per UL94	V2 as per UL94
Weight	1.8 kg	1.8 kg	1.8 kg	1.8 kg

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

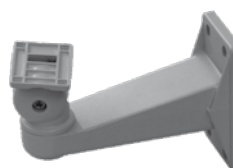Accessories and service

OUTDOOR HOUSINGS GH-FAST

Weatherproof housing series GH-FAST

Lenses

Cameras

Protection housings

Monitors

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IP systems and transmission

Switchers and matrix

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Accessories and service

GH-FW: With wall bracket

Model	GH-FW12	GH-FW24	GH-FW230
Operating voltage	12 VDC	24 VAC	230 VAC
Heater	Yes; 8.4 W	Yes; 8.4 W	Yes; 8.4 W
Operating environment	-20 °C ~ +55 °C at 17 W total power	-20 °C ~ +55 °C at 17 W total power	-20 °C ~ +55 °C at 17 W total power
Storage environment	-30 °C ~ +55 °C RH 85 % non-condensing	-30 °C ~ +55 °C RH 85 % non-condensing	-30 °C ~ +55 °C RH 85 % non-condensing
Sunshield	Yes	Yes	Yes
Material of the pane	Polycarbonate	Polycarbonate	Polycarbonate
Pre-wired bracket	Yes, not pre-wired	Yes, not pre-wired	Yes, not pre-wired
High-strength cable glands PG9 PG11	2 (included in scope of delivery) 1 (included in scope of delivery)	2 (included in scope of delivery) 1 (included in scope of delivery)	2 (included in scope of delivery) 1 (included in scope of delivery)
IP class	IP66	IP66	IP66
Vandalism resistance class IK	IK10 as per EN50102	IK10 as per EN50102	IK10 as per EN50102
Self-extinguishing fire behaviour	V2 as per UL94	V2 as per UL94	V2 as per UL94
Weight	1.76 kg	1.76 kg	1.76 kg

GH-F: Without wall bracket

Model	GH-F12	GH-F24	GH-F230
Operating voltage	12 VDC	24 VAC	230 VAC
Heater	Yes; 8.4 W	Yes; 8.4 W	Yes; 8.4 W
Operating environment	-20 °C ~ +55 °C at 17 W total power	-20 °C ~ +55 °C at 17 W total power	-20 °C ~ +55 °C at 17 W total power
Sunshield	Yes	Yes	Yes
Material of the pane	Polycarbonate	Polycarbonate	Polycarbonate
Pre-wired bracket	No	No	No
High-strength cable glands PG9 PG11	2 (included in scope of delivery) 1 (included in scope of delivery)	2 (included in scope of delivery) 1 (included in scope of delivery)	2 (included in scope of delivery) 1 (included in scope of delivery)
IP class	IP66	IP66	IP66
Vandalism resistance class IK	IK10 as per EN50102	IK10 as per EN50102	IK10 as per EN50102
Self-extinguishing fire behaviour	V2 as per UL94	V2 as per UL94	V2 as per UL94
Weight	1.38 kg	1.38 kg	1.38 kg

GANZ

ACCESSORIES FOR OUTDOOR HOUSINGS GH AND GH-FAST

Brackets, adapters, mounting accessories, power supply units, heaters, fans and alarm contacts for the weatherproof housings GH and GH-Fast

GH series

- ● **A host of combinations**
- ● **Easy mounting at virtually any location**
- ● **Rugged aluminium construction**
- ● **Attractive design**

GH-CM

GH-PAR   GH-PA

GH-PS   GH-PT

GH-WM   GH-SM

The accessories for the GH and GH-Fast weatherproof housings offer a host of combination and application possibilities. The well-conceived design guarantees easy mounting. All brackets are made of sturdy aluminium and are covered with a rugged protective paint for permanently reliable use outdoors. All accessory components are colour-matched.

The GH-CM mount, in conjunction with the GH-KIT, permits concealed cable routing, even with ceiling installation. Two adapters are available for mounting on poles. Both adapters are simply screwed to the GH-WM bracket. The GH-PAR adapter is intended for poles with a diameter of 60 to 140 mm. The GH-PA adapter is suitable for poles with a diameter of over 140 mm. Lateral surface-mounted cable routing is possible with the GH-SM distance plate. The weatherproof housing can be combined for professional use outdoors using the GH-PT adapter with a pan-and-tilt head of the PTH series.

The wall bracket (GH-FWM) of the GH-FAST series has an area prepared for the cabling. This can be broken open on both sides so that the cable can also be routed through the sides. This dispenses with the need for the GH-SM.

If the power supply of the GH-FAST and the camera is to be provided by means of PoE, we can offer the appropriate PoE splitter.

Lenses

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Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ACCESSORIES FOR OUTDOOR HOUSINGS GH AND GH-FAST

Brackets, adapters, mounting accessories, power supply units, heaters, fans and alarm contacts for the weatherproof housings GH and GH-Fast

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Model	GH-WM	GH-FWM	GH-CM	GH-CM2
Description/ Application	Wall bracket, incl. ball joint GH series, 18 cm	Wall bracket, incl. ball joint for GH-F series, 20 cm	Ceiling mount for internal cable routing for GH series	Ceiling mount for internal cable routing for GH-F series

Model	GH-SM	GH-PAR	GH-PA	GH-PT
Description/ Application	Distance plate for wall bracket, for lateral surface-mounted cable routing	Pole mount adapter for poles from 60 to 140 mm Ø, attachment with threaded rods	Pole mount adapter for poles from 140 mm Ø for use with assembly tapes (not included in scope of delivery)	Adapter for pan-and-tilt head

Model	GH-PS24/12	GH-PS230/12	GH-PS230/24	GH-PS230/12H
Description/ Application	Camera power supply unit 24 VAC/12 VDC, 360 mA	Camera power supply unit 230 VAC/12 VDC, 360 mA	Camera power supply unit 230 VAC/24 VAC, 500 mA	Camera power supply unit for the GH-F series, 230 VAC/12VDC, 1.5 A

Model	GH-B24	GH-B12	GH-VTA	GH-TK1
Description/ Application	Optional fan 24 VAC for the GH and GH-F series	Optional fan 12 VDC for the GH and GH-F series	Alarm transmission kit via coaxial cable for the GH and GH-F series	Alarm contact for installation in the GH-F series

Model	GH-TK	GH-FHT12	GH-FHT24	GH-FHT230
Description/ Application	Alarm contact for installation in the GH (KIT) series	Optional heater 12 VDC for the GH-F series, temperature range -40° C ~ + 50°C	Optional heater 24 VAC for the GH-F series, temperature range -40°C ~ + 50°	Optional heater 230 VAC for the GH-F series, temperature range -40° C ~ + 50°

GANZ®

OUTDOOR HOUSINGS CH SERIES

Protection housings CHEM/CHEB and CHOV

CH Serie

- **High-quality aluminium weatherproof housings up to IP66**
- **Free access to the camera technology**
- **Internal cable routing possible**
- **Standard includes sunshield and heater**
- **Heaters available as 12 VDC/24 VAC or 230 VAC**
- **Wide variety of accessories for individual requirements**

The CHEM housing version is characterised by small dimensions and is suitable for cameras without a motorised zoom lens. The sunshield can be removed completely or pushed forwards to protect the camera against dazzle.

The CHEB standard housing for applications with pan-and-tilt heads also accommodates motorised zoom lenses. Its particular quality is the possibility of complete internal cable routing. Just as with the CHEM housing, the sunshield can be positioned in line with the focal length or removed completely.

The CHOV housing version with the fold-up sides facilitates the installation of the camera and lens. As with the other models, the sunshield can be adapted to suit the individual focal length. The internal cable routing and an optional fan guarantee reliable and sustained use.

The CHEG housing is compatible with most video cameras and lenses thanks to its large inside dimensions. Owing to the removable body the internal slide for attaching the camera and lenses is completely revealed. This facilitates the mounting and setting of the camera. In conjunction with an optional double heater, the housing withstands a temperature range of -40 °C to +50°C.

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GANZ

OUTDOOR HOUSINGS CH SERIES

Protection housings CHEM/CHEB and CHOV

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Model	CHEM 12/24	CHEM 230	CHEB 12/24	CHEB 230
Cable design	1x PG9, 1x PG11	1x PG9, 1x PG11	2x PG9, 1x PG11	2x PG9, 1x PG11
Internal effective dimensions (W x H x L)	70 x 65 x 230 mm	70 x 65 x 230 mm	90 x 85 x 250 mm	90 x 85 x 250 mm
Pane dimensions (W x H)	65 x 60 mm (glass)	65 x 60 mm (glass)	90 x 81 mm (glass)	90 x 81 mm (glass)
Voltage versions for heater	12 VDC/24 VAC	230 VAC	12 VDC/24 VAC	230 VAC
Power consumption of the heater	12/24 V = 20 W	230 V = 40 W	12/24 V = 20 W	230 V = 40 W
Dimensions external (W x H x L)	113 x 104 x 410 mm	113 x 104 x 410 mm	144 x 135 x 470 mm	144 x 135 x 470 mm
Operating environment	-20 °C – +50 °C	-20 °C – +50 °C	-20 °C – +50 °C	-20 °C – +50 °C
Certifications	CE; IP66	CE; IP66	CE; IP66 (with cable clips), IP54 (without cable clips)	CE; IP66 (with cable clips), IP54 (without cable clips)
Special features			Can be used with normal or internal cable routing (depending on wall bracket used)	Can be used with normal or internal cable routing (depending on wall bracket used)

Model	CHOV 12/24	CHOV 230	CHEG
Cable design	2x PG9, 1x PG11	2x PG9, 1x PG11	1x PG9, 2x PG11
Internal effective dimensions (W x H x L)	100 x 70 x 250 mm	100 x 70 x 250 mm	134 x 88 x 358 mm
Pane dimensions (W x H)	118 x 75 mm (polycarbonate)	118 x 75 mm (polycarbonate)	94 x 80 mm (glass)
Voltage versions for heater	12 VDC/24 VAC	230 VAC	230 VAC
Power consumption of the heater	12/24 V = 20 W	230 V = 40 W	230 V = 40 W
Dimensions external (W x H x L)	176 x 131 x 514 mm	176 x 131 x 514 mm	175 x 168 x 590 mm
Operating environment	-20 °C – +50 °C	-20 °C – +50 °C	-20 °C – +50 °C
Certifications	CE; IP66 (with cable clips), IP54 (without cable clips)	CE; IP66 (with cable clips), IP54 (without cable clips)	CE; IP66
Special features	Can be used with normal or internal cable routing (depending on wall bracket used)	Can be used with normal or internal cable routing (depending on wall bracket used)	Available with double heater (down to -40 °C), wiper unit available

GANZ

ACCESSORIES FOR OUTDOOR HOUSINGS

Brackets, adapters, mounting accessories, power supply units and heaters for all outdoor housings of the CHEM, CHEB, CHOV and CHEG series

Housing installation/ Accessories

- ● **Flexible installation possibilities**
- ● **Rugged design**
- ● **Weatherproof powder coating**
- ● **Suitable for indoors and outdoors**

Application example with CHEB

WBJ

WBM

WBOV

WBOV/P

WBJ

CM4

CM5

CP

CW

SFP

The wall brackets for all outdoor housings of the CHEM, CHEB and CHOV series offer ideal mounting conditions with their variety of applications and flexibility. They are made of cast aluminium and coated with a rugged protective paint in the housing colour. The model WBOV/P also has a junction box arranged on the side which permits internal cable routing.

The CM4 and CM5 ceiling mounts offer attractive and reliable possibilities of ceiling installation for all housings. The models can be easily installed and perfectly aligned. The model CM4 has a mounting head specially for the CHOV and CHEB housings, therefore offering the possibility of complete internal cable routing.

In addition, a number of adapters is available for special mounting applications, e.g. the CW for corner mounting, the 4PVT for mounting on horizontal surfaces and the SFP for mounting on poles.

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ACCESSORIES FOR OUTDOOR HOUSINGS

*Brackets, adapters, mounting accessories, power supply units and heaters
for all outdoor housings of the CHEM, CHEB, CHOV and CHEG series*

Model	WBJ	WBM	WBOV	WBOV/P
Description/ Application	Wall mount incl. ball joint, for CHOV and CHEG housings	Wall mount incl. ball joint, for CHEB and CHEM housings	Wall mounting incl. ball joint, for CHOV housing, internal cable routing	Like WBOV, incl. wall junction box

Model	CP	CW	SFP	CM4
Description/ Application	Wall mount plate for WBM, WBJ and WBOV	Corner mount plate for WBM, WBJ and WBOV	Pole mount adapter for WBM, WBJ and WBOV	Ceiling mount incl. ball joint, for CHOV housing, internal cable routing

Model	CM5	CMP	4PVT	HE/GB
Description/ Application	Ceiling mount incl. ball joint, for CHEM, CHEB, CHOV and CHEG	Pipe extension for CM4/ CM5, 500 mm	Ball joint for mounting on horizontal surfaces	IP55 junction box for CHEM/CHEB/CHEG housings

Model	HEATER	CHEM/PSU12	CHEM/PSU24	CHEB/PSU12
Description/ Application	Spare heater, please indicate housing type and operating voltage	Camera power supply unit for installation in CHEM housing, 12 VDC, 400 mA	Camera power supply unit for installation in CHEM housing, 24 VAC, 400 mA	Camera power supply unit for installation in CHEB housing, 12 VDC, 400 mA

Model	CHEB/PSU24	CHOV/PSU12-2	CHOV/PSU24-2
Description/ Application	Camera power supply unit for installation in CHEB housing, 24 VAC, 400 mA	Camera power supply unit for installation in CHOV-2 housing, 12 VDC, 1 A	Camera power supply unit for installation in CHOV-2 housing, 24 VAC, 400 mA

As the CHEG housing is supplied in RAL9002, the accessories described
above are not colour-matched to it. If you require the accessories for the
CHEG housing, please always add **"RAL9002"**.

GANZ

VANDALISM-PROOF PROTECTION HOUSINGS AND ACCESSORIES

Protection housings TPSK and TPSC for the surveillance of vandalism-endangered areas

TPSK/TPSC

- **For installation inside buildings**
- **Steel plate design**
- **Penetration-resistant polycarbonate glass (TPSK)**
- **Epoxy powder paintwork**
- **Can be locked with key**

The TPSK and TPSC housings were developed for the surveillance of vandalism-endangered areas, e.g. underground garages, underground stations, prisons, police stations and supermarkets. The housing is made of steel plate coated with epoxy powder and fitted with an internal bracket for the attachment and positioning of the video camera. The TPSK housing is protected at the front by a penetration-resistant polycarbonate pane. Both housing versions can, on request, be fitted with a heater, camera power supply unit and alarm contact which emits an alarm in the event of it being opened.

