USER MANUAL

USB Devices for EXPLORER Panel PC

Doc: 60000243

USB Bluetooth	USB BT	
USB W-LAN	USB WLAN	
USB Memory Stick	USB MS	
USB Key	USB Key	
Docking Station USB	DS-USB	

Content

Introduction

The whole USER MANUAL must be read before mounting will started.

All here mentioned USB Devices designed for a wireless data communication and for mobile data transfer in **Ex Zone 1 / 2 / 21 / 22** hazardous areas.

For wireless data transmission in hazardous areas:

- „USB-BT" (USB Bluetooth),
- „USB-WLAN" (USB WLAN)

For mobile data transfer in hazardous areas:

- „USB-MS" (USB Memory stick),
- „USB-KEY" (USB Key as hardware key for software licenses)

All above mentioned USB devices are designed to connect to intrinsically safe interface only – not for normal USB interfaces.

For DATA TRANSFER from intrinsically safe USB devices to not intrinsically safe interfaces:

- „DS-USB" (USB Docking station)

The Docking station DS-USB is designed for communication from INTRINSICALLY SAFE interfaces USB-MS / USN-Key to NOT INTRINSICALLY SAFE USB interfaces in non-hazardous areas. Realized as barrier this DS-USB enables connection of intrinsically safe USB device on one side and connection of not intrinsically safe interfaces on the other side. This docking station DS-USB is designed for USE in NOT HAZARDOUS AREAS only.

USB-BT USB BLUETOOTH

FUNCTIONALITY:

The Bluetooth device USB-BT is designed for wireless communication in Ex Zone 1 / 2 /21 / 22 hazardous areas. USB-BT enables a data transmission to Bluetooth devices in hazardous areas and to Bluetooth devices in non-hazardous areas. The USB-BT is designed for USE in Ex Zone 1 / 2 / 21 / 22 hazardous areas only (not for use in normal non-hazardous areas).

For connection with an EXPLORER i.e. the USB BLUETOOTH device must connected to one intrinsically safe interface (Ex-i) via USB cable. Depending on location this antenna transfers data up to 100 maximum.

As standard the USB-BT is delivered with 1 USB cable (USB-BT-C).

SPECIAL INSTRUCTIONS:

- ATTENTION – if this USB device is connected to a not intrinsically safe interface one time this device could be damaged and it is not allowed to use this device in Ex Zone 1 / 2 / 21 /22 any longer.
- For electrical installation use the installation plan #30100475 and the certificate (at the end of this user manual).
- The manufacturer reserves the right to modify technical data without notices.
- The USB-BT requires the support of USB in the operating system at the PC (EXPLORER i.e.). Depending to the PC the speed of the USB interface must be set to USB 1.1.
- The attributes of SEND and RECEIVE could be restricted by location and attributes of environment. The USB devices USB-BT and USB-WLAN should not be shielded to have optimum SEND & RECEIVE functionality of the integrated antenna.
- This USB device warms up during operation – which is a normal operational parameter.
- The operator is responsible for data transmission. No liability is assumed for saved data on this USB device or for processed data by this USB device or for the loss or damage of this data.
- All versions of this USB device which are used in DUST atmosphere hazardous areas (Ex Zone 21 / 22) the USB connector must be connected in an IP6X certified housing only.
- Depending on the used ASD (Application Supporting Device) respectively the used operating system the detection of this USB device takes some time.

- This version is not designed for any change in location. It must be mounted fixed before it is commissioned and used in non-hazardous areas, and MUST BE CONNECTED in a non-hazardous atmosphere. All plugs and connectors must be secured against unintended separation. To mount this USB device the M32 screw can be used which requires a mounting hole of 32mm.
- Designed in intrinsically safe technology this USB device is for use in Ex Zone 1 / 2 / 21 / 22 hazardous areas ONLY.
- For any details of driver and further technical details use the added information at this device.

MOUNTING:

The **USB-BT** device (USB Bluetooth) is designed as intrinsically safe electrical device to connect to a suitable intrinsically safe interface. To run this device the plug of the integrated USB cable must be connected to the intrinsically safe interface.

This USB-BT device should be located in a suitable location to have the optimum SEND & RECEIVE attributes of the integrated antenna.

This device is equipped with 1 USB cable as standard which enables the mounting of this device in distance to intrinsically safe interface of the EXPLORER (i.e.)
Length of the USB cable is approx. 1m as standard (other length on request).

TECHNICAL DATA:

Class I, USB V1.1, maximum distance up to 100m, 723kbps, Antenna integrated – suitable for all common Bluetooth devices.

	Zone 1 / Zone 2	Zone 21 / Zone 22
Protection class:	II 2G Ex ia IIC T4	II 2D Ex tD A21 IP6X T135°C
Operating temperature: (10 to 90% rel. hum., non-condensing)	Ta: -20°C ... +50°C (-4°F to 122°F)	Ta: -20°C ... +50°C (-4°F to 122°F)
Certificate:	IBExU 06 ATEX 1162X	IBExU 06 ATEX 1162X

Material of housing:	Stainless steel / Aluminum / Synthetics
Size of housing:	see technical drawings
Protection of housing:	IP20 minimum
Storage temperature:	-20 °C to +60°C (-4°F to 140°F), 10 to 90% relative humidity, non-condensing

Connection parameter for USB-BT (X10 USB Type A) :

Ui_{max} ≤ 5,5 V	Uo_{max} ≤ 5,5 V
Ii_{max} ≤ 1,04 A	Io_{max} ≤ Ii_{max}
Pi_{max} ≤ 3W	Po_{max} ≤ Pi_{max}
Li_{max} ≤ 20uH	Lo_{max} ≤ 5uH
Ci_{max} ≤ 45uF	Co_{max} ≤ 5uF

Connection for USB-BT (X10):

Connection	Significance	Preferred color / marking	
X10-1	+UB	Red	"1"
X10-2	D-	White	"2"
X10-3	D+	Green	"3"
X10-4	GND	Black	"4"

USB-WLAN USB Wireless LAN

FUNCTIONALITY:

The USB WLAN device USB-BS is designed for wireless communication in Ex Zone 1 / 2 /21 / 22 hazardous areas. USB-WLAN enables a data transmission up to 54 Mbit/s (IEE 802.11b/ IEE 802.11g) in hazardous areas. Following technical standard this device enables the security method WEP and WPA (February 2007).

To run this USB WLAN device it must be connected to the 2 intrinsically safe interfaces by using the 2 USB cables.
This device is equipped with 2 USB cable as standard (USB-WLAN-C-2).

SPECIAL INSTRUCTIONS:

- ATTENTION – if this USB device is connected to a not intrinsically safe interface one time this device could be damaged and it is not allowed to use this device in Ex Zone 1 / 2 / 21 /22 any longer.
- For electrical installation use the installation plan #30100475 and the certificate (at the end of this user manual).
- The manufacturer reserves the right to modify technical data without notices.
- The USB-WLAN requires the support of USB in the operating system at the PC (EXPLORER i.e.). Depending to the PC the speed of the USB interface must be set to USB 1.1.
- The attributes of SEND and RECEIVE could be restricted by location and attributes of environment. The USB devices USB-BT and USB-WLAN should not be shielded to have optimum SEND & RECEIVE functionality of the integrated antenna.
- This USB device warms up during operation – which is a normal operational parameter.
- The operator is responsible for data transmission. No liability is assumed for saved data on this USB device or for processed data by this USB device or for the loss or damage of this data.
- All versions of this USB device which are used in DUST atmosphere hazardous areas (Ex Zone 21 / 22) the USB connector must be connected in an IP6X certified housing only.
- Depending on the used ASD (Application Supporting Device) respectively the used operating system the detection of this USB device takes some time.

- This version is not designed for any change in location. It must be mounted fixed before it is commissioned and used in non-hazardous areas, and MUST BE CONNECTED in a non-hazardous atmosphere. All plugs and connectors must be secured against unintended separation. To mount this USB device the M32 screw can be used which requires a mounting hole of 32mm.
- Designed in intrinsically safe technology this USB device is for use in Ex Zone 1 / 2 / 21 / 22 hazardous areas ONLY.
- For any details of driver and further technical details use the added information at this device.

MOUNTING:

The **USB-WLAN** device (USB Wireless Local Area Network) is designed as intrinsically safe electrical device to connect to a suitable intrinsically safe interface. To run this device the plug of the integrated USB cable must be connected to the intrinsically safe interface e.g. at the EXPLORER.

This USB-WLAN device should be located in a suitable location to have the optimum SEND & RECEIVE attributes of the integrated antenna.

