

Industrial Display Solution

Waterproof and durable displays are essential in today's commercial and industrial applications. IEI's versatile line of IP 64/65 compliant shock and vibration resistant industrial display solutions are designed specifically to endure the rigorous demands of modern commerce and industrial environments. These displays are easily integrated into diverse applications including automation, ATM machines and human machine interfaces (HMI).

Total Display Solutions

Industrial Rugged LCD Monitor



1. IP 65 front panel compliance
2. 800/1000 nits super high brightness (SRM Series)
3. -30°C~70°C extended operating temperature (TDM Series)
4. Stainless steel front baze (ISDM Series)
5. Open frame monitor (LCD-KIT Series)

Light Industry LCD Monitor



1. IP 64/65 front panel compliance
2. High Resolution and excellent video image
3. 5 Video Inputs
4. Picture in picture function
5. Ambient light sensor
6. Remote control for OSD functions

Features

IP65

IP65 Waterproof front panel
IP65 standard is the highest dusty, water and oil proof level in general usage. It absolutely prevents any micro-particle into the system from front panel, and let the system adapting harsh environment.

First Numerical	Second Numerical
Protection against solid bodies	Protection against liquid
No Protection	0 0 No Protection
Objects Greater Than 50mm	1 1 Vertically Dripping Water
Objects Greater Than 12mm	2 2 75 - 90° Sprayed water
Objects Greater Than 2.5mm	3 3 30 - 90° Sprayed water
Objects Greater Than 1.0mm	4 4 Water sprayed - low pressure
Dust-Protected	5 5 Water jets - low pressure
Dust-Tight	6 6 Water jets - high pressure - Heavy Seas
	7 7 Temporary immersion
	8 8 Indefinite Immersion

Auto-Dimming

IEI SRM and MDM series with auto-dimming function can adjust brightness according to ambient light, so that monitors can job properly under different lamp house average, and outdoor environment. This function not only saves unnecessary brightness that strains eyes strained and makes you tire but also saves energy saving.

Super High Brightness

IEI SRM monitors are still readable in bright sunlight at 800 and 1000 nits of brightness. Typical high brightness monitors usually have more than six CCFLs, but the IEI SRM monitors have super high brightness with only four CCFLs. With fewer backlights, not increasing power consumption or producing extra heat.

Anti-Reflection

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. The SRM series has special AR (anti-reflection) surface treatment to prevent reflection, ensuring excellent visibility in daylight conditions.

Wide Temperature

Typical monitors can only be used in environments that have temperatures in the 0°C~50°C range, Extended IEI environmental testing is performed to ensure the TDM series continues to function properly over its entire service life in a wide working temperature range of -30°C to +70°C.

smart OSD

An intelligent and easy to use proprietary On-Screen-Display (OSD) software for all the IEI LCD monitors to remote control the OSD functions from the systems via VGA/DVI video cable.

5-in-1

Multiple Video Inputs

Light industry LCD monitors integrated with multiple video inputs through common video connectors including VGA, DVI-D, S-Video, component and BNC/Composite video input interfaces. The 5-in-1 system connects to a wide range of devices and most electronic appliances. (The AFL-07M/08M/10M/12M has a 4-in-1 system with VGA, S-Video, Component and Composite)

PIP Function

Light industry LCD monitors have PIP function enabling a second video/image to be viewed in a small on-screen window

Remote Control

a remote controller ensuring easy OSD functions configuration.

IEI smartOSD

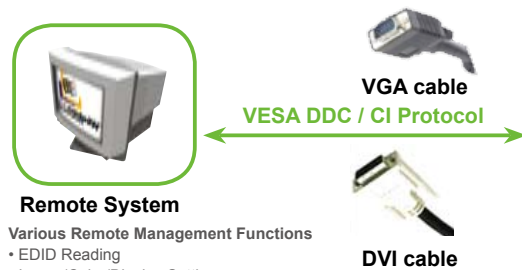
Software OSD for IEI LCD Monitors



IEI smartOSD is an intelligent and easy to use proprietary On-Screen-Display (OSD) software especially designed for IEI display monitors. It delivers excellent performance and flexibility over hardware OSD solution in the monitor unit. User can adjust monitor from smartOSD under Windows environment from the remote system instead of adjustment from front panel. The smartOSD allow you read and change such monitor settings as brightness, contrast, color and more enhanced features over normal video cable (VGA or DVI).

Note: The smartOSD function is only supported by revision 11 models and above

Directly controls IEI display device through standard video cables !