Model	TPSK-2	TPSC
Material	Steel plate 2.5 mm	Steel plate 1.5 mm
Housing colour	Anthracite, epoxy powder coating	Anthracite, epoxy powder coating
Front pane	Break-proof polycarbonate glass, 4 mm thick, in the steel frame	Glass made of PMMA, 4 mm thick
Lock	Lock with individual key, optionally with simultaneous locking key	Lock with normal key
Dimensions (W x H x L)	386.5 mm x 178.0 mm x 187.0 mm	354.5 mm x 178.0 mm x 155.0 mm
Operating environment	Inside buildings	Inside buildings
Certifications	CE (EN61000-6-3, EN60065, EN50130-4; IK10)	CE (EN61000-6-3, EN60065, EN50130-4; IK8)

Model	TPSC/H230	TPSC/H12/24	TPSC/PS12	TPSC/PS24
Description/ Application	Heater for TPSC housing, 230 VAC	Heater for TPSC housing, 12 VDC or 24 VAC	Camera power supply unit for TPSC housing, 12 VDC, 1 A	Camera power supply unit for TPSC housing, 24 VAC, 400 mA

Model	TPSK/PS12-2	TPSK/PS24-2	TPSK/H12/24-2	TPSK/H230-2
Description/ Application	Camera power supply unit for TPSK-2 housing, 12 VDC, 1 A	Camera power supply unit TPSK-2 housing, 24 VAC, 400 mA	Heater for TPSK-2 housing, 12 VDC or 24 VAC	Heater for TPSK-2 housing, 230 VAC

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LCD COLOUR MONITORS AND ACCESSORIES

MONITORS

LCD TFT monitors

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ZMA-RK8

ZM-L series

● **Automatic PAL/NTSC switch-over**

● **Up to 500 TV lines horizontal video resolution**

● **PIP function: Adjustable PIP dimensions, variable position, simultaneous display of the PC and video signal**

● **DC 12 V power output for the power supply to one single camera**

● **Light-weight and sturdy aluminium housing**

● **User-friendly control elements and multilingual menu**

● **Keylock function**

The extremely wide range of models of the ZM-L series comprises a host of different LCD colour monitors for diverse application possibilities. The compact ZM-L208C is ideally suited for installation in pairs in a 19" rack. Thanks to its low weight, it is also suitable for changing locations or the private sector. Other models are available with screen sizes of 15", 17" and 19" and all in the economy version in a black plastic housing or in the high-performance H versions in the more elegant aluminium housing.

All LCD monitors offer sophisticated technical features. They provide outstanding image quality thanks to their excellent resolution, the differentiated contrast and impressive brightness. Moreover, the various inputs and outputs open up a wide variety of connection possibilities. For example, the ZM-L208C has two composite signal inputs and outputs and an audio input and output.
The time-tested 8" monitor is supplied including a monitor bracket, the other units with a desktop base. Optionally available wall and installation accessories round off the series.

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GANZ

LCD COLOUR MONITORS AND ACCESSORIES

LCD TFT monitors

Model	ZM-L208C	ZM-L215E	ZM-L217E	ZM-L219E
Video norm	PAL/NTSC (3D COMB. FILTER)	PAL/NTSC (3D COMB. FILTER)	PAL/NTSC (3D COMB. FILTER)	PAL/NTSC (3D COMB. FILTER)
Screen diagonal	8"	15"	17"	19"
Max, resolution	800 x 600	1.024 x 768 XGA	1.280 x 1.024 SXGA	1.280 x 1.024 SXGA
Horizontal resolution TVL	>300 lines	500 lines	500 lines	500 lines
Contrast	500:1	500:1	800:1	800:1
Brightness	Min. 300 cd/m²	250 cd/m² (Typ.)	300 cd/m² (Typ.)	300 cd/m² (Typ.)
Angle of view horiz.; vertical	70°/70°; 70°/70°	70°/70°; 60°/65°	85°/85°; 80°/80°	80°/80°; 80°/80°
Signal inputs	2x BNC; 1x Y/C; 2x stereo-audio	Video BNC In (1.0 Vp-p 75 Ohm), audio In/Out, VGA 15 Pin D-Sub In, S-Video		
Signal outputs	2x BNC; 1x stereo-audio	Video BNC buffer Out (1.0 Vp-p 75 Ohm), Y/C out, audio out		
Loudspeakers	–	1 W (max.)	1 W (max.)	1 W (max.)
VESA connection	Yes	Yes	Yes	Yes
Operating voltage	12 VDC; 1,5A	12 VDC /4,0 A	12 VDC /4,0 A	12 VDC /4,0 A
Power consumption	18 W	30 W (max.)	40 W (max.)	50 W (max.)
Power supply unit	230 VAC/12 VDC	AC 100 V/240 V 50/60 Hz		
Operating environment	0 °C ~ 40 °C; 80 % RH	0 °C ~ 40 °C; 10 % ~ 85 % non-condensing		
Dimensions (W x H x D)	190 x 173 x 25 mm	364 x 316 x 170 mm	386 x 388 x 170 mm	424 x 419 x 170 mm
Weight	1 kg	4 kg	5.2 kg	6.1 kg

Model	ZM-L215H	ZM-L217H	ZM-L219H
Video norm	PAL/NTSC (3D COMB. FILTER)	PAL/NTSC (3D COMB. FILTER)	PAL/NTSC (3D COMB. FILTER)
Screen diagonal	15"	17"	19"
Max, resolution	1.024 x 768 XGA	1.280 x 1.024 SXGA	1.280 x 1.024 SXGA
Horizontal resolution TVL	500 lines	500 lines	500 lines
Contrast	500:1	800:1	800:1
Brightness	250 cd/m² (Typ.)	300 cd/m² (Typ.)	300 cd/m² (Typ.)
Angle of view horiz.; vertical	70°/70°; 60°/65°	85°/85°; 80°/80°	80°/80°; 80°/80°
Signal inputs	Video BNC In (1,0 Vp-p 75 Ohm), Audio In/Out, VGA 15 Pin D-Sub In, S-Video		
Signal outputs	Video BNC Buffer Out (1,0 Vp-p 75 Ohm), Y/C Out, Audio Out		
Loudspeakers	1 W (max.)	1 W (max.)	1 W (max.)
VESA connection	Yes	Yes	Yes
Operating voltage	12 VDC/ 4,0 A	12 VDC/ 4,0 A	12 VDC/ 4,0 A
Power supply unit	AC 100 V/240 V	AC 100 V/240 V	AC 100 V/240 V
Operating environment	0 °C ~ 40 °C; 10 % ~ 85 % non-condensing		
Dimensions (W x H x D)	353 x 338 x 170 mm	375 x 370 x 170 mm	420.6 x 405.3 x 170 mm
Weight	4 kg	5 kg	6.3 kg

Model	ZMA-WB2	ZMA-WB3	ZMA-RK8
Description/ Application	Wall mount with 2 knuckles for ZM-L2xx series, 15", 17" and 19" LCD	Wall mount with 3 knuckles for ZM-L2xx series, 15", 17" and 19" LCD	19" adapter for rack installation of up to 2 ZM-L208C

Model	ZMA-RK15H	ZMA-RK17H	ZMA-RK19H	ZMA-RK17E	ZMA-RK19E
Description/ Application	19" installation attachment	19" installation attachment	19" installation attachment	19" installation attachment	19" installation attachment

Model	ZMA-SG17H	ZMA-SG19H	ZMA-SG15E	ZMA-SG17E	ZMA-SG19E
Description/ Application	AR coated protective glass for installation	Protective glass	Protective glass	Protective glass	Protective glass

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GANZ

BLACK/WHITE MONITORS

CRT monitor series CEM

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CEM

- ● **1,200 TV lines resolution**
- ● **9", 12", 15" and 20" CRT sizes**
- ● **Audio function in all models**
- ● **Industrial housings of metallic design**

The CRT monitors of the CEM series show brilliant and high-contrast b/w pictures. All monitors have a high resolution and support the CCIR video norm. The CEM-09A and CEM-12A versions are also EIA-compatible. Moreover they are suitable for operation in various power networks and can therefore be used internationally. All models also have an internal loud-speaker. The standard cinch plugs are available for the connection of audio sources and connection to other loudspeakers.

CRT monitors are still best suited for showing video images of analog cameras. They are standardised to the PAL standard and operate without interpolation in contrast to TFT monitors. In addition, the images are displayed in top quality free of distortion.

Model	CEM-09A	CEM-12A	CEM-15A	CEM-20A
Bildschirmdiagonale	23 cm (9")	30.5 cm (12")	38.1 cm (15")	50.8 cm (20")
Auflösung Bildmitte	1,000 lines	1,000 lines	1,200 lines	1,000 lines
Auflösung Randbereich	800 lines	800 lines	1.000 lines	800 lines
Videonormen	CCIR, EIA	CCIR, EIA	CCIR	CCIR
Videoeingang	1x VBS 1,0 Vp-p, 75 Ohm, BNC	1x VBS 1,0 Vp-p, 75 Ohm, BNC	1x VBS 1,0 Vp-p, 75 Ohm, BNC	1x VBS 1,0 Vp-p, 75 Ohm, BNC
Videoausgang	1x VBS 1,0 Vp-p, 75 Ohm, BNC	1x VBS 1,0 Vp-p, 75 Ohm, BNC	1x VBS 1,0 Vp-p, 75 Ohm, BNC	1x VBS 1,0 Vp-p, 75 Ohm, BNC
Audioeingang	1 x cinch (RCA)	1 x cinch (RCA)	1 x cinch (RCA)	1 x cinch (RCA)
Audioausgang	1 x 0.5 W, cinch	1 x 0.5 W, cinch	1x 2 W, cinch	1x 0.6 W, cinch
Betriebsspannung	100–240 VAC (50/60 Hz)	100–240 VAC (50/60 Hz)	230 VAC (50/60 Hz)	230 VAC (50/60 Hz)
Stromaufnahme	<20 W	<30 W	<35 W	<36 W
Betriebsumgebung	All models: 0 °C ~ +40 °C (10 ~ 90 % rel. humidity, non-condensing)			
Gewicht	4.7 kg	8.0 kg	10.8 kg	18.2 kg
Abmessungen (L × B × H)	250 x 222 x 238 mm	310 x 304 x 320 mm	360 x 350 x 350 mm	360 x 472 x 450 mm

GANZ

COLOUR MONITORS WITH FLAT CRT

CRT monitor ZM-CR series

ZM-CR series

- **Flat, low-reflection CRTs**
- **15" (38 cm) and 21" (53 cm)**
- **Brilliant colour reproduction**
- **2 camera inputs and outputs**
- **Audio function integrated per channel**
- **15" model also available as high-resolution version**
- **400 to 800 TV lines**
- **Robust metal housing**
- **Integrated loudspeaker**

The absolutely flat CRTs of the ZM-CR series relieve strain on the eyes because the video picture is also displayed with absolutely no distortions at the edges. Moreover, the risk of disturbing reflections is almost completely excluded thanks to the flat screen surface. All monitors permit extremely sharp and brilliant colour reproduction. The very large screen area of the ZM-CR321NP is also particularly suitable for surveillance with split screen displays. The ZM-CR series integrates two separate video channels with an independent audio function in all models. High-performance loudspeakers are already incorporated into the monitor housings.

Model	ZM-CR315NP	ZM-CRH115NP	ZM-CR321NP
Video norms	PAL, NTSC	PAL, NTSC	PAL, NTSC
CRT	38.1 cm (15")	38.1 cm (15")	53.3 cm (21")
Vertical stripe pitch	0.6 mm	–	0,75 mm
Angle of view	90°	90°	90°
Horizontal resolution	400 lines	800 lines	500 lines
Convergence (centre)	<0.4 mm	–	<0.4 mm
Video inputs	3x BNC 1.0 Vp-p, 75 Ohm	2x BNC 1.0 Vp-p, 75 Ohm Y/C 4-Pin Mini-DIN	3x BNC 1.0 Vp-p, 75 Ohm
Video outputs	2x composite signal 1.0 Vp-p, 75 Ohm, BNC	2x composite signal 1.0 Vp-p, 75 Ohm, BNC	2x composite signal 1.0 Vp-p, 75 Ohm, BNC
Audio inputs camera	2x cinch plug (RCA)	3x cinch plug (RCA)	2x cinch plug (RCA)
Audio input recorder	1x cinch plug (RCA)	–	1x cinch plug (RCA)
Audio outputs	2x 1.5 W cinch plug (RCA)	1x 1 W cinch plug (RCA)	2x 1.5 W cinch plug (RCA)
Operating voltage	100 – 250 VAC (50/60 Hz)	100 – 240 VAC (50/60 Hz)	100 – 250 VAC (50/60 Hz)
Power consumption	50 W	60 W	95 W
Operating environment	-10 °C ~ +50 °C (10 ~ 90 % rel. humidity, non-condensing)		
Weight (with packing)	approx. 16.5 kg	approx. 15 kg	approx. 31 kg
Dimensions (W × H × D)	365 mm x 342 mm x 391 mm	368 mm x 361 mm x 376 mm	490 mm x 444 mm x 482 mm

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Accessories and service

BRACKETS FOR CRT MONITORS

Brackets for 9" – 12", 12" – 14", 14" – 21" and 21" – 28" CCTV monitors

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Brackets

- **Individual and space-saving mounting of CCTV CRT monitors**
- **For screen sizes between 9" and 28"**
- **Heavy-duty brackets with infinitely variable extension**
- **Wall and ceiling brackets**
- **Also suitable for large, heavy monitors**
- **MIS9-12 for CEM09A or CEM12A**
- **MIS12-14 for CEM12A, CEM15A, ZM-CR315NP or ZM-CRH115NP**
- **MID14-21 for CEM-20A or ZM-CR321NP**

The modular design of the monitor brackets permits virtually any arrangement in the room. In order to be able to hold each monitor with a screen size between 9" and 28", the heavy-duty brackets MIS and MID have infinitely extendible threaded rods. MIS and MID are suitable for combination with the wall bracket MWM, the ceiling brackets MCM and their extension CMP. Various elements made of light-weight but load-bearing aluminium tube serve to attach the monitor brackets to walls and ceilings. The module MWM was designed for the wall mounting of the MIS brackets, the MWM14/28 for the MIS models.