This device is equipped with 2 USB cables as standard which enables the mounting of this device in distance to intrinsically safe interfaces of the EXPLORER (i.e.). To run this device both USB cables must be connected.
Length of the USB cable is approx. 1m as standard (other length on request).

TECHNICAL DATA:

Wireless LAN, IEE 802.11b, IEE802.11g, 54Mbit/s, 128-bit WEP, Antenna integrated – suitable for all common network environments

	Zone 1 / Zone 2	Zone 21 / Zone 22
Protection class:	II 2G Ex ia IIC T4	II 2D Ex tD A21 IP6X T135°C
Operation temperature: (10 to 90% relative humidity non-condensing)	Ta: -20°C ... +50°C (-4°F to 122°F)	Ta: -20°C ... +50°C (-4°F to 122°F)
Certificate:	IBExU 06 ATEX 1162X	IBExU 06 ATEX 1162X

Material of housing:	Stainless steel / Aluminum / Synthetics
Size of housing:	see technical drawings
Protection of housing:	IP20 minimum
Storage temperature:	-20 °C to +60°C (-4°F to 140°F), 10 to 90% relative humidity, non-condensing

Connection parameter for **USB-WLAN-C-2** (Sum of X10 und X11):

X10 and **X11** together (2x USB Type A):

$Ui_{max} \leq 5{,}5$ V	$Uo_{max} \leq 5{,}5$ V
$Ii_{max} \leq 1{,}04$ A	$Io_{max} \leq Ii_{max}$
$Pi_{max} \leq 6$W	$Po_{max} \leq Pi_{max}$
$Li_{max} \leq 8$uH	$Lo_{max} \leq 2$uH
$Ci_{max} \leq 45$uF	$Co_{max} \leq 5$uF

Connection for USB-WLAN-C-2 (X10, X11):

Connection	Significance	Preferred color / marking	
X10-1, X11-1	+UB	Red	"1"
X10-2, X11-2	D-	White	"2"
X10-3, X11-3	D+	Green	"3"
X10-4, X11-4	GND	Black	"4"

USB-MS USB Memory Stick

FUNCTIONALITY:

This Memory Stick USB-MS is designed for data transmission between 2 data processing devices. Designed as intrinsically safe electrical devices is this device for use to an intrinsically safe interface only.

For data transfer from the intrinsically safe USB device to a not intrinsically safe interface the docking station DS-USB must be used – otherwise this USB-MS could be damaged.

SPECIAL INSTRUCTIONS:

- ATTENTION – if this USB device is connected to a not intrinsically safe interface one time this device could be damaged and it is not allowed to use this device in Ex Zone 1 / 2 / 21 /22 any longer.
- For electrical installation use the installation plan #30100474 and the certificate (at the end of this user manual).
- The manufacturer reserves the right to modify technical data without notices.
- The USB-MS requires the support of USB in the operating system at the PC (EXPLORER i.e.). Depending to the PC the speed of the USB interface must be set to USB 1.1.
- This USB device warms up during operation – which is a normal operational parameter.
- The operator is responsible for data transmission. No liability is assumed for saved data on this USB device or for processed data by this USB device or for the loss or damage of this data.
- All versions of this USB device which are used in DUST atmosphere hazardous areas (Ex Zone 21 / 22) the USB connector must be connected in an IP6X certified housing only.
- Depending on the used ASD (Application Supporting Device) respectively the used operating system the detection of this USB device takes some time.
- Before disconnecting this USB device from the EXPLORER Panel PC i.e. the user should wait several seconds (depending to the used ASD) to avoid loss of data during data saving.

- Designed in intrinsically safe technology this USB device is for use in Ex Zone 1 / 2 / 21 / 22 hazardous areas ONLY.

- For any details of driver and further technical details use the added information at this device.

MOUNTING:

The **USB-MS** device is designed as intrinsically safe electrical device to connect to a suitable intrinsically safe interface. To run this device the plug of this device must be connected to the intrinsically safe USB interface at the EXPLORER Panel PC i.e..

TECHNICLA DATA:

This USB Memory Stick could be delivered in various versions: kann mit verschiedenen
Capacity: 1 GB / 2 GB

	Zone 1 / Zone 2	Zone 21 / Zone 22
Protection class:	II 2G Ex ia IIC T4	II 2D Ex tD A21 IP6X T135°C
Operating temperature: (10 to 90% relative humidity, con-condensing)	Ta: -20°C ... +50°C (-4°F to 122°F)	Ta: -20°C ... +50°C (-4°F to 122°F)
Certificate:	IBExU 06 ATEX 1162X	IBExU 06 ATEX 1162X

Material of housing:	Stainless steel / Aluminum / Synthetics
Size of housing:	see technical drawings
Protection of housing:	IP20 minimum
Storage temperature:	-20 °C to +60°C (-4°F to 140°F), 10 to 90% relative humidity, non-condensing

Connection parameter for **USB-MS** (X10 USB Type A):

$Ui_{max} \leq 5{,}5$ V	$Uo_{max} \leq 5{,}5$ V
$Ii_{max} \leq 1{,}04$ A	$Io_{max} \leq Ii_{max}$
$Pi_{max} \leq 3$W	$Po_{max} \leq Pi_{max}$
$Li_{max} \leq 20$uH	$Lo_{max} \leq 5$uH
$Ci_{max} \leq 45$uF	$Co_{max} \leq 5$uF

Connection for USB-MS:

Connection	Significance	Preferred color / marking	
X10-1	+UB	Red	"1"
X10-2	D-	White	"2"
X10-3	D+	Green	"3"
X10-4	GND	Black	"4"

USB Key USB License Key / Dongle

FUNCTIONALITY:

The USB Key is designed for coding and de-coding of data, as hardware key for software licenses and for access right to software in Ex Zone 1 / 2 / 21 / 22 hazardous areas. Only for use to intrinsically safe interfaces.

The normal USB key / license key – belonging to a software – must be validated and modified by GECMA before he could used in hazardous areas (Ex zone 1 / 2 /21 /22).

For data transfer from the intrinsically safe USB device to a not intrinsically safe interface the docking station DS-USB must be used – otherwise this USB-Key could be damaged.

SPECIAL INSTRUCTIONS:

- ATTENTION – if this USB device is connected to a not intrinsically safe interface one time this device could be damaged and it is not allowed to use this device in Ex Zone 1 / 2 / 21 /22 any longer.
- For electrical installation use the installation plan #30100474 and the certificate (at the end of this user manual).
- The manufacturer reserves the right to modify technical data without notices.
- The USB-Key requires the support of USB in the operating system at the PC (EXPLORER i.e.). Depending to the PC the speed of the USB interface must be set to USB 1.1.
- This USB device warms up during operation – which is a normal operational parameter.
- The operator is responsible for data transmission. No liability is assumed for saved data on this USB device or for processed data by this USB device or for the loss or damage of this data.
- Depending on the used ASD (Application Supporting Device) respectively the used operating system the detection of this USB device takes some time.
- Before disconnecting this USB device from the EXPLORER Panel PC i.e. the user should wait several seconds (depending to the used ASD) to avoid loss of data during data saving.
- All versions of this USB device which are used in DUST atmosphere hazardous areas (Ex Zone 21 / 22) the USB connector must be connected in an IP6X certified housing only.

- Designed in intrinsically safe technology this USB device is for use in Ex Zone 1 / 2 / 21 / 22 hazardous areas ONLY.
- For any details of driver and further technical details use the added information at this device.

MOUNTING:

The **USB-Key** device is designed as intrinsically safe electrical device to connect to a suitable intrinsically safe interface. To run this device the plug of this device must be connected to the intrinsically safe USB interface at the EXPLORER Panel PC i.e..

TECHNICAL DATA:

All technical attributes are depending to the USB key of the customer / operator.

	Zone 1 / Zone 2	Zone 21 / Zone 22
Protection class:	II 2G Ex ia IIC T4	II 2D Ex tD A21 IP6X T135°C
Operating temperature: (10 to 90% relative humidity non-condensing)	Ta: -20°C ... +50°C (-4°F to 122°F)	Ta: -20°C ... +50°C (-4°F to 122°F)
Certificate:	IBExU 06 ATEX 1162X	IBExU 06 ATEX 1162X

Material of housing:	Stainless steel / Aluminum / Synthetics
Size of housing:	see technical drawings
Protection of housing:	IP20 minimum
Storage temperature: relative	-20 °C to +60°C (-4°F to 140°F), 10 to 90% humidity, non-condensing

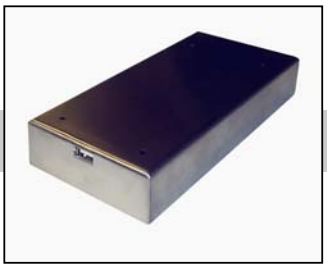
Connection parameter for **USB Key** (X10 USB Type A):

Ui_{max} ≤ 5,5 V	Uo_{max} ≤ 5,5 V
Ii_{max} ≤ 1,04 A	Io_{max} ≤ Ii_{max}
Pi_{max} ≤ 3W	Po_{max} ≤ Pi_{max}
Li_{max} ≤ 20uH	Lo_{max} ≤ 5uH
Ci_{max} ≤ 45uF	Co_{max} ≤ 5uF

Connection for USB-Key:

Connection	Significance	Preferred color / marking	
X10-1	+UB	Red	"1"
X10-2	D-	White	"2"
X10-3	D+	Green	"3"
X10-4	GND	Black	"4"

DS-USB Docking Station



FUNCTIONALITY:

This USB docking station enables a data transfer from intrinsically safe devices to not intrinsically safe devices. To protect our intrinsically safe technology of our USB devices data transfer to not intrinsically interfaces must be go via this docking station.

Designed a barrier this device has an intrinsically safe USB socket on one side and a normal USB socket (not intrinsically safe) on the other side to transfer data from a intrinsically safe interface to a not intrinsically safe and reversed.

The docking station **DS-USB** is realized as desk housing and designed for use in normal areas only (in the near of a PC i.e.).

DS-USB is NOT designed for USE IN HAZARDOUS AREA !

SPECIAL INSTRUCTIONS:

- The DS-USB docking station is designed for USE in non-hazardous areas ONLY – not for use in hazardous areas.
- For electrical installation use the installation plan #30100476 and the certificate (at the end of this user manual).
- The manufacturer reserves the right to modify technical data without notices.
- The DS-USB requires the support of USB in the operating system at the PC (EXPLORER i.e.). Depending to the PC the speed of the USB interface must be set to USB 1.1.
- This USB device warms up during operation – which is a normal operational parameter.

ALL SECURITY REGULATIONS MUST BE FOLLOWED.

MOUNTING:

The **DS-USB** docking station is realized as desk housing for location in the near of a PC (i.e.).

This device is powered with 12VDC, 500mA at the plug-in connectors X3/X4. Plug-in X2 must be connected to the USB-Interface at a standard PC by using the USB cable. Length of cable should be as short as possible. Depending to the used PC the speed of the USB interface at the PC must be reduced to USB 1.1.
Intrinsically safe USB devices must be connected to the plug-in X1.

TECHNICAL DATA:

The USB docking station DS-USB supports als common intrinsically safe USB devices.

	Safe area
Protection class:	II (2) GD [Ex ia] IIC
Operating temperature: (10 to 90%, relative humidity, non-condensing)	Ta: -20°C ... +50°C (-4°F to 122°F)
Certificate:	IBExU 06 ATEX 1162X

Material of housing:	Stainless steel / Aluminum / Synthetics
Size of housing:	see technical drawings
Protection of housing:	IP20 minimum
Storage temperature: relative	-20 °C to +60°C (-4°F to 140°F), 10 to 90% humidity, non-condensing

Connection parameter for **DS-USB (XI – intrinsically safe interface):**

X1 (USB Type A):

Ui_{max} ≤ 5,5 V	Uo_{max} ≤ 5,5 V
Ii_{max} ≤ not important	Io_{max} ≤ 1,04 A
Pi_{max} ≤ not important	Po_{max} ≤ 2,64 W
Li_{max} ≤ negligible	Lo_{max} ≤ 25uH
Ci_{max} ≤ negligible	Co_{max} ≤ 50uF

Connection for **DS-USB (XI – intrinsically safe interface):**

Connection	Significance	Preferred color	Preferred marking
X1-1	+UB	Red	"1"
X1-2	D-	White	"2"
X1-3	D+	Green	"3"
X1-4	GND	Black	"4"

Connection parameter for **DS-USB (X2, X3, X4 – not intrinsically safe interface**:

X2 (USB Typ B):	**X3, X4** (DC Power Jack for middle pin 2.0/2.1mm, middle pin=+, shield=GND):
$U_{typ} \leq$ 5 V dc/ac	$U_{typ} \leq$ 12 V, 500mA dc/ac
$U_m \leq$ 250 V dc/ac	$U_m \leq$ 250 V dc/ac
$Ii_{max} \leq$ 1500A	$Ii_{max} \leq$ 1500A

The +5V of the powering USB interface is not required.

GND of power supply and GND of the USB interface have some potential.

For further details please follow the certificate.

Safety Instructions

General Safety Instructions

The instructions stated in this chapter are to be followed accurately to ensure safe and reliable operation.

The license and the special conditions included in it are to be observed.

Follow any national safety regulations and the accident prevention regulations.

The installation is only to be performed by specialists. These specialist must be familiar with the technical requirements and conditions of potentially explosive atmospheres.

Incorrect or inadmissible application as well as non-observance of the instructions in this operating manual invalidate the warranty.

Only use this device for the approved purpose.

Conversions and modifications to the device are not allowed.

The housing is only to be opened by the company Gecma Components GmbH.

Assembly

The appropriate national installation and maintenance regulations are to be observed.

The generally accepted rules of engineering "good practice" are to be observed.

The entire equipment is to be connected and operated correctly and properly according to the applicable standards, guidelines and installation instructions.

The DS-USB Device is to be grounded via grounding equipment. Grounding must be effected with a core cross section of at least $4mm^2$.

Shielded cables are recommended for use in combination with this device.

Devices with the option "-C" and "-2" are not designed for any change in location. It must be mounted fixed before it is commissioned and used in hazardous areas, and MUST BE CONNECTED in a non-hazardous atmosphere.

The intrinsically safe circuits or the device with supply and signal lines have to be installed in such a way that no faults can occur between the individual circuits, ensure the installation is in accordance with IEC 60079-14, 12.2.2.8.

If the device has to be replaced in a dust atmosphere, the unit and/or the housing, in which the device is installed, is to be de-energized first and if necessary cooled according to the regulations. Before opening the device and/or housing and during the period in which the device and/or the housing is open, the environment of the device and/or housing has to be kept dust-free to such an extent that no dust can enter the interior of the housing. When installing a new device observe that all seals are in a flawless condition and function properly.

Before putting the device into operation make sure that the device has been installed as prescribed and that the device and its wiring are not damaged.

If the power supply of the device is not intrinsically safe, the license will become void and it must not be operated as an intrinsically safe device. If the device was operated intrinsically safely with a low level of international protection (e.g. ib), it must not be operated afterwards in applications for a higher level of international protection (e.g. ia).

Operation

The device is only to be operated in an undamaged and clean condition. When installed in dust hazardous areas 2D/3D only clean the device with a wet cloth.

If the device has suffered any damage which might affect the international Ex protection (e.g. cracks, holes or broken components) it must be taken out of service immediately. The device can only be put into operation again after the defective parts have been replaced.

When the device is damaged, do not touch it at all due to the risk of injury!

If the device is to be used in a dust atmosphere dust layers >5mm have to be removed.

In the event of non-observance & non-compliance the stipulated explosion protection cannot be guaranteed and/or the warranty will become invalid!

Modifications require the written approval by the company GeCma Components GmbH.

General Instructions

Before starting the installation read the entire operating manual!

In cases of doubt (in the form of mistranslation) the German operating manual is to be referred to. We do not assume liability for misprints and errors in this operating manual.

Should you have any questions or suggestions please feel free to contact us any time:

GeCma Components GmbH
Heisenbergstraße 26 – 40
D-50169 Kerpen

Tel.: +49 (0)22 37 / 69 96 0
Fax: +49 (0)22 37 / 69 96 99
mailto:info@gecma.com
http://www.gecma.com

Technical progress

The manufacturer reserves the right to change technical data without notice.

Repair work, hazardous material

The description of the fault(s) should be included with the device which are returned to GeCma Components GmbH or their Agent for repair.

The following measures are to be taken before sending a device in for repair:

Please clean the device thoroughly and remove any residue from surfaces. Pay special attention to sealing grooves and gaps which might contain harmful residue. We have to ask you to refrain from sending the device back if it is impossible for you to definitely guarantee that all harmful material has been completely removed.

Costs which arise due to inadequate cleaning of the device for a potential disposal or for personal injury (cauterisation or burns etc.) will be charged to the proprietor of the device.