Model	MIS9-12	MIS12-14	MID14-21	MID21-28
Inside dimensions (W)	212.5 mm – 325.0 mm	275.0 mm – 377.5 mm	367.5 mm – 532.5 mm	510.0 mm – 675.0 mm
Inside dimensions (H)	212.5 mm – 325.0 mm	275.0 mm – 377.5 mm	367.5 mm – 532.5 mm	510.0 mm – 675.0 mm
Load capacity	20 kg	25 kg	35 kg	40 kg
Weight	2.4 kg	2.5 kg	5.0 kg	7.0 kg

Model	MWM	MWM14/28	MCM	CMP	MHSW
Length	–	–	856 mm	500 mm	–
Wall distance	423 mm	503.5 mm	–	–	–
Surface area	–	–	–	–	300 mm x 300 mm
Load capacity	60 kg	60 kg	60 kg	60 kg	25 kg
Weight	1.4 kg	1.9 kg	1.7 kg	0.5 kg	3.4 kg

GANZ

ZM-L304

- **4" LCD**
- **Light-weight and manageable**
- **Protective bag with screen cover and belt**
- **Battery case**
- **9 VDC power input, power supply unit is also supplied**

The light-weight, handy monitor simplifies adjustment work to the cameras. Thanks to its battery case, it is independent of a 230 VAC power supply but can also be operated with the power supply unit supplied. The belt and screen cover leave both hands free to adjust the camera and lens. Six AA batteries are required for the battery case. The monitor also has a looping output. As a result, the picture can be viewed on the camera on site and passed on to headquarters.

Model	ZM-L304
Video norm	PAL/NTSC
Screen diagonal	4"
Max. resolution	480 x 234
Angle of view horiz.	45°/45°
Angle of view vertical	10°/30° main direction: 6 o'clock position
Signal inputs	1x BNC
Signal outputs	1x BNC
VESA connection	No
Power supply	9 VDC; 660 mA or 6x AA batteries
Power consumption	2 W
Power supply unit	230 VAC/9 VDC
Operating environment	0 °C ~ 40 °C; 80 % RH
Dimensions (W x H x D)	126 mm x 96 mm x 35 mm
Weight	250 g

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

Recording
equipment

ANALOG VIDEO RECORDERS

Time lapse recorder series

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

CTR-4000 series

- ● **24 hours (CTR-4024) to 960 hours (CTR-4960) maximum recording time on an E-180 cassette**

- ● **Reliable, continuous operation at a high recording density**

- ● **Direct access to important control elements**

- ● **Search function for alarm recordings and storage alarm data**

- ● **Forward and reverse playback and frame-by-frame switching**

- ● **Alarm ready even with the unit switched off**

- ● **Cascading of several VCRs and automatic switch-over possible**

- ● **Programmable timer**

- ● **Locking of all key functions possible for automatic operation**

- ● **Convenient programming with on-screen menus**

The time lapse video recorders of the CTR-4000 series offer sophisticated technology for continuous video surveillance and recording. All parameters for automatic operation can be programmed using on-screen menus. Various search functions permit effective and quick work. Modern drive technology ensures trouble-free operation with long maintenance intervals. The large display panel shows the current settings and operation functions at a glance. Alarms are indicated by optical and acoustic signals. All models can be configured either for colour or high-resolution b/w recordings.

Model	XF180
Description/ Application	VHS tape, 180 minutes

Model	CTR-4024	CTR-4960
Operating voltage	100 – 240 VAC (50/60 Hz)	100 – 240 VAC (50/60 Hz)
Power consumption	approx. 15 W	approx. 15 W
Video system	VHS PAL	VHS PAL
Video input	1x composite signal 1.0 Vp-p, 75 Ohm, BNC	1x composite signal 1.0 Vp-p, 75 Ohm, BNC
Video output	1x composite signal 1.0 Vp-p, 75 Ohm, BNC	1x composite signal 1.0 Vp-p, 75 Ohm, BNC
Recording system	4 heads, helical scan azimuth system	4 heads, helical scan azimuth system
Rewind time	approx. 60 s (E-180 cassette)	approx. 65 s (E-180 cassette)
S/N ratio	>43 dB	>43 dB
Audio input	1x -6.0 dB, >47 kOhm, cinch plug	1x -6.0 dB, >47 kOhm, cinch plug
Audio output	1x -6.0 dB, <4,7 kOhm, cinch plug	1x -6.0 dB, <4,7 kOhm, cinch plug
Audio frequency range	200 Hz – 10 kHz	200 Hz – 10 kHz
Operating environment	+5 °C ~ +40 °C (>80 % rel. humidity, non-condensing)	
Weight	approx. 3.8 kg	approx. 3.8 kg
Dimensions (W × H × D)	360 mm x 94 mm x 270 mm	360 mm x 94 mm x 270 mm

GANZ

EMBEDDED DIGITAL RECORDERS

DIGIMASTER digital recorder series

DIGIMASTER 200

- ● **4, 8, 16-channel digital recorders**
- ● **2CIF, 4CIF, CIF resolution**
- ● **Up to 3 internal hard disks without capacity limit**
- ● **Fast data export via integrated CD/DVD burner and USB interface**
- ● **Operation/configuration on the unit, via infrared remote control and Ethernet (remote software included)**
- ● **"Watermark" function**

The digital recorders of the DIGIMASTER 200 series are suitable for permanent video surveillance. Easy to install, the recorders can be readily connected to any standard CCTV monitor using the composite output. The DIGIMASTER 204 has 4 channels, the models 208 and 216 have 8 and 16 channels respectively. All units offer MPEG-4 compression, permitting efficient and space-saving storage of the video sequences. The data can be stored on up to three internal hard disks. Moreover, it is also possible to export and archive the data via the USB interfaces and the integrated CD-/DVD burner.

Model	DIGIMASTER 204 lite	DIGIMASTER 204 (DR-4N-DVD)
Video norm	PAL/CCIR, NTSC/EIA	PAL/CCIR, NTSC/EIA
Operating voltage	12 VDC (power supply unit with wide range input, enclosed)	12 VDC (power supply unit with wide range input, enclosed)
Power consumption	60 W	60 W
Video input	4x composite signal 1.0 Vp-p, 75 Ohm, BNC	4x composite signal 1.0 Vp-p, 75 Ohm, BNC
Video output	–	4x composite signal 1.0 Vp-p, 75 Ohm, BNC, looped
Monitor output	1x main composite signal, BNC or VGA (1,024 x 768; 60 Hz)	1x main composite signal, BNC or 1x Y/C or VGA (1,024 x 768; 60 Hz); 1x SPOT composite signal, BNC
Hard disk internal	Max. 2x S-ATA, max. 2 TByte	Max. 2x IDE, no capacity limit, optional S-ATA
Display	Full screen, 4x	Full screen, 4x
Live display speed	25 fps @ channel (100 fps)	25 fps @ channel (100 fps)
Recording format	MPEG-4	MPEG-4
Recording rate	25 fps (4CIF), 50 fps (2CIF) or 100 fps (CIF) speed adjustable 1 ~ 25 images/camera, depending on the resolution	
Resolution	704 x 576 pixels (4CIF), 720 x 288 pixels (2CIF) or 360 x 288 pixels (CIF), 4 quality levels	
Remote access	Web browser or software (live display, live recording, search function, remote setting, archiving)	
OSD language	German, English, Russian, Polish, Czech, French, Italian, Spanish, Portuguese	
Operating environment	5 ~ 50 °C (10 ~ 80 % rel. humidity)	5 ~ 50 °C (10 ~ 80 % rel. humidity)
Weight	7 kg	7.5 kg
Dimensions (W x H x D)	304 mm x 290 mm x 58 mm	360 mm x 70 mm x 360 mm

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ

EMBEDDED DIGITAL RECORDERS

DIGIMASTER digital recorder series

RECORDING EQUIPMENT

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

Model	DIGIMASTER 208 (DR-8N-DVD)	DIGIMASTER 216 (DR-16N-DVD)
Video norm	PAL/CCIR, NTSC/EIA	PAL/CCIR, NTSC/EIA
Operating voltage	100 ~ 240 VAC (50/60 Hz)	100 ~ 240 VAC (50/60 Hz)
Power consumption	200 W	200 W
Video input	8x composite signal 1.0 Vp-p, 75 Ohm, BNC	16x composite signal 1.0 Vp-p, 75 Ohm, BNC
Video output	8x composite signal 1.0 Vp-p, 75 Ohm, BNC, looped	16x composite signal 1.0 Vp-p, 75 Ohm, BNC, looped
Monitor output	1x main composite signal, BNC or 1x Y/C or VGA (1,024 x 768; 60 Hz); 2x SPOT composite signal, BNC	1x main composite signal, BNC or 1x Y/C or VGA (1,024 x 768; 60 Hz); 4x SPOT composite signal, BNC
Hard disk internal	Max. 3x IDE, no capacity limit, optional S-ATA	Max. 3x IDE, no capacity limit, optional S-ATA
Display	1, 4, 6, 8, 9x	1, 4, 6, 8, 9, 13, 16x
Live display speed	25 fps @ channel (200 fps)	25 fps @ channel (400 fps)
Recording format	MPEG-4	MPEG-4
Recording rate	50 fps (4CIF), 100 fps (2CIF) or 200 fps (CIF) Speed adjustable 1 ~ 25 images/camera, depending on the resolution	
Resolution	704 x 576 pixels (4CIF), 720 x 288 pixels (2CIF) or 360 x 288 pixels (CIF), 4 quality levels	
Remote access	Web browser or software (live display, live recording, search function, remote setting, archiving)	
OSD language	German, English, Russian, Polish, Czech, French, Italian, Spanish, Portuguese	
Operating environment	5 ~ 50 °C (10 ~ 80 % rel. humidity)	
Weight	10 kg	10 kg
Dimensions (W x H x D)	430 mm x 90 mm x 470 mm	430 mm x 90 mm x 470 mm

Model	DR-RM1	DR-RM2
Description/ Application	19" adapter for rack mounting of DIGIMASTER 204	19" adapter for rack mounting of DIGIMASTER 208/216 and 308/316

GANZ

EMBEDDED DIGITAL RECORDERS

DIGIMASTER digital recorder series

DIGIMASTER 300

- 8, 16-channel digital recorders
- Recording of 200 or 400 fps
- 2CIF, 4CIF, CIF resolution
- Up to 3 internal hard disks without capacity limit
- Fast data export thanks to integrated CD-/DVD burner and USB interface
- Operation/configuration on the unit using infrared remote control and Ethernet (remote software included)
- "Watermark" function
- Special OSD for mouse control

Like the 200 series, the DIGIMASTER 300 series is ideally suited for permanent video surveillance and satisfies all the requirements placed on cost-effectiveness, reliability and easy operation. The DIGIMASTER 308 has 8 channels, the model 316 has 16 channels. The resolution, image quality and refresh rate can be individually adjusted for each channel. This permits the display and recording of videos in real time and with excellent image quality. The models of the 300 series are genuine pentaplex recorders with all the advantages in terms of live mode, recording, playback, network connection and backup.

Model	DIGIMASTER 308 (DR-8NRT-DVD)	DIGIMASTER 316 (DR-16NRT-DVD)
Video norm	PAL/CCIR, NTSC/EIA	PAL/CCIR, NTSC/EIA
Operating voltage	100 ~ 240 VAC (50/60 Hz)	100 ~ 240 VAC (50/60 Hz)
Power consumption	200 W	200 W
Video input	8x composite signal 1.0 Vp-p, 75 Ohm, BNC	16x composite signal 1.0 Vp-p, 75 Ohm, BNC
Video output	8x composite signal 1.0 Vp-p, 75 Ohm, BNC, looped	16x composite signal 1.0 Vp-p, 75 Ohm, BNC, looped
Monitor output	1x main VGA (1,024 x 768; 60 Hz), 1x composite signal BNC, 1x Y/C, 4x SPOT composite signal BNC	1x main VGA (1,024 x 768; 60 Hz), 1x composite signal BNC, 1x Y/C, 4x SPOT composite signal BNC
Hard disk internal	Max. 3× IDE (P-ATA), S-ATA (optional), no capacity limit	Max. 3× IDE (P-ATA), S-ATA (optional), no capacity limit
Display	1, 4, 6, 8, 9x	1, 4, 6, 8, 9, 13, 16x
Live display speed	25 fps @ channel (200 fps)	25 fps @ channel (400 fps)
Recording format	MPEG-4	MPEG-4
Recording rate	50 fps (4CIF), 100 fps (2CIF) or 200 fps (CIF)	100 fps (4CIF), 200 fps (2CIF) or 400 fps (CIF)
Resolution	704 x 576 pixels (4CIF), 720 x 288 pixels (2CIF) or 360 x 288 pixels (CIF), 4 quality levels	
Remote access	Web browser or software (live display, live recording, search function, remote setting, archiving)	
OSD language	German, English, Russian, Polish, Czech, French	
Operating environment	+5 °C ~ +50 °C (10 ~ 80 % rel. humidity)	+5 °C ~ +50 °C (10 ~ 80 % rel. humidity)
Weight	approx. 12 kg	approx. 12 kg
Dimensions (W x H x D)	428 mm x 93 mm x 475 mm	428 mm x 93 mm x 475 mm

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ

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EMBEDDED DIGITAL RECORDERS

C-MP digital recorder series

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

C-MP series

- **Operation-friendly embedded system for small to medium-scale applications**

- **4, 8 or 16 channels**

- **MPEG-4 compression**

- **Motion sensors**

- **Flexible access using web browser and client software**

With a choice of 4, 8, or 16 channels, the C-MP series offers a reasonably priced, high-performance alternative to PC-based management systems or video cards. The 16-channel model provides 400 fields in CIF format. The optimised MPEG-4 real-time process compresses the data rate without a loss in quality. Archiving can be performed with up to 2.25 TB in the recorder itself.