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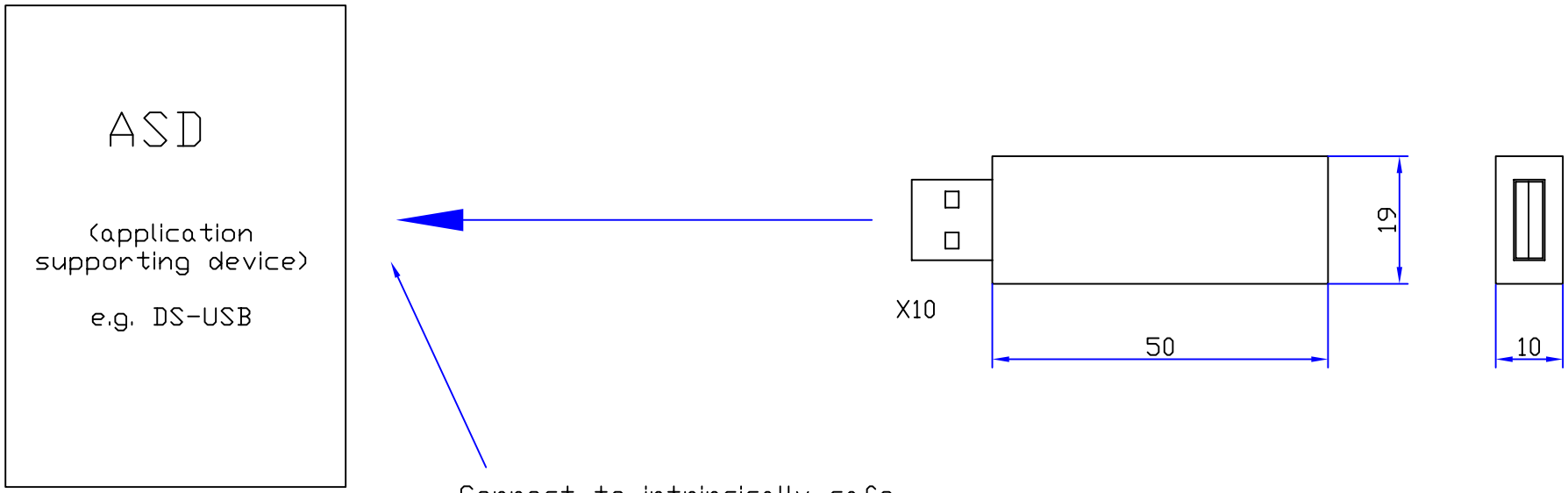
Microsoft, Windows and Windows XP are registered trademarks of Microsoft Corporation.
All other trademarks mentioned and depicted in the text are trademarks of the respective owners and are recognized as registered.

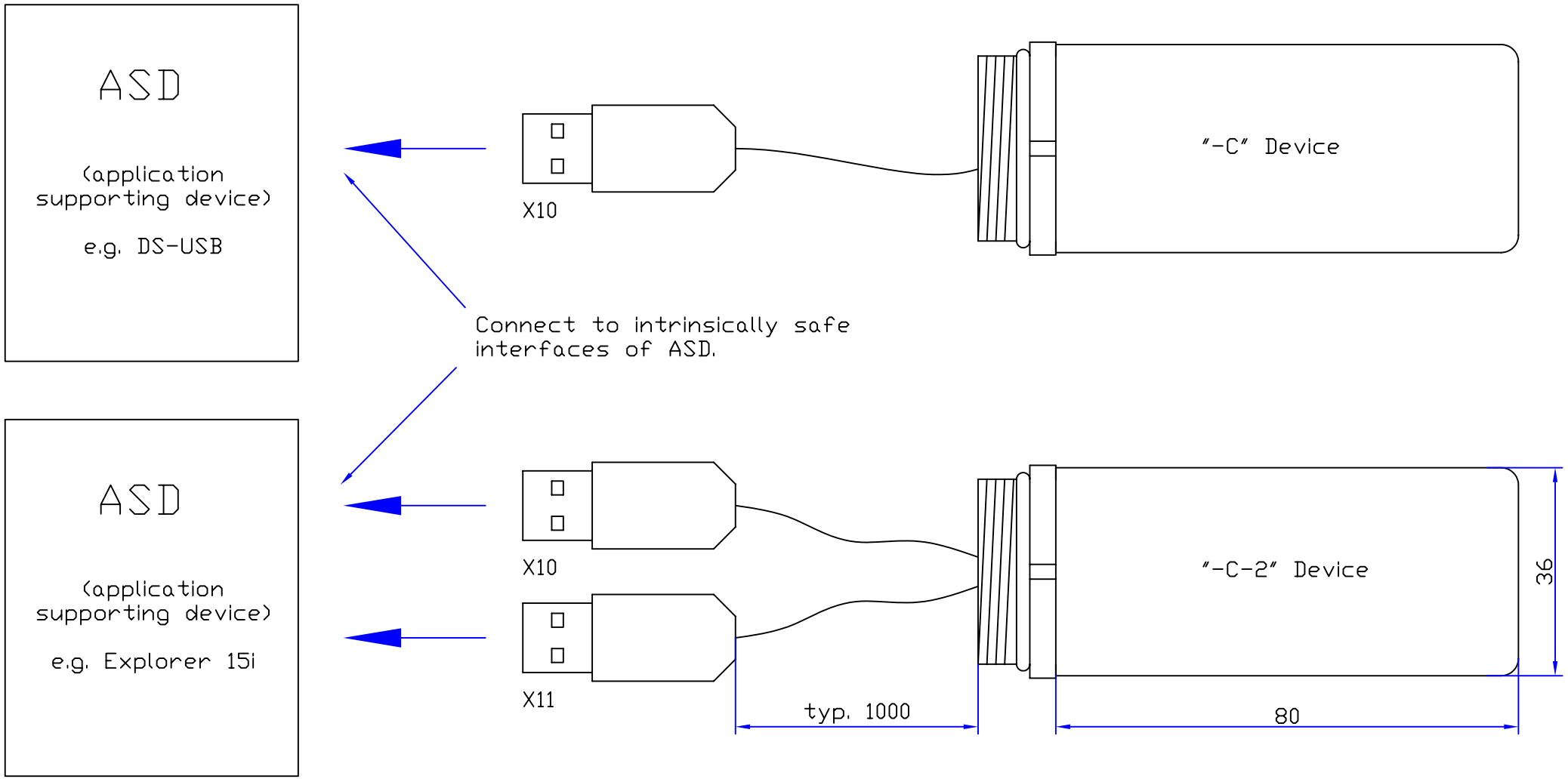


For Installation and for technical details refer manual.

All dimensions can slide variantly.

Modifications who are unaffected to the used protectionmethodes are allowed.

Rev.	Änderung	Datum	Name		
				Ersteller: A.Jung	Datum: 15.08.06
				Geprüft:	Datum:
				Maßstab: 1 : 1	Gewicht:
				Werkstoff:	Oberfläche:
				Zul.Abw.: Allgemeintoler. mittel DIN 7168	
				Titel: USB-MS, USB-BT, USB-WLAN, USB-KEY Installationplan	
				GeCma Components GmbH D-50169 Kerpen, Germany	Zeichnungsnummer: 30100474
					Blatt: 1/1



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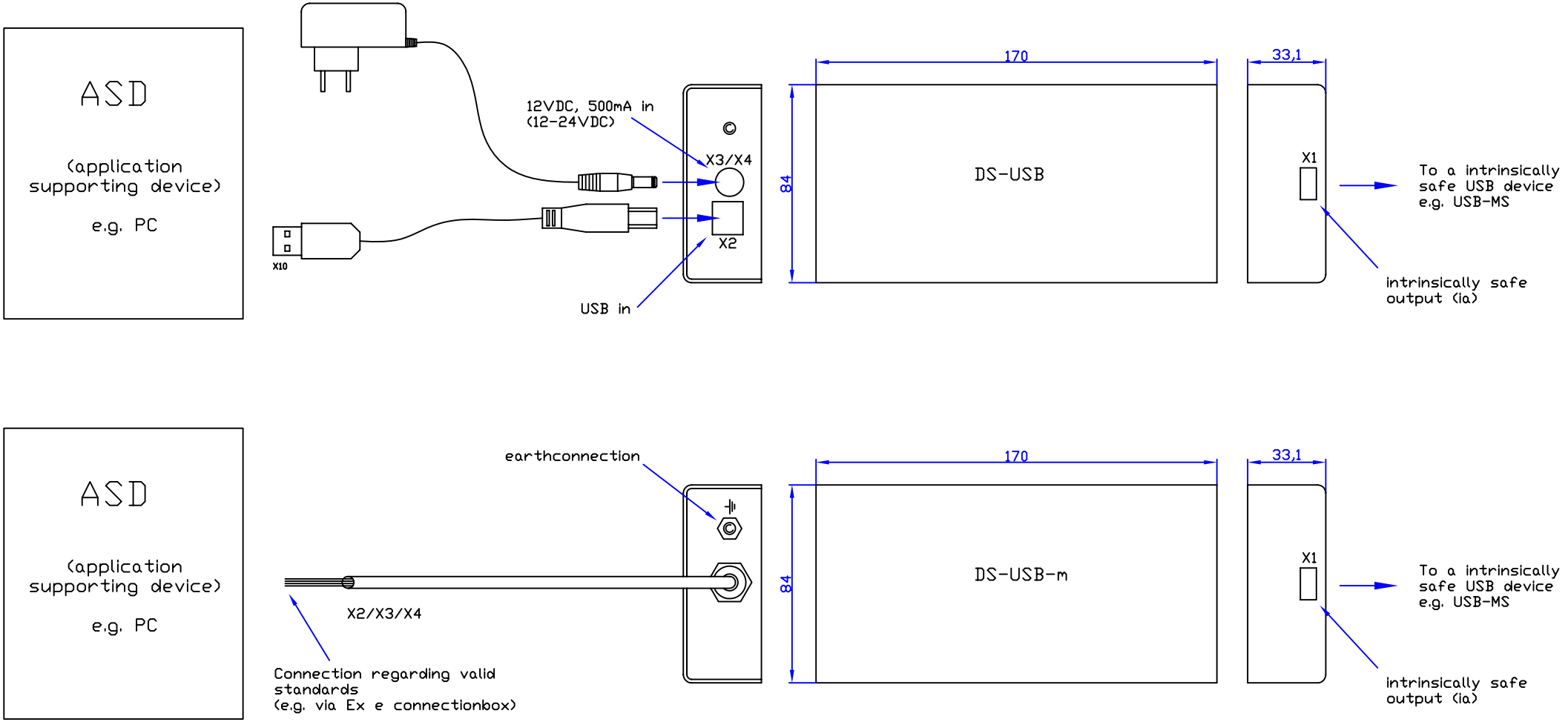
Maßstab: 1 : 1	Gewicht:
Werkstoff:	Oberfläche:
Zul.Abw.: Allgemeintoler. mittel DIN 7168	
Titel: USB-MS-C-2, USB-BT-C-2 USB-WLAN-C-2, USB-KEY-C-2 Installationplan	
GeCma Components GmbH D-50169 Kerpen, Germany	Zeichnungsnummer: 30100475
	Blatt: 1/1



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				Werkstoff:	Oberfläche:
				Zul.Abw.: Allgemeintoler. mittel DIN 7168	
				Titel: DS-USB, DS-USB-m Installationplan	
				GeCma Components GmbH D-50169 Kerpen, Germany	Zeichnungsnummer: 30100476
					Blatt: 1/1

[1] **EG-BAUMUSTERPRÜFBESCHEINIGUNG**
gemäß Richtlinie 94/9/EG, Anhang III

[2] Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen, **Richtlinie 94/9/EG**

[3] EG-Baumusterprüfbescheinigungsnummer: **IBExU06ATEX1162 X**

[4] Gerät: USB-Devices USB-**
und Dockingstation DS-USB

[5] Hersteller: Gecma Components GmbH

[6] Anschrift: Heisenbergstr. 26-40
50169 Kerpen
Germany

[7] Die Bauart des unter [4] genannten Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser EG-Baumusterprüfbescheinigung festgelegt.

[8] IBExU Institut für Sicherheitstechnik GmbH, BENANNTE STELLE Nr. 0637 nach Artikel 9 der Richtlinie 94/9/EG des Europäischen Parlaments und des Rates vom 23. März 1994, bescheinigt, dass das unter [4] genannte Gerät die in Anhang II der Richtlinie festgelegten grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau des Gerätes zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen erfüllt.
Die Prüfergebnisse sind in den Prüfberichten IB-06-3-273/1+2 vom 18.12.2006 festgehalten.

[9] Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit EN 60079-0:2004, IEC 60079-11:2006, prEN 61241-0:2002 und EN 61241-1:2004.

[10] Falls das Zeichen „X" hinter der Bescheinigungsnummer steht, wird auf besondere Bedingungen für die sichere Anwendung des Gerätes in der Anlage zu dieser EG-Baumusterprüfbescheinigung unter [17] hingewiesen.

[11] Diese EG-Baumusterprüfbescheinigung bezieht sich nur auf die Konzeption und den Bau des festgelegten Gerätes. Weitere Anforderungen dieser Richtlinie gelten für die Herstellung und das Inverkehrbringen dieses Gerätes.

[12] Die Kennzeichnung des unter [4] genannten Gerätes muss die folgenden Angaben enthalten:

USB-Device Typ USB-** **II 2G Ex ia IIC T4**
II 2D Ex tD A21 IP 6X T 135 °C
$-20\ °C \le T_a \le +50\ °C$

Dockingstation Typ DS-USB **II (2) GD [Ex ia] IIC**

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Zertifizierungsstelle Explosionsschutz

Im Auftrag

(Dr. Lösch)

Zertifizierungsstelle Explosionsschutz IBExU Institut für Sicherheitstechnik GmbH * Kenn-Nr. 0637 *

- Siegel -
(Kenn-Nr. 0637)

Freiberg, 19.12.2006

Bescheinigungen ohne Unterschrift und ohne Siegel haben keine Gültigkeit. Bescheinigungen dürfen nur unverändert weiterverbreitet werden.

Anlage

IBExU Institut für Sicherheitstechnik GmbH
An-Institut der TU Bergakademie Freiberg

[13] **Anlage**

[14] **zur EG-BAUMUSTERPRÜFBESCHEINIGUNG IBExU06ATEX1162 X**

[15] **Beschreibung der Geräte**
Die USB-Devices sind eigensichere Geräte zur Verwendung in explosionsgefährdeten Bereichen. Sie haben Anschlussmöglichkeiten für 1 oder 2 eigensichere USB-Interface. Die Geräte in unterschiedlichen Abmessungen bestehen aus vergossenen Metallgehäusen oder Kunststoffgehäusen und können ein Funkmodul beinhalten.
Das Gerät DS-USB stellt eine Barriere dar und ist als zugehöriges Betriebsmittel außerhalb explosionsgefährdeter Bereiche installiert. Sie dient dem Anschluss der USB-Devices an einen PC und einer Spannungsversorgung.

USB-Devices Ausführungen:

USB-MS (USB Memorystick)
USB-BT (USB Bluetooth)
USB-WLAN (USB WLAN)
USB-KEY (USB Key)

Folgende Optionen sind jeweils möglich:

-C mit Kabelanschluss
-2 mit 2 Kabelanschlüssen

Umgebungstemperaturbereich: -20 °C bis +50 °C
Schutzart des Gehäuses: ≥ IP 20

Elektrische Daten
(Klemm X10) USB-MS, USB-BT, USB-WLAN und USB-KEY in Zündschutzart Ex ia IIC

U_i	5,5 V
I_i	1,04 A
P_i	3 W
L_i	20 µH
C_i	45 µF

U_o	5,5 V
I_o	$I_{i\,max}$
P_o	$P_{i\,max}$
L_o	5 µH
C_o	5 µF

(Klemme X10 +X11) USB-MS-2, USB-BT-2, USB-WLAN-2 und USB-KEY-2 in Zündschutzart Ex ia IIC

U_i	5,5 V
I_i	2,08 A
P_i	6 W
L_i	8 µH
C_i	45 µF

U_o	5,5 V
I_o	$I_{i\,max}$
P_o	$P_{i\,max}$
L_o	2 µH
C_o	5 µF

Die Werte gelten für beide Anschlüsse zusammen

DS-USB

Versorgungsspannung
für DC Version (Kl. X3, X4) 12 V DC ± 10 %
Bemessungsspannung U_m 253 V

USB-Schnittstelle bis 5 V DC/AC
(Kl. X2)
Bemessungsspannung U_m 253 V

Eigensicherer Datenstromkreis in Zündschutzart Ex ia IIC

USB-Schnittstelle (Kl. X1)

U_i	5,5 V	U_o	5,5 V
I_i	unwichtig	I_o	1,04 A
P_i	unwichtig	P_o	2,64 W
L_i	vernachlässigbar	L_o	25 µH
C_i	vernachlässigbar	C_o	50 µF

Der eigensichere Stromkreis ist mit dem Erdpotential verbunden.