Model	C-MP404 Lite	C-MP404	C-MP408	C-MP416
Video norm	PAL	PAL	PAL	PAL
Operating voltage	19 VDC (power supply unit with wide range input, enclosed)		19 VDC (power supply unit with wide range input, enclosed)	
Power consumption	<64 W	<64 W	<64 W	<64 W
Video input	4x BNC	4x BNC	8x BNC	16x BNC
Video output	4x BNC looped	4x BNC looped	8x BNC looped	16x BNC looped
Monitor output	1x main BNC; 1x SPOT BNC	1x main BNC; optional VGA, 1x SPOT BNC	1x main BNC; optional VGA, 1x SPOT BNC	1x main BNC; optional VGA, 1x SPOT BNC
Audio input	2x cinch plug, line-in	4x cinch plug, line-in	4x cinch plug, line-in	4x cinch plug, line-in
Audio output	1x cinch plug, line-out	2x cinch plug, line-out	2x cinch plug, line-out	2x cinch plug, line-out
Hard disk internal	1x IDE, up to 750 GB	1x IDE, up to 750 GB	3x IDE, up to 2.25 TB	3x IDE, up to 2.25 TB
Display	Full screen, 4x	Full screen, 4x	Full screen, 4, 8, 9x	Full screen, 4, 9, 16x
Live display speed	25 fps @ channel	25 fps @ channel	25 fps @ channel	25 fps @ channel
Recording format	MPEG-4	MPEG-4	MPEG-4	MPEG-4
Recording rate	25 fps (4CIF) or 100 fps (CIF)	25 fps (4CIF) or 100 fps (CIF)	50 fps (4CIF) or 200 fps (CIF)	100 fps (4CIF) or 400 fps (CIF)
Resolution	720 x 576 pixels (4CIF) or 352 x 288 pixels (CIF), 4 quality levels			
Interfaces	1x RS-485, 1x Ethernet, 10/100 Base-T, RJ-45, 1x USB 1.1 (front)			
Remote access	Web browser or software (live display, live recording, search function, remote setting, archiving)			
OSD language	German, English, Russian, Chinese, French, Japanese			
Operating environment	+10 °C ~ +40 °C (10 ~ 80 % rel. humidity)		+10 °C ~ +40 °C (10 ~ 80 % rel. humidity)	
Weight	4.6 kg	4.6 kg	4.9 kg	5 kg
Dimensions (W × H × D)	432 mm x 90 mm x 326 mm	432 mm x 90 mm x 326 mm	432 mm x 90 mm x 326 mm	432 mm x 90 mm x 326 mm

Model	C-MPDVR VGA	C-MPDVR Rack	ZRA-HDD250	ZRA-HDD500
Description/ Application	VGA adapter for C-MP series	19" adapter for rack mounting	ATA hard disk 250 GB for ZR-DHD, C-MP recorder and DIGIMASTER for 24/7 operation	ATA hard disk 500 GB for ZR-DHD, C-MP recorder and DIGIMASTER for 24/7 operation

GANZ

PC-BASED SYSTEMS

Digital video management systems

ZR-DHC series

- ● **Intuitive graphic user interface**
- ● **Recording process MPEG-4 with up to 400 fps**
- ● **Remote access via LAN with client and browser**
- ● **Internal storage capacity up to 2.5 TB (external up to 6 TB)**
- ● **Integrated DVD/CD-RW drive**
- ● **8, 16 and 32 channels available**

The video management systems of the ZR-DHC series satisfy the growing demands in security management and offer the flexibility of a PC. Thanks to MPEG-4 compression, real-time recordings are possible with a total of 400 fps. The models offer unique features owing to their pentaplex functions. Immediate playback and backup as well as drag & drop features ensure user-friendly operation. As a PC-based system, the ZR-DHC series has RS-232, RS-485, LPT1 and USB interfaces as well as alarm and audio channels. In addition to the VGA monitor output, the systems are equipped with a composite signal video output for multi-image display, as well as two separate composite signal spot monitor outputs. Optionally, cash register systems, cash dispensers, barcode scanners and scales can be connected using an additional module.

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ

PC-BASED SYSTEMS

Digital video management systems

Model	ZR-DHC830NP	ZR-DHC1630NP	ZR-DHC3240NP
Type	PC-based	PC-based	PC-based
Operating system	MS Windows XP Embedded	MS Windows XP Embedded	MS Windows XP Embedded
Video norm	PAL/NTSC	PAL/NTSC	PAL/NTSC
Recording format	MPEG-4	MPEG-4	MPEG-4
Video inputs	8x composite signal 1.0 Vp-p, 75 Ohm, BNC	16x composite signal 1.0 Vp-p, 75 Ohm, BNC	32x composite signal 1.0 Vp-p, 75 Ohm, BNC
Video outputs	1x main monitor (S-VGA), 2x SPOT, 1x multi-image display, composite signal 1.0 Vp-p, 75 Ohm, BNC	1x main monitor (S-VGA), 2x SPOT, 1x multi-image display, composite signal 1.0 Vp-p, 75 Ohm, BNC	1x main monitor (S-VGA), 2x SPOT, 1x multi-image display, composite signal 1.0 Vp-p, 75 Ohm, BNC
Resolution (H × V)	PAL: 352 x 288 (CIF), 704 x 288 (2CIF), 704 x 576 (4CIF)	PAL: 352 x 288 (CIF), 704 x 288 (2CIF), 704 x 576 (4CIF)	PAL: 352 x 288 (CIF), 704 x 288 (2CIF), 704 x 576 (4CIF)
Display	Full screen, 4, 6, 9, 10, 16x	Full screen, 4, 6, 9, 10, 16x	Full screen, 4, 6, 9, 10, 16x
Image refresh rate/ Live display	200 fps PAL; 240 fps NTSC	400 fps PAL; 480 fps NTSC	800 fps PAL; 960 fps NTSC
Recording modes	Motion, object view, alarm contact, pre-alarm, POS, timetable, continuous	Motion, object view, alarm contact, pre-alarm, POS, timetable, continuous	Motion, object view, alarm contact, pre-alarm, POS, timetable, continuous
Recording rate	PAL: 200 fps @ 352 x 288 (CIF), 100 fps @ 704 x 288 (2CIF) or 50 fps @ 704 x 576 (4CIF)	PAL: 400 fps @ 352 x 288 (CIF), 200 fps @ 704 x 288 (2CIF) or 100 fps @ 704 x 576 (4CIF)	PAL: 400 fps @ 352 x 288 (CIF), 200 fps @ 704 x 288 (2CIF) or 100 fps @ 704 x 576 (4CIF)
Alarm inputs	8x camera-independent alarm contacts	16x camera-independent alarm contacts	16x camera-independent alarm contacts
Internal hard disk	Standard 1x 250 GB, 3 additional disks can be installed (S-ATA) up to a total of 2.5 TB, can be upgraded internally	Standard 1x 250 GB, 3 additional disks can be installed (S-ATA) up to a total of 2.5 TB, can be upgraded internally	Standard 1x 500 GB, 3 additional disks can be installed (S-ATA) up to a total of 2.5 TB, can be upgraded internally
DVD-RW	Yes	Yes	Yes
Remote access	GMS-Lite remote software (included in the scope of delivery); web browser	GMS-Lite remote software (included in the scope of delivery); web browser	GMS-Lite remote software (included in the scope of delivery); web browser
Menu languages	German, English, French, Italian, Spanish, Portuguese, Russian, Polish, Japanese, Chinese	German, English, French, Italian, Spanish, Portuguese, Russian, Polish, Japanese, Chinese	German, English, French, Italian, Spanish, Portuguese, Russian, Polish, Japanese, Chinese
Operating environment	+0 ~ +40 °C (<80 % rel. humidity)	+0 ~ +40 °C (<80 % rel. humidity)	+0 ~ +40 °C (<80 % rel. humidity)
Operating voltage	100 – 120/200 – 240 VAC (50/60 Hz)	100 – 120/200 – 240 VAC (50/60 Hz)	100 – 120/200 – 240 VAC (50/60 Hz)
Power consumption	500 W max. (starting current at 240 VAC, max. 5.5 A)	500 W max. (starting current at 240 VAC, max. 5.5 A)	500 W max. (starting current at 240 VAC, max. 5.5 A)
Weight	approx. 19 kg	approx. 19 kg	approx. 19 kg
Dimensions (W × H × D)	430 mm x 176 mm x 466 mm (19" x 4 HE)	430 mm x 176 mm x 466 mm (19" x 4 HE)	430 mm x 177 mm x 497 mm (19" x 4 HE)

Model	ZRS-HDD500	ZRS-HDD750	ZRS-HDD1000	ZRA-ES2
Description/ Application	S-ATA hard disk 500 GB for ZR-DHC for 24/7 operation	S-ATA hard disk 750 GB for ZR-DHC for 24/7 operation	S-ATA hard disk 1 TB for ZR-DHC for 24/7 operation	External HDD housing for ZR-DHC series, 4 hard disks can be installed, incl. IEEE 1394 cable and card

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ

IP systems and transmission

IP VIDEO

IP video series

Lenses

Cameras

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Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ZN-PT304L/ZN-PT304WL

ZN-YH305

ZN-D2024

ZV-S306

IP video series

- ● **Economic launch pad into IP technology**
- ● **Large selection of cameras and lenses**
- ● **Various resolutions freely selectable**
- ● **Existing analog units can still be used**
- ● **Software included in the scope of delivery**
- ● **PTZ IP camera, also with WLAN function (for ZN-PT)**

The CS-mount camera ZN-YH305 is primarily designed for use in the private sector. The inconspicuous mini dome camera ZN-D2024 is particularly suitable for discreet installation indoors and is fitted with a varifocal lens whose wide angle also permits the surveillance of smaller rooms. The use of the ZV-S306 video server converts the signals from analog cameras into IP data (MPEG-4), permitting the upgrading of existing analog systems to IP.

The IP camera series ZN-PT304 has an automatic pan-and-tilt feature and an intelligent motion sensor. A range of some 350° can be viewed owing to the pan mimic and roughly 125° with the tilt mimic. The built-in microphone produces synchronous live playback of audio and video data. MPEG-4 compression permits optimum bandwidth utilisation at up to 30 fps.

Model	ZN-PT304L	ZN-PT304WL	ZN-YH305	ZN-D2024PHA
Image sensor	1/4" CMOS	1/4" CMOS	1/4" CMOS	1/4" CMOS
Effective pixels (H x V)	640 x 480	640 x 480	640 x 480	640 x 480
Min. illumination	1.5 lux (F 2.0)	1.5 lux (F 2.0)	1.5 lux (F 2.0)	1.5 lux (F 2.0)
Focal length	4.0 mm	4.0 mm	4.0 mm	2.0 mm – 4.0 mm
Types of resolution	160 x 120; 320 x 240; 640 x 480		160 x 120; 320 x 240; 640 x 480	
Compression format	MPEG-4 for video sequences, JPEG for individual images		MPEG-4 for video sequences via UDP, TCP or HTTP, JPEG for freeze frames	
Image refresh rate	25 fps	25 fps	25 fps	25 fps
Pan range	350° (+175° ~ -175°)	350° (+175° ~ -175°)	–	–
Tilt range	125° (+90° ~ -35°)	125° (+90° ~ -35°)	–	–
Connection	10/100 Base-T	10/100 Base-T, W-LAN	10/100Base-T	10/100 Base-T
Operating voltage	12 VDC	12 VDC	12 VDC	12 VDC
Power consumption	7 W max.	7 W max.	2,7 W max.	2,7 W max.
Operating environment	0 °C ~ +50 °C; 0 ~ 95 % humidity, non-condensing		0 °C ~ +40 °C; 20 ~ 80 % humidity, non-condensing	
Weight	259 g	271 g	292 g	292 g
Dimensions (W x H x D)	110 mm x 130 mm x 110 mm		95 mm x 48.5 mm x 160.5 mm	
Certifications	–	–	CE, FCC, PSE	CE, FCC, PSE

GANZ

IP VIDEO

IP video series

Model	ZV-S306
System & hardware	CPU: CBC-1000 SoC, Flash: 8 MB, RAM: 64 MB; OS: embedded Linux 2.4
Network protocols	TCP/IP, HTTP, uPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP
Network	10/100 Mbit/s connection with RJ-45; Support DDNS, PPPoE, Support Multicasting
Video compression	M-JPEG & MPEG-4; video resolution max. D1; up to 25 fps; simultaneous dual stream; MPEG-4 streaming via UDP, TCP or HTTP, M-JPEG streaming via HTTP
Audio compression	GSM-AMR; 4.75 kb/s to 12 kb/s (bit rate)
Alarm management	Motion detector on multi-window video; 1x digital input & 1x digital output; event alarm through HTTP, SMTP, FTP
PTZ control	GANZ-PT, Pelco-D, Lilin, CGI command serial driver
Access administration	Multi-level user access, IP address filtration
Power supply	12 VDC
Power consumption	Max. 4 W
Operating environment	0 °C ~ 40 °C; 20 % ~ 80 % RH
Accessories	Installation Wizard, free 16-channel recording software
Certifications	CE, FCC, PSE, RoHS, WEEE

Model	ZN-PoE Kit	ZN-PoE Splitter	ZNA-DE-304T-EU
Description/Application	Ethernet integrator and splitter for the transmission of data and voltage to the end units, via CAT-5 patch cable, max. range 100 m, input voltage at the integrator 230 VAC, output voltage at the splitter 12 VDC/1 A output, IEEE802.3af	Ethernet splitter for data and voltage distribution, output voltage 12 VDC/1 A, IEEE802.3af	Weatherproof housing for the ZN-PT304 cameras, IP65, incl. wall bracket, wide range power supply unit, output voltage 12 VDC/3 A

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ

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IP VIDEO

IP series ZN-9000

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ZN-9000

- **Advanced hybrid technology**
- **Transmission in MPEG-4 or M-JPEG format**
- **Versatile day/night and colour cameras**
- **Convenient video and data transmission**
- **Video server also available as audio version**

The ZN-9000 IP series comprises IP camera models as well as video transmitters/receivers and is ideally used for the upgrading of existing analog CCTV systems.

Individual transmitters and receivers optionally form an independent system and, as a result, no PC is required to show the videos. The compact cameras ZN-L9210PHA and ZN-LN9039PHA have varifocal lenses with a focal length range of 2.8 mm – 10.0 mm and 3.0 mm – 9.0 mm. The ZN-C9000 can be fitted with all CS-mount lenses of the computar range, optionally with manual or DC iris. All models integrate various alarm functions and are all equipped with BNC and LAN connections.