[16] **Prüfbericht**
Der Nachweis des Explosionsschutzes ist im Detail in den Prüfberichten IB-06-3-273/1+2 dargelegt. Die Prüfunterlagen sind Bestandteil des Prüfberichtes und dort aufgelistet.

Zusammenfassung der Prüfergebnisse
Die USB-Devices erfüllen die Anforderungen des Explosionsschutzes für Gerätegruppe II und der Gerätekategorie 2G bzw. 2D in Zündschutzart Eigensicherheit und Schutz durch Gehäuse für Gase der Explosionsgruppe IIC und der Temperaturklasse T4 bzw. einer Oberflächentemperatur von max. 135 °C.
Das Gerät DS-USB erfüllt die Anforderungen des Explosionsschutzes an ein zugehöriges Betriebsmittel für Gerätegruppe II und der Gerätekategorie 2G bzw. 2D in Zündschutzart Eigensicherheit für Gase der Explosionsgruppe IIC.

[17] **Besondere Bedingungen**
Die eigensicheren Stromkreise und das Gehäuse sind galvanisch verbunden. Im gesamten Verlauf der Errichtung der eigensicheren Stromkreise muss Potentialausgleich bestehen.
Bei Verwendung der USB Devices USB-** nach Kategorie 2D oder 3D dürfen die Anschlussstecker nur innerhalb eines min IP 6X zertifizierten Gehäuses angeschlossen werden.
USB-Devices USB-** mit den Optionen „-C" und „-2" sind fest zu montieren und dürfen nicht in Bereichen mit Ex-Atmosphäre angeschlossen werden.

[18] **Grundlegende Sicherheits- und Gesundheitsanforderungen**
Erfüllt durch Einhaltung von Normen (siehe [9]).

Im Auftrag

(Dr. Lösch)

Freiberg, 19.12.2006

[1] **EC-TYPE EXAMINATION CERTIFICATE**
according to Directive 94/9/EC, Annex III
(Translation)

[2] Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres, Directive 94/9/EC

[3] EC-Type Examination Certificate Number: **IBExU06ATEX1162 X**

[4] Equipment: USB-Devices USB-**
and Dockingstation DS-USB

[5] Manufacturer: Gecma Components GmbH

[6] Address: Heisenbergstr. 26-40
50169 Kerpen
Germany

[7] The equipment mentioned under [4] and any acceptable variation there to are specified in the schedule to this EC-Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23rd March 1994, certifies that the under [4] mentioned equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of the equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in test reports IB-06-3-273/1+2 of 18th December 2006.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2004, IEC 60079-11:2006, prEN 61241-0:2002 and EN 61241-1:2004.

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified under [17] in the schedule to this EC-Type Examination Certificate.

[11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned under [4] shall include the following:

USB-Device type USB-** **II 2G Ex ia IIC T4**

II 2D Ex tD A21 IP 6X T 135 °C
-20 °C ≤ T_a ≤ +50 °C

Dockingstation type DS-USB **II (2) GD [Ex ia] IIC**

IBExU Institut für Sicherheitstechnik GmbH
Fuchsmühlenweg 7 - 09599 Freiberg, Germany
☎ +49 (0) 3731 3805-0 - 🖷 +49 (0) 3731 23650

Authorised for certifications
- Explosion protection -

By order
(Dr. Lösch)

Zertifizierungsstelle Explosionsschutz IBExU Institut für Sicherheitstechnik GmbH Kerpen Seal-Nr. 0637
(ID no. 0637)

Freiberg, 19th December 2006

Certificates without signature and seal are not valid.
Certificates may only be duplicated completely and unchanged.
In case of dispute, the German text shall prevail.

Schedule

[13] **Schedule**

[14] **to EC-TYPE EXAMINATION CERTIFICATE IBExU06ATEX1162 X**

[15] **Description of the equipment**

The USB-Devices are intrinsically Safety equipment for use in hazardous areas. You have connectivity for 1 or 2 intrinsically Safety USB-Interface. The equipment in various dimensions consist of us putted metal or plastics enclosures and can contain a radio modul.
The equipment DS-USB represent a barrier and is as associated apparatus outsite hazardous areas installed. Theye served for connection the USB-Devices on a PC and a Powersupply.

USB-Devices types:

USB-MS (USB Memorystick)
USB-BT (USB Bluetooth)
USB-WLAN (USB WLAN)
USB-KEY (USB Key)

The following options are possible respectively:

-C	with cable connection
-2	with 2 cable connections

Ambient temperature range:	-20 °C to +50 °C
Degree of protection of the enclosure::	≥ IP 20

Electrical data
(Termina X10) USB-MS, USB-BT, USB-WLAN und USB-KEY in type of protection Ex ia IIC

U_i	5.5 V
I_i	1.04 A
P_i	3 W
L_i	20 µH
C_i	45 µF

U_o	5.5 V
I_o	$I_{i\,max}$
P_o	$P_{i\,max}$
L_o	5 µH
C_o	5 µF

(Termina X10 +X11) USB-MS-2, USB-BT-2, USB-WLAN-2 und USB-KEY-2 in type of protection Ex ia IIC

U_i	5.5 V
I_i	2.08 A
P_i	6 W
L_i	8 µH
C_i	45 µF

U_o	5.5 V
I_o	$I_{i\,max}$
P_o	$P_{i\,max}$
L_o	2 µH
C_o	5 µF

The value apply together to the two connections.

DS-USB

Power supply circuit	
(Terminal X3, X4)	12 V DC ± 10 %
Max. r.m.s. a.c. or d.c. voltage U_m	253 V
USB-Interface	to 5 V DC/AC
(Terminal X2)	
Max. r.m.s. a.c. or d.c. voltage U_m	253 V

Intrinsically safe data circuit in type of protection Ex ia IIC

USB-Interface (Kl. X1)

U_i	5.5 V	U_o	5.5 V
I_i	not important	I_o	1.04 A
P_i	not important	P_o	2.64 W
L_i	negligible	L_o	25 µH
C_i	negligible	C_o	50 µF

The intrinsically Safety circuit is connect with the earth potential.

[16] **Test report**
The test results are recorded in the test reports IB-06-3-273/1+2. The test documents are part of the test reports and listed there.

Summary of the test results:

The USB-Devices fulfil the requirements of explosion protection for the Equipment Group II and Category 2G respectively 2D in type of protection Intrinsic safety and protection by enclosure for gases of the Explosion Group IIC and Temperature Class T4 respectively with a maximum surface temperature of maximum 135 °C.
The equipment DS-USB fulfills the requirements of explosion protection on a associated apparatus for the Equipment Group II and Category 2G respectively 2D in type of protection Intrinsic safety for gases of the Explosion Group IIC.

[17] **Special conditions**
The intrinsically safe circuits and the enclosure are galvanically connected. In the whole course of the formation of intrinsically safe circuits equipotential bonding must be guaranteed.
For use of the USB devices USB-** respective category 2D or 3D must be ensured that the connectors connected in a min. IP 6X certified enclosure only.
USB-Devices USB-** with the options -C und -2 are fix installed and may be not attached into hazarded atmosphere areas.

[18] **Essential health and safety requirements**

Confirmed by compliance of standards (see [9]).

By order

(Dr. Lösch)

Freiberg, 19th December 2006

СИСТЕМА СЕРТИФИКАЦИИ ГОСТ Р
ГОССТАНДАРТ РОССИИ

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ РОСС DE.ГБ04.В00777

Срок действия с 02.07.2007 г. по 02.07.2010 г.