Model	ZN-LN9039PHA	ZN-L9210PHA	ZN-C9000PH
Video system	PAL/CCIR (day/night)	PAL	PAL
Video output	1x composite signal; 1,0 Vp-p; 75 Ohm; BNC	1x composite signal; 1,0 Vp-p; 75 Ohm; BNC	1x composite signal; 1,0 Vp-p; 75 Ohm; BNC
Operating voltage	12 VDC	12 VDC	12 VDC
Power consumption	approx. 800 mA	approx. 800 mA	approx. 800 mA
Focal length	3.0 mm – 9.0 mm	2.8 mm – 10.0 mm	CS-mount lens (variable)
Image sensor	1/4" IT-ExView HAD-CCD	1/4" IT-ExView HAD-CCD	1/4" IT-ExView HAD-CCD
Effective pixels (H x V)	752 x 582	752 x 582	752 x 582
Min. illumination (50 IRE)	0.09 lux (F1.6) @ 30 IRE (night mode)	1.5 lux (F1.2) @ 50 IRE	1.5 lux (F1.2) @ 50 IRE
Iris control	DC	DC	DC/manual
Network interface	1x RJ-45, 10/100 Base-T	1x RJ-45, 10/100 Base-T	1x RJ-45, 10/100 Base-T
Image refresh rate	up to 25 fps PAL	up to 25 fps PAL	up to 25 fps PAL
Video resolutions	QCIF, CIF, 2CIF, 1/2D1, 4CIF/D1, 2/3D1	QCIF, CIF, 2CIF, 1/2D1, 4CIF/D1, 2/3D1	QCIF, CIF, 2CIF, 1/2D1, 4CIF/D1, 2/3D1
Compression formats	MPEG-4, M-JPEG	MPEG-4, M-JPEG	MPEG-4, M-JPEG
Weight	approx. 400 g	approx. 400 g	approx. 400 g
Dimensions (W x H x D)	81.3 mm x 59.0 mm x 194.0 mm	81.3 mm x 59.0 mm x 194.0 mm	81.3 mm x 59.0 mm x 154.0 mm

GANZ

IP VIDEO

IP series ZN-9000

Model	ZN-T9000	ZN-R9000	ZN-T9000A	ZN-R9000A
Video system	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC
Video output	–	1x composite signal, 1 Vp-p, 75 Ohm, BNC	–	1x composite signal, 1 Vp-p, 75 Ohm, BNC
Video input	1x composite signal, 1 Vp-p, 75 Ohm, BNC	–	1x composite signal, 1 Vp-p, 75 Ohm, BNC	–
Audio input	–	–	Yes	Yes
Audio output	–	–	Yes	Yes
Operating voltage	12 VDC	12 VDC	12 VDC	12 VDC
Power consumption	approx. 800 mA	approx. 800 mA	approx. 800 mA	approx. 800 mA
Network interface	1x RJ-45, 10/100 Base-T	1x RJ-45, 10/100 Base-T	1x RJ-45, 10/100 Base-T	1x RJ-45, 10/100 Base-T
Image refresh rate	up to 25 fps PAL	up to 25 fps PAL	up to 25 fps PAL	up to 25 fps PAL
Video resolutions	QCIF, CIF, 2CIF, 1/2D1, 4CIF/D1, 2/3D1	QCIF, CIF, 2CIF, 1/2D1, 4CIF/D1, 2/3D1	QCIF, CIF, 2CIF, 1/2D1, 4CIF/D1, 2/3D1	QCIF, CIF, 2CIF, 1/2D1, 4CIF/D1, 2/3D1
Compression formats	MPEG-4, M-JPEG	MPEG-4, M-JPEG	MPEG-4, M-JPEG	MPEG-4, M-JPEG
Weight	approx. 400 g	approx. 400 g	approx. 400 g	approx. 400 g
Dimensions (W x H x D)	100 mm x 38.8 mm x 112.7 mm		100 mm x 38.8 mm x 112.7 mm	

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

GANZ

IP VIDEO MEGAPIXELS

MP network camera series (M-JPEG compression)

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

MP series

● **Resolution can be selected from 1.3 – 5 megapixels**

● **Day/night function by means of dual-ocular toggling**

● **Power supply via network (power over Ethernet)**

● **Motion detection**

● **Zoom function in live and playback modes**

● **Control of automatic lenses**

● **Handy and space-saving**

The megapixel network camera series excels with its appealing design and outstanding image quality at a resolution of up to 5 megapixels. In combination with an image refresh rate of up to 30 fps, this ensures cinema quality. The CMOS sensor also guarantees an optimum and dynamic contrast compensation even under the most difficult environment conditions. Another special feature is the auto-Iris lens mount on the rear (on MP-2A, MP-3A and MP-5A), which, for example, permits the use of megapixel varifocal lenses with automatic iris control.

Model	MP-1	MP-2A	MP-3A	MP-3DN2
Image sensor	1/2" CMOS, 1.3 megapixels	1/2" CMOS, 2 megapixels	1/2" CMOS, 3 megapixels	1/2" CMOS, 3 megapixels and 1.3 megapixels
Compression format	M-JPEG	M-JPEG	M-JPEG	M-JPEG
Effective pixels colour (H x V)	1,280 x 1,024	1,600 x 1,200	2,048 x 1,536	2,048 x 1,536
Effective pixels b/w (H x V)	–	–	–	1,280 x 1,024
Min. illumination (colour)	0.1 lux @ F 1.4	0.1 lux @ F 1.4	0.2 lux @ F 1.4	0.2 lux @ F 1.4
Min. illumination (b/w)	–	–	–	0.01 lux @ F 1.4
Lens mount	C/CS-mount	C/CS-mount	C/CS-mount	C/CS-mount
Network interface	100 Base-T	100 Base-T	100 Base-T	100 Base-T
Operating voltage	Power over Ethernet (PoE) IEEE 802.3af; DC input 9 V-12 VDC (2.1 mm x 5.5 mm, central positive)			
Power consumption	4 W max.	3 W max.	3 W max.	3.5 W max.
Operating environment	0 °C ~ +50 °C (0 ~ 90 % humidity, non-condensing)			
Weight	243 g	243 g	243 g	243 g
Dimensions (W x H x D)	76.0 mm x 63.5 mm x 57.0 mm		76.0 mm x 63.5 mm x 57.0 mm	

GANZ

IP VIDEO MEGAPIXELS

MP network camera series (M-JPEG compression)

Model	MP-5A	MP-8P	MP-8DL4	EX85-D8IPXXBS
Image sensor	1/2" CMOS, 5 megapixels	4x 1/2" CMOS, 2 megapixels	4x 1/2" CMOS, 2 megapixels	3,1 megapixels and 1,3 megapixels
Compression format	M-JPEG	M-JPEG	M-JPEG	M-JPEG
Effective pixels colour (H x V)	2,592 x 1,944	1,600 x 1,200	1,600 x 1,200	2,048 x 1,024
Effective pixels b/w (H x V)	–	–	–	1,280 x 1,024
Min. illumination (colour)	0.3 lux @ F 1.4	0.5 lux @ F 1.4	0.5 lux @ F 1.4	0 lux
Min. illumination (b/w)	–	–	–	0 lux
Lens mount	C/CS-mount	C/CS-mount	C/CS-mount	C/CS thread
Network interface	100 Base-T	100 Base-T	100 Base-T	100 Base-T
Operating voltage	Power over Ethernet (PoE) IEEE 802.3af; DC input 9 V-12 VDC (2,1 mm x 5,5 mm, mittig positiv)			Power over Ethernet (PoE) IEEE 802.3af; 12 V-24 VDC or DC
Power consumption	3 W max.	6 W max.	6 W max.	4.5 W day/24 W night
Weight	243 g	1,800 g	1,800 g	2,300 g
Dimensions (W x H x D)	76 x 63.5 x 57 mm	–	–	–
Dimensions (Ø x H)	–	182.9 mm x 154.7 mm	182.9 mm x 154.7 mm	–

ACCESSORIES FOR MP8 CAMERAS

To ensure that the megapixel series can always be properly installed, there is a variety of protection housings for the indoor and outdoor sectors.

Model	DOME6-I-C	DOME6-I-W
Description/ Application	6" for MP8 cameras, indoor dome housing, vandalism-proof, ceiling mounting	6" for MP8 cameras, indoor dome housing, vandalism-proof, with wall bracket

Model	DOME6-O-C	DOME6-O-WH
Description/ Application	Outdoor dome housing (IP66) 6" for MP8x cameras, vandalism-proof, ceiling mounting, incl. heater, fan and sunshield	Outdoor dome housing (IP66) 6" for MP8x cameras, vandalism-proof, wall bracket, incl. heater, fan and sunshield

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

IP VIDEO MEGAPIXELS

Day/night versions (H.264 compression)

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads
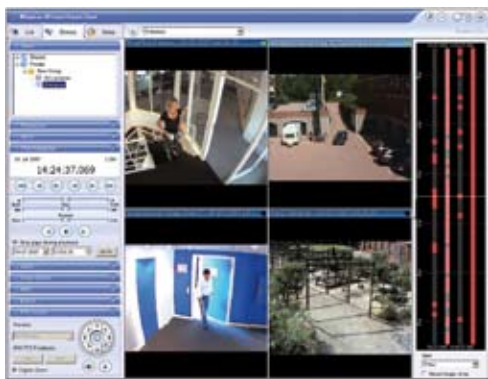
Motion detectors

Infrared lighting

Accessories and service

IP video megapixels

- ● **Complete series of H.264 megapixel cameras**
- ● **H.264 (MPEG-4 Part10) compression standard**
- ● **High luminous efficiency due to the 1/2" CMOS sensor**
- ● **1,3, 2, 3 or 5 megapixel resolution**
- ● **Multi-streaming, up to 8 different streams**
- ● **Real Time Streaming Protocol (RTSP)**
- ● **Up to 30 fps depending on the resolution**
- ● **Day/night C/CS-mount cameras**
- ● **Power over Ethernet (PoE)**
- ● **Digital zooming in live and archive images possible**

The special "MegaVideo"® architecture for image processing performs over 80 billion calculations per second and permits encoding in H.264. The new H.264 compression standard is up to 25 times more efficient than the M-JPEG standard. As a result, the network bandwidth used is reduced considerably and the recording time prolonged by the same factor. The large CMOS sensor is particularly light-sensitive. The cameras offer high resolution as well as crystal-clear images and can replace a large number of PAL cameras – with optimum resolution and significantly lower costs. No additional power supply unit is required if the camera is supplied via the Ethernet cable (power over Ethernet). Any picture detail can be digitally zoomed and displayed both in live and archive images. With their accuracy of detail, they are especially suited for the surveillance of very large areas (shops, service stations, schools, offices and banks). The cameras can also be used outdoors with the appropriate weatherproof housings. All H.264 cameras in this series are suitable for night operation (IR light) and fitted with a swivel-type IR cut filter.

Model	MP-1DN	MP-2DN	MP-3DN	MP-5DN
Image sensor	1/2" CMOS	1/2" CMOS	1/2" CMOS, 3 Megapixel	1/2" CMOS
Compression format	H.264	H.264	H.264	H.264
Effective pixels colour (H x V)	1,280 x 1,024	1,600 x 1,200	2,048 x 1,536	2,592 x 1,944
Min. illumination (colour)	0.1 lux @ F 1.4	0.1 lux @ F 1.4	0.2 lux @ F 1.4	0.3 lux @ F 1.4
Min. illumination (b/w)	0.01 lux @ IR sensitive	0.01 lux @ F 1.4	0.01 lux @ F 1.4	0.01 lux @ F 1.4
Lens mount	C/CS mount	C/CS mount	C/CS mount	C/CS mount
Network interface	100 Base-T	100 Base-T	100 Base-T	100 Base-T
Operating voltage	Power over Ethernet (PoE) IEEE 802.3af; DC input 9 V-12 VDC (2.1 mm x 5.5 mm, central positive)			
Power consumption	4 W	4 W	4 W	4 W
Weight	330 g	330 g	330 g	330 g
Dimensions (W x H x D)	72.0 mm x 64.0 mm x 61.0 mm		72.0 mm x 64.0 mm x 61.0 mm	

GANZ®

ETHERNET OVER COAXIAL CABLES

Converter to transmit Ethernet signals over coaxial cables

Coaxi.Net

- **Permits high-speed IP over coaxial cables**
- **For using existing 75 Ohm coaxial cables**
- **No configuration required**
- **Installation without MAC and IP addresses**
- **Immediate recognition in the network**

With Coaxi.Net an already existing coaxial cable can be converted in an easy and reasonably priced way into a reliable IP-based connection with a high transmission speed. The advantages of the Ethernet can be used for every unit in the network via the full duplex Ethernet connection according to the IEEE standard. The converters are immediately recognised without the registration of MAC or IP addresses and integrated into the network. Coaxi.Net automatically adapts to the transmission conditions and, if required, automatically reduces the transmission bandwidth. Moreover, distances of up to 250 m can be covered with the installation of Coaxi.Net in conjunction with an RG-59 video cable at full data transmission rate.

Model	CN-HWC
Connections	Analog (BNC) / network (RJ-45)
Cable type	75 Ohm (RG-59 video cable or similar) / direct, "crossover"; autom. detection
Distances supported	250 m max. distance with full bandwidth, 10 Base-T, 100 Base-T, autom. switch-over
Power supply connection	Screw connection with removable plug
Operating voltage	Nominal 12 VDC (9 ~ 24 V working range) or 24 VAC (autom. detection of type and polarity)
Power consumption	200 mA (12 V), 100 mA (24 V)
Operating environment	-10°C ~ 50°C, 85% without condensation
Dimensions (W x H x L)	54 mm x 23 mm x 104 mm (length without connections – 83 mm)
Weight	110 g

Model	CN-WMB	CN-1U	CN-RMPSU
Description/Application	Wall mount for a single CN-HWC	19" rack mount holder for 8 single CN-HWCs, 1 HE	Power supply unit for 19" rack installation for max. 8 single CN-HWCs

GANZ

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

MILESTONE XPROTECT BASIS+

IP viewing, administration and recording software (NVR)

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission
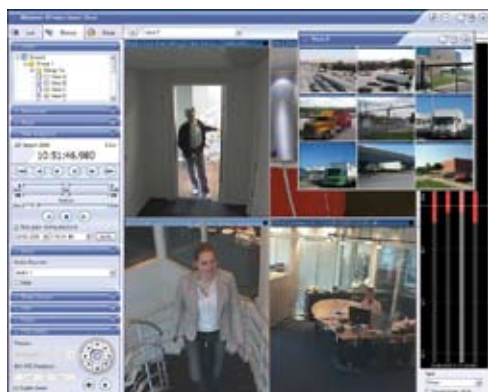
Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

XProtect Basis+

- ● **Single-server video management system for up to 25 cameras**
- ● **Remote access with basic options**
- ● **Supports all common IP network units**
- ● **Tailor-made concepts for individual applications**
- ● **Fast and simple export**
- ● **Reliable, robust and stable**
- ● **H.264, M-JPEG, MPEG-4**
- ● **Simultaneous live and playback modes**
- ● **Intelligent PTZ control**

XProtect Basis+ is a single-server video management system for up to 25 cameras per server incl. basic remote access possibility. It was developed with all the basic features for small-scale applications. The software is available with the following camera licence packages:

Model	XPB+04	XPB+06	XPB+09	XPB+16	XPB+25
Description/ Application	XProtect Basis+ 4.0 for 4 cameras	XProtect Basis+ 4.0 for 6 cameras	XProtect Basis+ 4.0 for 9 cameras	XProtect Basis+ 4.0 for 16 cameras	XProtect Basis+ 4.0 for 25 cameras

MILESTONE XPROTECT PROFESSIONAL

IP viewing, administration and recording software (NVR)

XProtect Professional

- **Single-server video management system for up to 64 cameras**
- **Extensive remote access possibilities**
- **Supports all common IP network units**
- **Tailor-made concepts for individual applications**
- **Fast and easy export**
- **Reliable, robust and stable**
- **H.264, M-JPEG, MPEG-4**
- **Simultaneous live and playback modes**
- **Two-way audio**
- **Intelligent PTZ control (patrol and tours)**

The extended single-server video management system XProtect Professional is suitable for up to 64 cameras per server and offers extensive remote access possibilities. The Smart Client software can be installed as often as you want without additional licence fees. The software was developed for medium-scale applications and is available with the following camera licence packages:

Model	XPP01	XPP04	XPP09	XPP16
Description/ Application	XProtect Professional 6.0 for 1 camera	XProtect Professional 6.0 for 4 cameras	XProtect Professional 6.0 for 9 cameras	XProtect Professional 6.0 for 16 cameras

Model	XPP25	XPP36	XPP50	XPP64
Description/ Application	XProtect Professional 6.0 for 25 cameras	XProtect Professional 6.0 for 36 cameras	XProtect Professional 6.0 for 50 cameras	XProtect Professional 6.0 for 64 cameras

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

MILESTONE XPROTECT ENTERPRISE

IP viewing, administration and recording software (NVR)

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

XProtect Enterprise

- **Multi-server video management system**
- **Convenient remote access possibilities**
- **Supports all common IP network units**
- **Tailor-made concepts for individual applications**
- **Scalable solution**
- **Open architecture**
- **Fast and easy export**
- **Licensing per channel**
- **Reliable, robust and stable**
- **JPEG, MPEG-4, MPEG-4 ASP, MxPEG, H.264**
- **Simultaneous live and playback modes**
- **Intelligent PTZ control (patrol and tours)**
- **OPC data access support**

The XProtect Enterprise software is a perfect solution for applications which require a stable multi-sever video surveillance system and can also be integrated into an existing IP video security system.

The system supports an unlimited number of cameras, servers and users and can be upgraded in stages. Control is convenient by means of a user-friendly user interface.

XProtect Enterprise supports the latest video compression technologies (H.264, MPEG-4 ASP, MxPEG) and, as a result, the network traffic is also minimised without the video quality suffering. The well documented software development kit (SDK) offers easy access to the application-programmed interface (API). This also permits integration with other security systems. OPC data access also allows connection to industrial and building environments.

Model	XPEBL	XPECL
Description/Application	XProtect Enterprise 6.0 basic licence	XProtect Enterprise 6.0 camera licence

VSOIP3

Digital video surveillance over Internet protocol
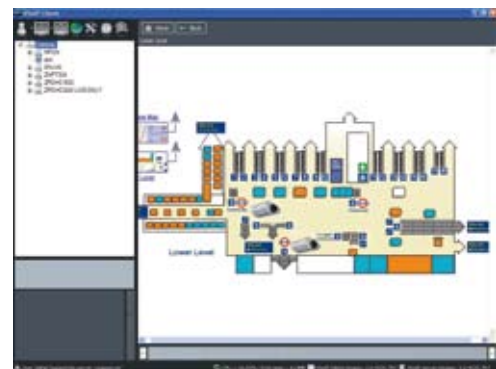
VSoIP3

- ● **Location-independent online configuration and surveillance**
- ● **Network recording**
- ● **Flexible recording configuration**
- ● **Multiple monitors for displaying live videos or the receiver status**
- ● **16 or 32-channel NVR (network recorder)**
- ● **Immediate recording**
- ● **Picture-in-picture PTZ control**
- ● **Central audit trails**
- ● **Central alarm management**
- ● **Installation and user-friendly**

VSoIP 3 is an intelligent network-based software solution for video surveillance over IP. The video management system consists of the software modules VSoIP-Client and VSoIP-Recorder (the relevant server is always included in the scope of delivery). The system permits both the use of existing network structures and the integration of IP-ready and analog components into a comprehensive video surveillance network.

All available settings and displays are controlled and used via the VSoIP-Client. Operation itself is simple and user-friendly. Using "drag&drop" functions, connections can be made to other cameras or PTZ-ready units can be controlled. Operation-friendly playback buttons facilitate the set-up of a mixed multiple monitor for live and playback cameras. In addition, a special multi-channel window is available for the immediate and synchronised image data display of remote cameras.

The VSoIP recorder is responsible for the actual recording and storage of all video signals. Theoretically, there is no limit to the storage capacity as the necessary hard disk capacities can be retrofitted or existing recordings can be exported onto optical storage media.

All users, units, maps and system configuration rights and setting parameters are stored in a database on the VSoIP server. At the start of recording it automatically activates the NVR (network recorder). Another function of the VSoIP server is the preparation of audit trails where all system and alarm events are registered and recorded. All server settings are made via the VSoIP Client, thus permitting easy and user-friendly configuration.

VSoIP
VIDEO SURVEILLANCE
OVER INTERNET PROTOCOL

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

TWISTED-PAIR TRANSMISSION

TP-T20 transmitter and TP-R20A receiver

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

TP-T20/TP-R20A

- ● **Twisted-pair transmitter and receiver, for twisted cables**
- ● **Weatherproof housing IP66**
- ● **Small dimensions**
- ● **230 VAC power supply**
- ● **Signal transmission up to 1,000 m**
- ● **Adjustable cable equalisation at the receiver**

The TP-T20 creates a differential signal pair from a coaxially transmitted video signal and transmits it through a standard twisted-pair cable. This produces advantages in terms of cable costs and signal quality, especially with very long transmission routes. The twisted-pair receiver TP-R20A converts the differential signal pair back into a coaxially transmitted signal at the end of the transmission route.

Model	TP-T20	TP-R20A
Description/ Application	Twisted-pair transmitter, IP66 housing, integrated power supply unit	Twisted-pair receiver, IP66 housing, integrated power supply unit

In addition, we offer you the complete series of NVT transmission technology: Passive, active, digital transmitters/receivers, PVD (power, video, data) components, also incl. audio transmission. Request the detailed catalogue free of charge at info@cbc-de.com.

GANZ

Signal amplification

- **Video signal amplification, up to 1,000 m via coaxial cable**

- **Potential separation**

- **No quality losses thanks to signal amplification from 4 to 8 and 8 to 16 video distributors**

- **Easy installation and quick settings with jumper and potentiometer**

The video distributor amplifiers VD4.8P and VD8.16P double the analog video signals from 4 to 8 or from 8 to 16 channels. Flexible configuration options permit adaptation to the input and output sources so that, for example, 1 input channel can be distributed to 15 outputs. This allows professional internal distribution to various video sources, such as digital recorders, switchers, image splitters, monitors and other end units. The ZVA-A100 video amplifier also offers electrical isolation in addition to the actual amplification of an analog video signal. Disruptive potentials or inductive interference can be suppressed or fully offset using an intermediate amplifier.

Model	ZVA-A100	VD4.8P	VD8.16P
Operating voltage	12VDC ±10%	12 VDC (plug-type power supply unit 230 VAC)	12 VDC (plug-type power supply unit 230 VAC)
Video inputs	1 Vp-p, 75 Ohm, BNC	4 x 1 Vp-p, 75 Ohm, BNC	8 x 1 Vp-p, 75 Ohm, BNC
Video outputs	1 Vp-p, 75 Ohm ± 3 dB, BNC	8 x 1 Vp-p, 75 Ohm, BNC	16 x 1 Vp-p, 75 Ohm, BNC
Output voltage	Max. 3 Vp-p	Max. 2 Vp-p	Max. 2 Vp-p
Weight	0.247 kg	1.6 kg	2.0 kg
Dimensions (W x H x D)	100 mm x 80 mm x 21 mm	220 mm x 40 mm x 180 mm	433 mm x 45 mm x 180 mm

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

Switchers
and matrix

SWITCHERS

Lenses

Cameras

Protection
housings

Monitors

Recording
equipment

IP systems and
transmission

Switchers
and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories
and service

SW4.1B/SW8.1B

- ● **4/8 inputs, 1 output**
- ● **Selection of the camera input manual/automatic**
- ● **Identification of the active input by LED**
- ● **Skip function of the switching inputs not connected**
- ● **Automatic scanning by a potentiometer infinitely variable between 0.5 and 30 sec.**

The SW4.1B and SW8.1B units are video switchers in an aluminium housing. They have 4 or 8 video inputs and one output each. The video input can be selected by hand or automatic switching. During automatic mode the switching duration is set with a potentiometer (from 0.5 to 30 sec.). The enabled video input and automatic mode are displayed by the red LEDs integrated in the keys.

Model	SW4.1B	SW8.1B
Video inputs	4x BNC	8x BNC
Video outputs	1x BNC	1x BNC
Operating voltage	230 VAC/50 Hz	230 VAC/50 Hz
Operating temperature	0 °C ~ +45 °C	0 °C ~ +45 °C
Dimensions (W x H x D)	230 mm x 190 mm x 50 mm	230 mm x 190 mm x 50 mm

MATRIX SYSTEMS AND TELEMETRY

Microprocessor-controlled video matrix systems

- ● **4, 8, 16 or 32 video inputs**
- ● **2 or 4 independent monitor outputs**
- ● **Remote control with up to 4 control units**
- ● **Telemetry control output**
- ● **Protective function "privacy video masking"**

The video matrix systems are microprocessor-controlled and can be operated with up to 4 control units. The cameras connected can be displayed and controlled independently on up to 4 monitor outputs. The menu of the units is available in 4 languages. A programmed password protects the matrix against improper use. The telemetry can be controlled via coaxial cable or the RS-485 output. Various control elements are available to control the matrix. Telemetry receivers are also available in various designs and with various functions.

Model	SM42A	SM84A	SM164A	SM328A	DCBD
Description/ Application	4 to 2 matrices incl. telemetry function to control the DTRX3 and DTMRX receivers, desktop control unit for direct operation, remote control via DCBD	8 to 4 matrices incl. telemetry function to control the DTRX3 and DTMRX receivers, 19" version, can be controlled via DCBD, DCTEL etc.	16 to 4 matrices incl. telemetry function to control the DTRX3 and DTMRX receivers, 19" version, can be controlled via DCBD, DCTEL etc.	32 to 8 matrices incl. telemetry function to control the DTRX3 and DTMRX receivers, 19" version, can be controlled via DCK and DCJ, can be cascaded up to 9 systems	Control panel for matrix SM series up to 16 channels, no telemetry control, 12 VDC, incl. power supply unit

Model	DCTEL	DCIR	DCK	DCJ	DTMRX
Description/ Application	Control panel for matrix SM series up to 16 channels, or RS-485 telemetry receiver, desktop control unit, max. 16 cameras, 12 VDC, incl. power supply unit	IR remote control for matrix SM series up to 16 channels or RS-485 telemetry receiver, basis 12 VDC, incl. power supply unit	Control panel for matrix SM series, desktop control unit with LCD display, RS-485 to the matrix, no telemetry control, 12 VDC, incl. power supply unit	Control panel with joystick for matrix of the SM series or RS-485 telemetry receiver, desktop control unit with LCD display, implemented dome protocols of leading manufacturers, 12 VDC, incl. power supply unit	Telemetry receiver for pan-and-tilt heads, 12 functions, no preset, 230 VAC

Model	DTMRX24	DTRX3	DTCOAX
Description/ Application	Telemetry receiver for pan-and-tilt heads, 12 functions, no preset, 230 VAC	Telemetry receiver for pan-and-tilt heads, 12 functions, no preset, 230 VAC	Interface for DTRX3, to transmit the control signals via the video cable, for use with SM matrix series

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

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Pan-and-tilt heads

PAN-AND-TILT HEADS INDOORS

Pan-and-tilt heads IPTH 720/721

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

IPTH 720/721

- **Flexible and very reliable**
- **For up to 5 kg load when used indoors**
- **Auto-pan function**
- **Dust-proof plastic housing**
- **Power supply either with 230 VAC or 24 VAC**
- **Complete with wall mount and terminal strip**

Pan-and-tilt heads permit the situation-related alignment of the camera technology. They are ideally used in conjunction with motorised zoom lenses. This permits both the adaptation of the angle and the size of the close-ups. The pan-and-tilt heads can be aligned by remote control within the pan range from max. 320° and over the tilt range of 90° at any angles. Alternatively, the auto-pan function performs continuous automatic scanning between the left and right stops.

Model	IPTH720	IPTH721
Operating voltage	230 VAC	24 VAC (292 mA)
Field of application	Indoors	Indoors
Protection class	IP60	IP60
Dimensions (L × W × H)	230 mm × 120 mm × 190 mm	230 mm × 120 mm × 190 mm
Weight	2.4 kg	2.4 kg
Pan range	320°	320°
Tilt range	90°	90°
Pan speed	6°/s	6°/s
Tilt speed	3°/s	3°/s
Maximum load	5 kg	5 kg
Operating temperature	-10 ~ +45 °C	-10 ~ +45 °C

PAN-AND-TILT HEADS OUTDOORS

Pan-and-tilt heads PTH310/910

PTH310/910

- ● **Weatherproof to IP66**
- ● **Auto-pan with reverse delay**
- ● **Programmable fixed positions**
- ● **Robust and accurate**
- ● **For loads up to 30 kg**

PTB

PTP   PTC

PTD

Pan-and-tilt heads are particularly suitable for outdoors and permit effective surveillance of open terrain. The pan-and-tilt stops in the units of the PTH series can be set individually within the feasible motion ranges of up to 345° in the horizontal and up to 360° in the vertical. The auto-pan function with reverse delay permits the automatic scanning between the stops. The PTH series contains an optional model for programming fixed positions. The pan-and-tilt heads are available for power supplies of 24 VAC and 230 VAC. A wide range of mounts and adapters are available for special locations or for the installation of additional equipment.

Model	PTH310, PTH310P	PTH311, PTH311P	PTH910, PTH910P	PTH911, PTH911P
Operating voltage	230 VAC (30 mA)	24 VAC (292 mA)	230 VAC (57 mA)	24 VAC (542 mA)
Field of application	Outdoors	Outdoors	Outdoors	Outdoors
Protection class	IP66	IP66	IP66	IP66
Pan range	330°	330°	345°	345°
Tilt range	360°	360°	350°	350°
Pan speed	6°/s	6°/s	6°/s	6°/s
Tilt speed	3°/s	3°/s	3°/s	3°/s
Maximum load	12 kg	12 kg	30 kg	30 kg
Operating temperature	-20 ~ +50 °C	-20 ~ +50 °C	-23 ~ +60 °C	-23 ~ +60 °C
Weight	3.4 kg	3.4 kg	5.5 kg	5.5 kg

Model	PTB	PTC	PTP	PTD
Description/ Application	Wall mount, 45.8 cm	Pole mount adapter for PTB	Cap for mounting on the pole top	Mount bracket for ceiling or base mounting

Lenses
Cameras
Protection housings
Monitors
Recording equipment
IP systems and transmission
Switchers and matrix
Pan-and-tilt heads
Motion detectors
Infrared lighting
Accessories and service

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DIRECT CONTROL FOR PAN-AND-TILT HEADS

Pan-and-tilt head and lens control unit, in panel housing

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

CBZ230/CBZ24

● **Housing of aluminium and membrane control panel made of polycarbonate**

● **Connection and power supply provided direct on the pan head**

● **Auto-pan control function**

● **Lenses with common line or polarity reversal, 6/12 VDC**

● **Versions 24 VAC and 230 VAC, 50/60 Hz**

CBZ is a direct control unit for pan-and-tilt heads. The connection and the direct feed of the function is achieved with a multi-core cable. Motorised lenses (zoom, focus, iris) can be controlled with a common cable or with reverse polarity. 6 VDC or 12 VDC can be set as the voltage. The control is available in the versions 230 VAC or 24 VAC. In view of their favourable price and their self-explanatory, intuitive operation, these units are ideal for small-scale CCTV control systems.