7324844

ОРГАН ПО СЕРТИФИКАЦИИ

Рег. № РОСС RU.0001.11ГБ04 ЦЕНТР СЕРТИФИКАЦИИ «СТВ»
607190, г. Саров Нижегородской обл., пр. Мира, 37
телефон (83130) 454-78, факс (83130) 455-30

ПРОДУКЦИЯ

Технические устройства вычислительной техники в соответствии с приложением к сертификату;

серийный выпуск

код ОК 005 (ОКП):
40 0000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ НОРМАТИВНЫХ ДОКУМЕНТОВ

ГОСТ Р 51330.0-99, ГОСТ Р 51330.6-99,
ГОСТ Р 51330.8-99, ГОСТ Р 51330.10-99,
ГОСТ Р 51330.17- 99, ГОСТ Р МЭК 61241-1-1-99
в соответствии с приложением к сертификату

код ТН ВЭД России:
8471 60 700 0
8504 40 900 9

ИЗГОТОВИТЕЛЬ

GeCma Components GmbH
Heisenbergstraße 26-40 D-50169 Kerpen, Deutschland

СЕРТИФИКАТ ВЫДАН

GeCma Components GmbH
Heisenbergstraße 26-40 D-50169 Kerpen, Deutschland
Телефон: +49-2237-6996-0, Факс: +49-2237-6996-99

НА ОСНОВАНИИ

отчета по сертификации № С3-718/07 от 29.06.2007 г. Центра сертификации "СТВ" (Рег. № РОСС RU.0001.11ГБ04)

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ

Условия применения – в соответствии с Дополнением к сертификату

Руководитель органа _____ В.В. Байрак
подпись — инициалы, фамилия

Эксперт _____ В.Н. Липавский
подпись — инициалы, фамилия

Сертификат имеет юридическую силу на всей территории Российской Федерации

Бланк изготовлен ЗАО "ОПЦИОН" (лицензия № 05-05-09/003 МФ РФ уровень В) тел. (495) 257 2439, 208 7617, г. Москва, 2006 г.

СИСТЕМА СЕРТИФИКАЦИИ ГОСТ Р
ГОССТАНДАРТ РОССИИ

1769832

ПРИЛОЖЕНИЕ

К сертификату соответствия № РОСС DE.ГБ04.В00777 Лист 1 из 2

Перечень конкретной продукции, на которую распространяется действие сертификата соответствия

код ОК 005 (ОКП) / код ТН ВЭД СНГ	Наименование и обозначение продукции, ее изготовитель	Обозначение документации, по которой выпускается продукция
8471 60 700 0	15" монитор типа Challenger 15i-2-FMO с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	15" монитор типа Challenger 15i-FMO с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	18" монитор типа Challenger 18i-FMO с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Считыватель карт – идентификатор типа Challenger CRi с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Пальцевый идентификатор типа Challenger FPi с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Клавиатура типа Challenger KB с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Клавиатура с мышью типа Challenger KMU с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Оболочка для защиты от горючей пыли типа Challenger LITE Ex 15/18-FHP, Challenger 15i/18i Dust с маркировкой защиты от воспламенения горючей пыли DIP A22 T_A 80°C, IP65	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99 ГОСТ Р МЭК 61241-1-1-99
8471 60 700 0	Мышь типа Challenger M с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Трекбол типа Challenger TB, TB-2 с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Клавиатура с мышью и декодером типа Challenger MTD с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Блок интерфейса типа Challenger RS232 TCS(RSI)1i 5V1(6V8, 8V2, X) с маркировкой взрывозащиты 1ExibIICT4, [Exib]IIC	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Блок передачи данных типа Challenger TCV 2i с маркировкой взрывозащиты [Exib]IIC	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	15"/18" сенсорный монитор типа Challenger Touch 15i/18i-FMO (-HB, -G-Touch) с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8504 40 900 9	Источник питания для Challenger компонентов типа PSU 14i/*/468 (543) с маркировкой взрывозащиты 2Exqe[ib]IICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.6-99 ГОСТ Р 51330.8-99 ГОСТ Р 51330.10-99

Дополнительные позиции в обозначении, выделенные символом (*),сертификатом не регламентируются

Изготовитель: "GeCma Components GmbH"
Heisenbergstraße 26-40 D-50169 Kerpen, Deutschland

Руководитель органа _____ В.В. Байрак
подпись — инициалы, фамилия

Эксперт _____ В.Н. Липавский
подпись — инициалы, фамилия

Бланк изготовлен ЗАО "ОПЦИОН" (лицензия № 05-05-09/003 МФ РФ уровень В) тел. (495) 646 6068, 208 7617, г. Москва, 2007 г.

СИСТЕМА СЕРТИФИКАЦИИ ГОСТ Р
ГОССТАНДАРТ РОССИИ

1769833

ПРИЛОЖЕНИЕ

К сертификату соответствия № РОСС DE.ГБ04.В00777 Лист 2 из 2

Перечень конкретной продукции, на которую распространяется действие сертификата соответствия

код ОК 005 (ОКП) / код ТН ВЭД СНГ	Наименование и обозначение продукции, ее изготовитель	Обозначение документации, по которой выпускается продукция
8504 40 900 9	Источники напряжения для Challenger компонентов типа PSU 150/12(15, 24), PSU 150i/*/468(543) с маркировкой взрывозащиты 2ExqeIIT4, 2Exqe[ib]IICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.6-99 ГОСТ Р 51330.8-99 ГОСТ Р 51330.10-99
8471 60 700 0	Сенсорная панель типа Challenger TPi с маркировкой взрывозащиты 0ExiaIIC/IIBT4 и защиты от воспламенения горючей пыли DIP A22 T_A60°C, IP65	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99 ГОСТ Р МЭК 61241-1-1-99
8471 60 700 0	Джойстик типа Challenger Ji с маркировкой взрывозащиты 0ExiaIIC/IIBT4 и защиты от воспламенения горючей пыли DIP A22 T_A60°C, IP65	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99 ГОСТ Р МЭК 61241-1-1-99
8471 60 700 0	15" монитор высокой светимости типа Challenger 15i-2-HB-FMO с маркировкой взрывозащиты 1ExibIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Мышь типа Challenger Mi – PS2, Mi – PS2-B с маркировкой взрывозащиты 0ExiaIICT4	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99
8471 60 700 0	Клавиатура типа Challenger K**i-PS2 с маркировкой взрывозащиты 0ExiaIICT4 и защиты от воспламенения горючей пыли DIP A21 T_A120°C, IP65	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99 ГОСТ Р МЭК 61241-1-1-99
8471 60 700 0	Панель PC типа Explorer 15i/18i с маркировкой взрывозащиты 2Exem[ia]IICT4 и защиты от воспламенения горючей пыли DIP A21 T_A120°C, IP65	ГОСТ Р 51330.0-99 ГОСТ Р 51330.8-99 ГОСТ Р 51330.10-99 ГОСТ Р 51330.17-99 ГОСТ Р МЭК 61241-1-1-99
8471 60 700 0	Устройства типа USB BT, USB WLAN, USB MS, USB Key для подключения к порту USB с маркировкой взрывозащиты 0ExiaIICT4 и защиты от воспламенения горючей пыли DIP A21 T_A135°C, IP65	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99 ГОСТ Р МЭК 61241-1-1-99
8471 60 700 0	Искробезопасный барьер типа DS USB для подключения устройств USB** с маркировкой взрывозащиты [Exia]IIC	ГОСТ Р 51330.0-99 ГОСТ Р 51330.10-99

Дополнительные позиции в обозначении, выделенные символом (*),сертификатом не регламентируются

Изготовитель: "GeCma Components GmbH"
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Бланк изготовлен ЗАО "ОПЦИОН" (лицензия № 05-05-09/003 ИФ РФ уровень В) тел. (495) 640 5066, 258 7817, г. Москва, 2007 г.

ФЕДЕРАЛЬНАЯ СЛУЖБА
ПО ЭКОЛОГИЧЕСКОМУ, ТЕХНОЛОГИЧЕСКОМУ И АТОМНОМУ НАДЗОРУ

РАЗРЕШЕНИЕ

№ РРС 00-25602

На применение

Оборудование (техническое устройство, материал):
Технические устройства вычислительной техники во взрывозащищенном исполнении согласно сертификату соответствия № РОСС DE.ГБ04.В00777 от 02.07.2007 г.

Код ОКП (ТН ВЭД): 40 0000 (8471 60 700 0, 8504 40 900 9)

Изготовитель (поставщик): Фирма "GeCma Components GmbH" (Германия).

Основание выдачи разрешения: Техническая документация, сертификат соответствия ЦС "СТВ" № РОСС DE.ГБ04.В00777 от 02.07.2007 г.

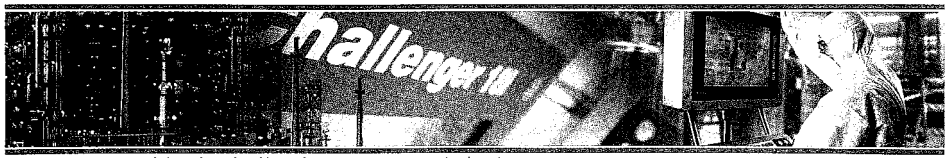
Условия применения:
1. Применять на поднадзорных производствах и объектах согласно маркировке взрывозащиты в соответствии с Руководством по эксплуатации, а также требованиями главы 7.3 ПУЭ.
2. Внесение изменений в техническую документацию и конструкцию технических устройств возможно только по согласованию с аккредитованной испытательной организацией и Федеральной службой по экологическому, технологическому и атомному надзору.