Model	CBZ230	CBZ24
Description/ Application	Control panel for pan-and-tilt heads, 230 VAC	Control panel for pan-and-tilt heads, 24 VAC, without power supply unit

Motion detectors

RADAR SURVEILLANCE

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

RADAR surveillance

- **24/7 surveillance in all weathers**
- **Sophisticated and field-proven technology**
- **Built-in self-test and self-adjustment**
- **Low in maintenance**
- **360° all-round surveillance**
- **Large detection range (800 m for vehicles, 500 m for people)**
- **Can be used in all weather and light conditions**
- **Also operates over water**
- **Simultaneous control of 5 PTZ cameras, e.g. C-AllView**
- **Pre-alarm zones**
- **Acoustic warning signal**

The radar surveillance system is the ideal choice for large-area perimeter surveillance when early alarms and tracking of people and vehicles are required. An intruder can be identified and tracked within a radius of up to 500 m. The security team responsible is informed in this case by an acoustic signal and visual alarm. This dispenses with constant manual monitoring of the screen. The radar can control 5 separate PTZ cameras and track the intruder at the same time.

The radar system scans 360° and works in all weather and light conditions. As a result, the area to be observed can be monitored 24 hours a day. If the C-AllView thermal camera is used, a 24-hour video image is also possible. The RADAR system can even be used over expanses of water.

Model	RV-W200	RV-W500	RV-W800H	RV-RPU	RV-24PSU
Description/ Application	RadarVision detection head, intruder detection in a radius of 200 m, incl. NS3-CT software	RadarVision detection head, intruder detection in a radius of 500 m, incl. NS3-CT software	RadarVision detection head, intruder detection in a radius of 800 m, incl. NS3-CT software	Remote control unit PC (RPU – Remote Processing Unit), 19" server (230 V) with pre-installed NS3-CT software and BaseStation software for a LAN connection	24 VDC power supply unit for outdoor use, DIN rail attachment, for installation in a junction box or similar (not included in scope of delivery), incl. 3 m mains connection cable, voltage input 110 or 240 VAC

RADAR SURVEILLANCE

Model	NV-SWITCH	RV-FIBRE	RV-POLE	RV-AVPOLE	RV-CAMINT
Description/ Application	5 port switch for outdoor use, -30 °C to +75 °C, 24 VDC, DIN rail attachment	Outdoor media converter, 40 °C to +75 °C, 24 VDC, encapsulated SC glass fibre plug connection, incl. DIN rail attachment	Steel mast for the installation of the radar, approx. 1.5 m high, powder-coated, IP67 junction box for power supply unit, media converter and switch	Radar mast with additional bracket for the C-AllView	Protocol converter, RS-485 input, IP output, connection of up to 15 cameras

Model	RV-RELAY	RV-LPU	RV-BASESTATION
Description/ Application	Relay interface box for indoors, 5 contacts are available for each box	Local processor unit (PC), temperature range for outdoors: -20 °C to +50 °C, with installed NS3-CT software configured in wireless mode	Basis station PC, with pre-installed software including graphics card and 17" monitor. Can display and manage up to 16 radar units

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission
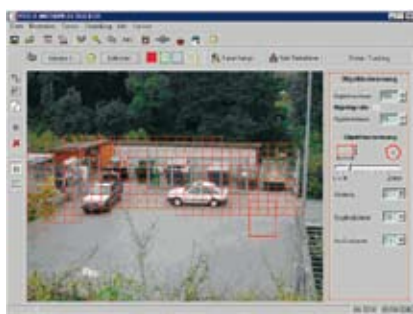
Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

4-CHANNEL MOTION DETECTOR

Digital motion detector

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ZS-MD4-2

- ● **Professional outdoor surveillance**
- ● **4 camera images simultaneously**
- ● **Reliable filter functions to suppress false alarms caused by the weather**
- ● **Intelligent alarm and sabotage detection**
- ● **Fully automatic tracking of moving objects**
- ● **19" rack**

The ZS-MD4-2 motion detector achieves a very high level of triggering reliability and is therefore particularly suitable for the surveillance of outdoor facilities, buildings and driveways. It automatically distinguishes movements with surveillance implications in the video image from harmless factors caused by the weather. Moreover, the ZS-MD4-2 takes into account differences in sizes in terms of perspective in the evaluation of movements at a distance. With 1,024 sensor fields, four surveillance zones can be defined for each camera location. In the event of motion alarms the motion detector automatically activates moving camera units. With this tracking function a suspicious object can be kept under continuous surveillance even if it passes several camera locations. Sabotage warnings and alarms are reliably detected by the ZS-MD4-2 and can be forwarded via freely programmable RS-232/RS-485 interfaces and a relay contact per channel. Alarm indicators, for example, can be connected to the relay outputs. The user-friendly software supplied permits the motion detector to be configured from a PC or laptop.

Model	ZS-MD4-2
Video norm	PAL
Operating voltage	Switch-type power supply unit 9 – 12 VDC, 800 mA
Power consumption	(12 VDC) 620 mA
Video sensor	32 × 32 sensor cells per channel, differential measurement: 256 grey scales integrated in one sensor cell
Video inputs	4× composite signal 1.0 Vp-p, 75 Ohm, BNC, termination resistors switchable
Video outputs	4× composite signal 1.0 Vp-p, 75 Ohm, BNC
Switch inputs	9 (4 alarms), passively protected
Alarm outputs	4× changeover contact
Alarm functions	Activation of the external alarm input, motion detector alarm, signal interruption, automatic restart, after signal interruption
Interfaces	1× Sub-D, 25-pin, alarm/relay; 1× Sub-D, 9-pin, RS-232; 1× Sub-D, 9-pin, RS-422/RS-485; 1× PS/2 for PC keyboard
Operating environment	-10 ~ +60 °C
Weight	2.5 kg
Dimensions (W × H × D)	440 mm × 45 mm × 200 mm

Infrared lighting

IR SYSTEMS FOR INDOORS AND OUTDOORS

Infrared lights ZP-IR series

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

ZP-IR series

- ● **Powerful IR LEDs**
- ● **Ranges up to 300 m**
- ● **880 nm wavelength (optionally 950 nm)**
- ● **Long service life**
- ● **IP65 suitability for outdoors**
- ● **Compact and rugged design**
- ● **12 VDC operating voltage**
- ● **Low power consumption**

The LED illuminators of the ZP-IR series generate illumination in the 880 nm wavelength. Ranges of up to 100 m can be achieved with the models listed below. IR illuminators for greater distances are also available. Thanks to the combination of different beam angles, the scene to be monitored can be properly illuminated with a broad angle and at special points. Owing to their low power consumption the high-performance LEDs cut running costs by up to 65% compared with conventional lighting.

Model	ZP-IR21/25/60	ZP-IR56/20/60	ZP-IR294/20/60/120
Operating voltage	12 VDC	12 VDC	12 VDC
Power consumption	0.2 A	0.6 A	3.0 A
Service life	100,000 hours	100,000 hours	100,000 hours
Lights	21 LED (880 nm)	56 LED (880 nm)	294 LED (880 nm)
Beam angle	25°, 60°	20°, 60°	20°, 60°, 120°
Range	up to 25 m up to 12 m	up to 40 m up to 18 m	up to 100 m up to 40 m up to 17 m
Protection class	IP65	IP65	IP65
Operating temperature	-30 °C ~ +40 °C	-30 °C ~ +40 °C	-30 °C ~ +40 °C
Weight	0.12 kg	0.40 kg	1.5 kg
Dimensions (W x H x D)	74 mm x 48 mm x 38 mm	98 mm x 76 mm x 42 mm	200 mm x 134 mm x 64 mm

Model	ZP-ST2	ZP-ST3	ZP-IRBJ	ZP-IRAP	ZP-IRPSU
Description/ Application	Wall bracket for the ZP-IR21/56	Wall bracket for the ZP-IR294	Ball joint for holding the ZP-IR series on the CHEG and CHEB housing series	Adapter plate for holding the ZP-IRBJ, for the GH and CHOV housing series	Power supply unit for the ZP-IR series, IP65, with photocell, 12 VDC, 3 A

IR SYSTEMS FOR INDOORS AND OUTDOORS

Infrared series for the short and medium illumination range

IR30i series

● **Integrated photosensor**

● **Simple installation**

● **Incl. wall bracket**

● **12 VDC/24 VAC operating voltage**

● **Low power consumption and low running costs**

● **Even illumination**

● **Vandalism-proof**

The IR30i series of the integrated LED infrared illuminators is the right choice for the short and medium illumination range. With the integrated Black Diamond technology, this series achieves a range of up to 30 m. The IR30i series can be supplied with 12 VDC or 24 VAC. The illumination is switched ON and OFF automatically with the integrated photocell. The low energy consumption and the long service life of the LED technology cuts running and maintenance costs. Thanks to the rugged, resistant and appealing design, the IR30i series is ideal for both indoor and outdoor applications.

Model	IR30i/30	IR30i/60	IR30i/120
Operating voltage	12 VDC/24 VAC	12 VDC/24 VAC	12 VDC/24 VAC
Power consumption	max. 15 W	max. 15 W	max. 15 W
Service life	5,000 hours	5,000 hours	5,000 hours
Lights	LED (880 nm)	LED (880 nm)	LED (880 nm)
Beam angle	30°	60°	120°
Range	up to 30 m	up to 20 m	up to 15 m
Protection class	IP66	IP66	IP66
Operating temperature	-40 °C ~ +50 °C	-40 °C ~ +50 °C	-40 °C ~ +50 °C
Dimensions (W x H x D)	98 mm x 110 mm x 121 mm	98 mm x 110 mm x 121 mm	98 mm x 110 mm x 121 mm

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

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IR SERIES

Lenses

Cameras

Protection housings

Monitors

Recording equipment

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Switchers and matrix

Pan-and-tilt heads

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Infrared lighting

Accessories and service

IR series

- **IR illumination up to 300 m**
- **Even illumination**
- **Latest LED technology**
- **Adaptive illumination**
- **10°-180° beam angle**
- **Incl. power supply unit und photocell**
- **Wide-range power supply unit 100 – 240 VAC**
- **Adaptive photocell**
- **Special heat dissipation to prolong the service life**
- **Vandalism-proof**

The advantages of varifocal lenses have already been exploited for years in the CCTV sector and with this series you are now gaining the flexibility of variable settings with an IR light. Various models with the following beam angles are available: 10° – 20°, 20° – 60°, 50° – 100° or 120° – 180°. The illumination is very efficient, requires less than 100 W and has a very high luminous intensity and a very long service life (approx. 10 years). As a result, the running costs of this type of illumination are very low compared with conventional IR lighting or even normal visible lighting. The IR series is also supplied with a power supply unit and U-bracket. Optional accessories and special power supply units are also available.

Model	IR750/50180	IR500/1020/2060/50100/120180	IR300/1020/2060/50100/120180
Max. distance	up to 140 m@50° / 100 m@180°	up to 160 m	up to 150 m
Illumination angle	50° – 180°	10° – 20°, 20° – 60°, 50° – 100° oder 120° – 180°	10° – 20°, 20° – 60°, 50° – 100° oder 120° – 180°
Horiz. illumination	100 m – 150 m	300 m – 240 m, 160 m – 127 m, 112 m – 89 m, 64 m – 51 m	150 m – 100 m, 80 m – 63 m, 64 m – 56 m, 32 m – 31 m
Wavelength	850 nm	850 nm	850 nm
Power consumption	120 W	10 W	50 W
Operating voltage	13.5 Vs power controlled	13.5 Vs power controlled	13.5 Vs power controlled
Operating temperature	-50°C ~ +50°C	-50°C ~ +50°C	-50°C ~ +50°C
Protection class	IP66	IP66	IP66
Weight	6.0 kg	4.0 kg	2.5 kg
Dimensions	420 mm x 195 mm x 66 mm	280 mm x 195 mm x 66 mm	210 mm x 150 mm x 65 mm
Connection cable	2.5 m	2.5 m	2.5 m
Housing colour	black	black	black
Bracket	VF and U-bracket	VF and U-bracket	VF and U-bracket

IR SERIES

Model	Power supply unit supplied for IR750/50180	Power supply unit supplied for IR500/1020/2060/50100/120180	Power supply unit supplied for IR300/1020/2060/50100/120180
Input voltage	100 – 240 VAC auto. wide-range power supply unit	100 – 240 VAC auto. wide-range power supply unit	100 – 240 VAC auto. wide-range power supply unit
Max. power output	120 W	80 W	50 W
Protection class	IP66	IP66	IP66
Dimensions	240 mm x 160 mm x 81 mm	160 mm x 160 mm x 90 mm	160 mm x 160 mm x 90 mm
Operating temperature	-50°C – +50°C	-50°C – +50°C	-50°C – +50°C
Weight	2.4 kg	1.9 kg	1.5 kg

Model	IR100/1020/2060/50100/120180	IR50/10/30/50/120
Max. distance	Bis zu 75 m	Bis zu 35 m
Illumination angle	10° – 20°, 20° – 60°, 50° – 100° oder 120° – 180°	10°, 30°, 50° oder 120°
Horiz. illumination	75 m – 50 m, 40 m – 26 m, 28 m – 18 m, 16 m – 11 m	35 m, 20 m, 14 m, 8 m
Wavelength	850 nm	850 nm
Power consumption	20 W	10 W
Operating voltage	13,5 Vs power controlled	13,5 Vs power controlled
Operating temperature range	-50°C – +50°C	-50°C – +50°C
Protection class	IP66	IP66
Weight	1.7 kg	1.0 kg
Dimensions	160 mm x 1115 mm x 54 mm	75 mm x 100 mm x 54 mm
Connection cable	2.5 m	2.5 m
Housing colour	black	black
Bracket	VF and U-bracket	U-bracket

Model	Power supply unit supplied for IR100/1020/2060/50100/120180	Power supply unit supplied for IR50/10/30/50/120
Input voltage	100 – 240 VAC auto. wide-range power supply unit	100 – 240 VAC auto. wide-range power supply unit
Max. power output	20 W	10 W
Protection class	IP66	IP66
Dimensions	160 mm x 120 mm x 80 mm	160 mm x 120 mm x 80 mm
Operating temperature	-50°C – +50°C	-50°C – +50°C
Weight	0.9 kg	0.9 kg

Model	SB1	DB2	PB180
Description/ Application	Is the best solution to install one IR spotlight on a pan-and-tilt head. It is mounted between the camera housing and the pan-and-tilt head.	Is the best solution to install up to two IR spotlights on a pan-and-tilt head. It is mounted between the camera housing and the pan-and-tilt head.	This pole mounting bracket is installed between the dome and the pole in order to combine IR spotlights with a dome camera. PB180 is the 180° version. It has 2" and 4" PCDs for attachment.

Model	PB360	PBC-1	WB1
Description/ Application	This pole mounting bracket is installed between the dome and the pole in order to combine IR spotlights with a dome camera. PB360 is the 360° version. It has 2" and 4" PCDs for attachment.	If you ant to attach the IR spotlights to a pole, you require the PBC-1. This adapter is supplied with clips for a pole diameter of 45 – 170 mm.	Is a small L-mount for mounting the IR spotlight and the U-bracket supplied to the wall.

IR SYSTEMS, OUTDOORS

Infrared lights series UL

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

UL series

● **High light output**

● **Even illumination thanks to cosec lens technology**

● **Completely inconspicuous beam**

● **High performance in spite of low power consumption**

● **Long service life**

● **Equipped with different filters and lenses**

● **Optional power supply units and brackets for the connection of one or two lights**

The IR lights of the UL series were developed for the inconspicuous surveillance of low-light environments. Their application is suitable where conventional spotlights cause interference or hazards. The series optionally works with wavelengths in the discreet range.

The UL500 and UL300 lights are extremely powerful despite their low power consumption. Versions with cosec lenses illuminate large areas uniformly and virtually without any overexposure or underexposure.

The UL-Mini model comprises small, light-weight IR compact illuminators. Their limited range is ideal for the surveillance of building entrances or indoors. Both model series are available with wavelengths of 730 nm, 830 nm or 950 nm.

Model	UL500	UL300	UL-Mini
Luminosity	500 W	300 W	100 W
Max. distance	170 m/130 m/90 m/70 m	130 m/100 m/65 m/45 m	55 m/40 m/25 m
Illumination angle	6°/10°/30°/60°	6°/10°/30°/60°	10°/30°/60°
Wavelength	730 nm, 830 nm	730 nm, 830 nm	730 nm, 830 nm
Service life of the lights	3,000 hours	3,000 hours	8,000 hours
Operating voltage	28 VAC current controlled (requires optional power supply unit)	26,5 VAC current controlled (requires optional power supply unit)	12 V current controlled (requires optional power supply unit)
Protection class	IP66	IP66	IP66
Weight	1.9 kg	1.9 kg	0.75 kg
Dimensions	250 mm x 90 mm x 160 mm	250 mm x 90 mm x 160 mm	140 mm x 90 mm x 90 mm
Housing colour	black	black	black
Bracket	U-bracket	U-bracket	U-bracket

Model	Optional power supply unit UL500	Optional power supply unit UL300	Optional power supply unit UL-Mini
Photocell	Photocell for automatic switching on/off included in scope of delivery		
Input voltage	230 VAC	230 VAC	220 – 240 VAC
Max. output power	220 W	180 W	70 W
Protection class	IP66	IP66	IP66
Dimensions	250 mm x 160 mm x 95 mm	230 mm x 140 mm x 95 mm	120 mm x 120 mm x 65 mm
Weight	3.4 kg	3.2 kg	–

IR SYSTEMS, OUTDOORS

Infrared lights series UL

Model	Mini-PSUSS	Mini-PSUST	ULMini-SB	ULMini-TB	ULMini-BULB
Description/ Application	Power supply unit for connecting one ULMini, with photocell	Power supply unit for connecting two ULMinis, with photocell	Bracket for one ULMini	Bracket for two ULMinis	Spare bulb for ULMini

Model	UL300-PSUSS	UL300-PSUST	UL300-SB	UL300-TB	UL300-BULB
Description/ Application	Power supply unit for connecting one ULMini, with photocell	Power supply unit for connecting two UL300s, with photocell	Bracket for one UL300 or UL500	Bracket for two UL300s or UL500s	Spare bulb for UL300

Model	UL500-PSUSS	UL500-PSUST	UL500-SB	UL500-TB	UL500-BULB
Description/ Application	Power supply unit for connecting one UL500, with photocell	Power supply unit for connecting two UL500s, with photocell	Bracket for one UL300 or UL500	Bracket for two UL300s or UL500s	Spare bulb for UL500

Model	ULMini-LED-PSU
Description/ Application	Power supply unit for the connection of up to two ULMini-LEDs

Lenses

Cameras

Protection housings

Monitors

Recording equipment

IP systems and transmission

Switchers and matrix

Pan-and-tilt heads

Motion detectors

Infrared lighting

Accessories and service

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AEGIS SERIES

LEDs infrared illuminators

AEGIS series

● **Constant luminosity**

● **Black Diamond technology**

● **12 VDC/24 VAC operating voltage**

● **Integrated photocell for automatic switching on and off**

● **Beam angles 10°, 20°, 30°, 60°, 95°, 120°**

● **Incl. wall bracket (U-format)**

The AEGIS series is the first infrared illuminator with constant light technology. This compensates for the LED attenuation which occurs with all LED lighting systems and therefore permits constant illumination during the entire service life.

Thanks to Black Diamond technology, AEGIS UFLED permits such an even illumination of the foreground and background of a scene that no hot spots or underexposed areas occur. In view of the low power consumption of the efficient LEDs, the AEGIS series is environmentally friendly and cost-saving. The operating voltage can be selected using the built-in electronics: 12 VDC or 24 VAC, max. 45 W. The illuminator has the protection class IP67 and is supplied with a separate 5 m connection cable incl. plug.

Model	UFLED10-8BD	UFLED20-8BD	UFLED30-8BD	UFLED60-8BD	UFLED95-8BD	UFLED95-8BD
No. of LEDs	19 LEDs Arrays	19 LEDs Arrays	19 LEDs Arrays	19 LEDs Arrays	19 LEDs Arrays	19 LEDs Arrays
Max. distance	220 m	150 m	110 m	70 m	50 m	35 m
Horiz. beam angle	10°	20°	30°	60°	95°	120°
Horiz. illumination range	40 m	55 m	60 m	80 m	110 m	120 m
Wavelength	850 nm	850 nm	850 nm	850 nm	850 nm	850 nm
Power consumption	26 – 45 W The power consumption is not constant over time as the optical output control offsets the LED attenuation and fluctuations in the ambient temperature.					
Operating voltage	12 – 40 VDC or 24 VAC +/-30%			12 – 40 VDC or 24 VAC +/-30%		
Temperature range	-50°C ~ +50°	-50°C ~ +50°	-50°C ~ +50°	-50°C ~ +50°	-50°C ~ +50°	-50°C ~ +50°
Protection class	IP67	IP67	IP67	IP67	IP67	IP67
Weight	1.4 kg	1.4 kg	1.4 kg	1.4 kg	1.4 kg	1.4 kg
Dimensions	152 mm x 188 mm x 115 mm			152 mm x 188 mm x 115 mm		
Connection cable	With mains plug for IP67 and 5 m mains cable, 10 m cable optionally available					
Bracket	Wall bracket in U-format included in scope of delivery			Wall bracket in U-format included in scope of delivery		

Model	Optional power supply unit PSU-UFLED-230x2
Input voltage	230 VAC
Output voltage	2x 24 VAC/45 W
Protection class	IP66
Design	Polycarbonate
Dimensions	160 mm x 120 mm x 90 mm
Weight	1.6 kg
Colour	white

Lenses

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BLACK DIAMOND SUPER LEDS

High Fidelity™ LED infrared illuminators

BDS series

- ● **Black Diamond technology**
- ● **Uniform illumination**
- ● **Micro-refractive lenses**
- ● **Infrared illumination up to 300 m**
- ● **Beam angles 10°, 20°, 30°, 60°, 95°, 135°**
- ● **Incl. wall bracket (U-format)**
- ● **Power supply unit included in scope of delivery**

Black Diamond technology permits uniform illumination of the foreground and background of a scene and so no hot spots or underexposed areas occur. Micro-refractive lenses increase the range and horizontal illumination considerably.

Model	BDS10-8DS	BDS20-8DS	BDS30-8DS	BDS60-8DS	BDS95-8DS	BDS135-8DS
No. of LEDs	560 LEDs Arrays	560 LEDs Arrays	560 LEDs Arrays	560 LEDs Arrays	560 LEDs Arrays	560 LEDs Arrays
Horiz. beam angle	10°	20°	30°	60°	95°	135°
Max. distance	300 m	200 m	160 m	110 m	90 m	56 m
Horizontal object view at max. distance	42 m	70 m	85 m	130 m	200 m	270 m
Wavelength	850 nm	850 nm	850 nm	850 nm	850 nm	850 nm
Input voltage	incl. 230 VAC power supply unit			incl. 230 VAC power supply unit		
Temperature range	-50°C ~ +50°C max. at full power			-50°C ~ +50°C max. at full power		
Protection class	IP67	IP67	IP67	IP67	IP67	IP67
Weight	4.2 kg	4.2 kg	4.2 kg	4.2 kg	4.2 kg	4.2 kg
Dimensions	277 mm x 212 mm x 90 mm			277 mm x 212 mm x 90 mm		
Mains cable	4 m connection cable included in scope of delivery			4 m connection cable included in scope of delivery		
Bracket	U-shaped wall bracket included in scope of delivery			U-shaped wall bracket included in scope of delivery		

Model	Power supply unit supplied
Input voltage	85 – 265 VAC (switchable power supply unit)
Output	16,2 V at 5,6 A rated current, 12 V at 0.3 A auxiliary current
Photocell	Photocell for switching on/off automatically included in scope of delivery
Design	Cast aluminium, protection class IP66
Colour	Grey (RAL 7035)
Ambient conditions	IP66
Dimensions	280 mm x 180 mm x 100 mm
Weight	3.8 kg

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REGISTRATION PLATE IDENTIFICATION REG-SENTRY™

Access control system with vehicle registration plate identification

REG-Sentry™

- **Complete access control system with automatic registration plate identification**

- **Independent operation, easy installation and installation software**

- **Round-the-clock identification with REG cameras for vehicle registration plate identification**

- **Different identification distances – 7.5 m/15 m/18 m**

- **Selectable security levels ensure maximum flexibility**

- **Identification library for vehicle registration plates of various regions included in scope of delivery**

REG-Sentry™ is the first automated access control system. It consists of a control unit with an integrated processor, a camera for vehicle registration plate identification at the necessary identification distance and the easy-to-use Sentry Viewer software. The system represents a flexible, user-friendly solution for vehicle registration plate identification and is suitable for a host of access control applications.

The **REG-Sentry™** system was designed so that it can be used as an independent system or integrated into an already existing access control system. The system can be configured by the user so that access to a secured location can be granted or denied to vehicles on the basis of a user-defined registration plate list.

Registration data can be uploaded using the PC-based Sentry Viewer software in order to create a user-defined list. The REG camera records the registration of all vehicles which approach an access control point and transmits these data to the control unit where the data are processed and compared with the list. Then access is granted or denied.

The **REG-Sentry™** system can be used, for example, for the controlling access to car parks, enclosed residential estates, factories, warehouses, offices, schools and universities.

REGISTRATION PLATE IDENTIFICATION REG-SENTRY™

Access control system with vehicle registration plate identification

Model	REG-Sentry-00-1EU	REG-Sentry-X-1EU REG-X	REG-Senry-LX-1EU REG-LX	REG-Sentry-L1-1EU REG-L1
Description/ Application	Without camera, EMEA region, identification of most European registration plates, operating voltage 12 – 24 VAC or VDC	REG-X for a distance of 7.5 m, EMEA region, identification of most European registration plates, suitable power supply unit PSU-230-24	REG-LX for a distance of 15 m, EMEA region, iden tification of most European registration plates, suitable power supply unit PSU-230-24-100W	REG-L1 for a distance of 18 m, EMEA region, iden-tification of most European registration plates, suitable power supply unit PSU-230-24-100W

Model	PSU-230-24	PSU-230-24-100W
Description/ Application	Power supply unit for the REG-Sentry-X-1EU REG-X in the weatherproof housing, 230 VAC/24 VAC	Power supply unit for the REG-Sentry-L1-1EU REG-L1 in the weatherproof housing, 230 VAV/24 VAC

Model	RST-10	RST-20	RST-30	RST-40
Description/ Application	Camera with IR illumination for registration plate iden-tification systems, LEDs 10 m, 850 nm, IP66, incl. wall bracket and power supply unit	Camera with IR illumination for registration plate iden-tification systems, LEDs 20 m, 850 nm, IP 66 incl. wall bracket and power supply unit	Camera with IR illumination for registration plate iden-tification systems, LEDs 30 m, 850 nm, IP66, incl. wall bracket and power supply unit	Camera with IR illumination for registration plate iden-tification systems, LEDs 40 m, 850 nm, IP66, incl. wall bracket and power supply unit

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Accessories
and service

ACCESSORIES

UHF video modulator

ZC-HF02

● **UHF modulator**

● **Integrated power supply unit**

● **Can be set with Dip switch**

The UHF video modulator transmits the standard video signal 1 Vp-p on an HF carrier frequency so that it can be received with any TV set on the channels 21 – 69 (depending on the channel set on the modulator). Several modulators can be connected in series. Moreover, terrestrial TV or BK signals can be supplied to the HF input which are then available at the HF output together with the modulated video signal for feeding into the building distribution network.

Model	ZC-HF02
Description/ Application	UHF modulator for converting composite UHF, with built-in power supply unit, 230 VAC

POWER SUPPLY UNITS

Power supply units for supplying power with 12 VDC, 24 VAC or 28 VAC

Power supply units

- **Reliable power supply**
- **230 VAC input voltage**
- **12 VDC, 24 VAC or 28 VAC output voltage**
- **Plug-type, flush-mounted, fixed-installation and rack-mounted power supply units**

A selection of power supply units is available for operating the cameras with different voltages. They offer a voltage supply of either 12 VDC, 24 VAC or 28 VAC. The CV12-II and CV24-II power supply units are particularly suitable for fixed installation. Two bores for screws (8 mm) permit quick mounting on walls. All power supply units offer thermal overvoltage protection.
The CV12P is a plug-type power supply unit made of space-saving SMD components.

Furthermore, a flush-mounted power supply unit is available, ideally suited for concealed installation for use in building automation, from telecommunications, security and surveillance technology down to light technology applications. it is optimally suited for decentralised power supply, e.g. in building automation, and has an output rating of 12 W with 12 VDC output voltage.

Model	CV12P	CV12UP	CV12-II	CV24-II
Description/ Application	Plug-type power supply unit, 12 VDC, 1,000 mA	Compact, fully encapsulated switch-type power supply module with connection wires suitable for installation in flush-mounted boxes on plane surfaces	Power supply unit for fixed installation, 12 VDC, 800 mA	Power supply unit for fixed installation, 24 VAC, 400 mA

Model	CV2408-6A	CV2416-12A
Description/ Application	19" rack installation, primary input reversible; 110/230 VAC 2.4/1.2 A, 8 secondary outputs, 24/28 VAC, 1 A max. per camera, 6 A together, coloured function display (LED) for each channel	19" rack installation, primary input reversible; 110/230 VAC 4.8/2.4 A, 16 secondary outputs, 24/28 VAC, 1 A max. per camera, 12 A together, coloured function display (LED) for each channel

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