Срок действия разрешения до 30.07.2010

Дата выдачи 30.07.2007

Начальник Управления государственного горного и металлургического надзора Ш.М. Тугуз
(по доверенности № ЮП-23/213 от 12.02.2007)

АВ 025238



HMI & Remote PC Terminals for industrial and hazardous areas – Ex Zone 1 / 2 / 21 / 22

GECMA Components GmbH, Postfach 4146, D-50155 Kerpen

GECMA
A member of The MTL Instruments Group

Erklärung der EG – Konformität

/ Declaration of EC – Conformity / Attestation de Conformité CE

Wir / We / Nous GeCma Components GmbH
Heisenberstr. 26-40
50169 Kerpen, Germany

erklären in alleiniger Verantwortung, dass unser Produkt / declare under our sole responsibility that the product / attestons sous notre responsabilité que le produit,

auf welches sich diese Erklärung bezieht, den Bestimmungen der folgenden Richtlinien entspricht: / to which this declaration relates is in accordance with the provision of the following directives / se référant à cette attestation correspond aux dispositions des directives suivantes:

Productname	Product	Certificate	Standard
Challenger 15i-2-FMO #	Challenger 15i-2-FMO	DMT 00 ATEX E 089 X	EN 50014:1997+A1+A2, EN 50020:1994
Challenger 15i-FMO #	Challenger 15i-FMO	DMT 00 ATEX E 089 X	EN 50014:1997+A1+A2, EN 50020:1994
Challenger 18i-FMO #	Challenger 18i-FMO	DMT 00 ATEX E 089 X	EN 50014:1997+A1+A2, EN 50020:1994
Challenger KB #	Challenger KB	DMT 00 ATEX E 089 X	EN 50014:1997+A1+A2, EN 50020:1994
Challenger KMU #	Challenger KMU	DMT 00 ATEX E 089 X	EN 50014:1997+A1+A2, EN 50020:1994
Challenger M #	Challenger M	DMT 00 ATEX E 089 X	EN 50014:1997+A1+A2, EN 50020:1994
Challenger MTD #	Challenger MTD	DMT 00 ATEX E 089 X	EN 50014:1997+A1+A2, EN 50020:1994
Challenger TB #	Challenger TB	DMT 00 ATEX E 089 X, BVS 05 ATEX E 048	EN 50014:1997+A1+A2, EN 50020:1994
Challenger TCV 2i #	Challenger TCV 2i	DMT 00 ATEX E 089 X	EN 50014:1997+A1+A2, EN 50020:1994
Challenger CRi #	Challenger CRi	DMT 02 ATEX E 141	EN 50014:1997+A1+A2, EN 50020:1994
Challenger FPi #	Challenger FPi	TÜV 03 ATEX 2251	EN 50014:1997+A1+A2, EN 50020:2002
Challenger Ji #	Challenger Ji	TÜV 04 ATEX 2459	EN 50014:1997+A1+A2, EN 50020:2002, EN 1127-1:1997, EN 50284:1999, EN 50281-1-1 :1998+A1 :2002
Challenger TPi #	Challenger TPi	TÜV 04 ATEX 2458	EN 50014:1997+A1+A2, EN 50020:2002, EN 1127-1:1997, EN 50284:1999, EN 50281-1-1 :1998+A1 :2002
Challenger Lite Ex 15/18-FHP #, 15i/18i Dust #	Challenger Lite Ex 15/18-FHP, 15i/18i Dust	BVS 03 E 254	EN 50281-1-1:1998+A1
Challenger PSU14i/*/*** #	Challenger PSU14i/*/***	DMT 00 ATEX E 090	EN 50014:1997+A1+A2, EN 50017:1998, EN 50019 :1994, EN 50020 :1994
Challenger PSU 150/** # and PSU150/*/*** #	Challenger PSU 150/** and PSU150/*/***	TÜV 03 ATEX 2032	EN 50014:1997+A1+A2, EN 50017:1998, EN 50019 :2000, EN 50020 :1994
Challenger Touch 15i-2-FMO # ; 18i-FMO #	Challenger Touch 15i-2-FMO ; 18i-FMO	TÜV 02 ATEX 1959	EN 50014:1997, EN 50020:1994
Challenger RS232***1i-* #	Challenger RS232***1i-*	DMT 03 ATEX E 032X	EN 50014:1997+A1-A2, EN 50020:1994
Challenger 15i-2-HB-FMO #	Challenger 15i-2-HB-FMO	BVS 05 ATEX E 020	EN 50014:1997+A1-A2, EN 50020:2002
Challenger Mi-PS2 und Mi-PS2-B #	Challenger Mi-PS2 und Mi-PS2-B	BVS 05 ATEX E 175	EN 50014:1997+A1-A2, EN 50020:2002, EN 50284 :1999
Challenger K**i-PS2 #	Challenger K**i-PS2	BVS 05 ATEX E 174 X, IBExU 06 ATEX 1043 X	EN 50014:1997+A1-A2, EN 50020:2002, EN 50284 :1999, prEN 61241-0 :2002, EN 61241-1 :2004
Explorer 15i/18i #	Explorer 15i/18i	IBExU 05 ATEX 1186 X	EN 60079-0:2004, EN 60079-7:2003, E IEC 60079-11:2004 (31G/132ACD), EN 60079-18:2004, prEN 61241-0:2002, EN 61241-1:2004
USB-Devices USB-** #	USB-Devices USB-**	IBExU 06 ATEX 1162 X	EN 60079-0:2004, IEC 60079-11:2006, prEN 61241-0:2002, EN 61241-1:2004
EFU -1-2-3, EFU-NEX #	EFU -1-2-3, EFU-NEX	TÜV 07 ATEX 7501 X	EN 60079-0:2006, prEN 60079-5:2006, EN 60079-7:2007, EN 60079-28:2007, EN 61241-0:2006, EN 61241-1:2004
ExB -DS-2-3 Data Storage Device #	ExB -DS-2-3 Data Storage Device	TÜV 08 ATEX 7570 X	EN 60079-0:2006, EN 60079-5:2007, EN 60079-7:2007, EN 61241-0:2006, EN 61241-1:2004
BCSi-1 * #	BCSi-1 *	TÜV 08 ATEX 7633	EN 60079-0:2006, EN 60079-11:2007, EN 60079-28:2007, EN 61241-0:2006, EN 61241-11:2006
ExMod-1-2-3 * #	ExMod-1-2-3 *	TÜV 08 ATEX 7639 X	EN 60079-0:2006, EN 60079-5:2007, EN 60079-7:2007, EN 60079-11:2007, EN 61241-0:2006, EN 61241-1:2004, EN 61241-11:2006

beschreibt beliebige Character, welche keinen Einfluss auf den Explosionsschutz bzw. das ATEX Zertifikat haben / # describe free signs which have no effect to the hazardous protection resp. the ATEX certificate / # Décrit un caractère libre qui ne change pas la méthode de production du produit ainsi que son certificat ATEX.

Das jeweilige Zertifikat ist Bestandteil der Konformitätsbescheinigung welcher weitere Details zu entnehmen sind / The respective certificate is a part of this declaration of conformance of which further details are to be refered / chaque certificat indiquée ci-dessus fait partie de cette pésente déclaration. Pour plus de détails, veuillez se référer au document de chaque certificat.

94/9/EG ATEX Richtlinie
89/336/EWG EG-EMV-Richtlinie
73/23/EWG Niederspannungsrichtlinie

GeCma Components GmbH
Dipl.-Ing. (FH) A. Jung
Entwicklung / Development

Cologne, 19.12.2008
Ort und Datum
Place and date
Lieu et date

Für Bestellungen und Verkäufe gelten ausschließlich unsere „Allgemeinen Zahlungs- und Geschäftsbedingungen".
All orders are subject to „GECMA Components GmbH Terms and Conditions of Sale" unless otherwise agreed in writing.

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Frank Kellershohn

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Ust.-Id Nr./VAT Number:
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Registriert/Registered:
HRB 42513, Amtsgericht Köln

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BLZ/Bank code: 37062124
KTO/Account No: 303202030
Swift: GENODED1BGL via GENODEDD
IBAN: DE36 3706 2124 0303 2020 30