Remote System

Various Remote Management Functions

- EDID Reading
- Image/Color/Display Setting
- Power Management
- OSD Lock/Unlock
- PIP Control

IEI LCD Monitor

IEI Displays Only!



• Overcome Operation Obstacles

Distance, location and multiple display units no longer present any obstacles when controlling the monitors with the smartOSD.



Multiple Control Displays



Untouchable Location

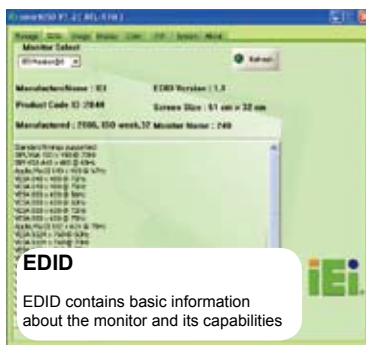


• 100% Compatible With VESA DDC/CI Protocol

IEI LCD monitors are implemented with the VESA DDC/CI protocol and the standard VESA Monitor Control Command Set (MCCS). Compliance software for designing displays compatible with VESA's DDC/CI and MCCS standards are easily modified and applied in other application programs.

Various Remote Management Functions

1.EDID



2.Image Setting



3.Display Setting



4.Color Setting



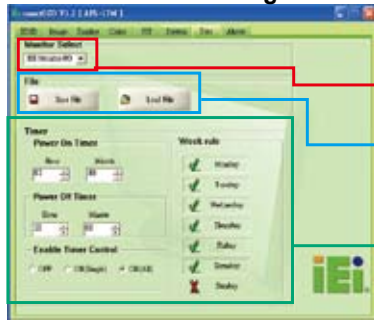
5. Picture in Picture Setting



6. System Setting



7. Monitor Power Management and File Saving



Monitor Select

Selects the monitor unit for which the system parameters will be adjusted

Settings Saving

Save the referred settings of all the OSD functions as .dat files and load the settings

Power Management

Setting the monitor power on/off by time and week

Valuable for Project Base

The smartOSD can be very useful in many projects:

(1) Easy Configuration of Multiple Monitors

(2) Fast Configuration of Multiple Monitors

Unlimited smartOSD setting configurations can be stored in the memory thereby enabling you to change or choose between memorized configuration modes more quickly.

(3) Smart Power Management



Supermarket Daily Product Promotion

Different memorized settings enable you to easily configure your screen according to the promotion goods to deliver the greatest image to the viewers.



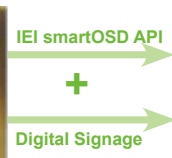
LCD monitor automatically turns on at 7 a.m. and turns off at 10 p.m. from Sunday to Monday

Modifiable for Customization Service

IEI OSD software is based on the VESA protocol standards and can be customized through a command library using customer defined MSSC commands. This programming feature supports easier software development.



LCD monitor and system automatically turns on at 8 a.m.



LCD monitor and system automatically turns off at 12 p.m.

Outdoor Digital Signage Power Management



Industrial Rugged LCD Monitor

To meet your specific needs, IEI offers several display lines (listed below) are available from IEI to fit your versatile monitor needs:



Industrial Display Monitor

The DM series displays are flexible, durable systems that are easily integrated into a wide variety of general-purpose industrial applications including HMI, factory automation and process control.

DM Series

Sizes: 6.5" to 19"



Industrial Stainless Steel Display Monitor

The ISDM series features a stainless steel frame and chassis that can resist most corrosive acids, alkaline solutions and chlorinated environments that are commonly found in processing plants. In addition, the easy cleaning ability of stainless steel makes it the first choice for strict hygiene environments such as hospitals, kitchens, abattoirs and other food processing facilities.

ISDM Series

Sizes: 8.4" to 19"



Sunlight Readable Monitor

The SRM series is designed to operate in high ambient lighting conditions at 800 nits or 1000 nits of brightness within extended operating temperature ranges and is especially designed for outdoor use under direct or indirect sunlight.

SRM Series

Sizes: 12.1" to 15"



Wide Temperature Display Monitor

The TDM series offers an extended operational temperature range of -30°C ~ +70°C that can tolerate temperature extremes in harsh operating environment, both indoors and out.

TDM Series

Sizes: 12.1" to 15"



HMI



Factory Automation



Food Processing Plant



Pharmaceutical



Outdoor Kiosk



Gas Station



Steel Refining

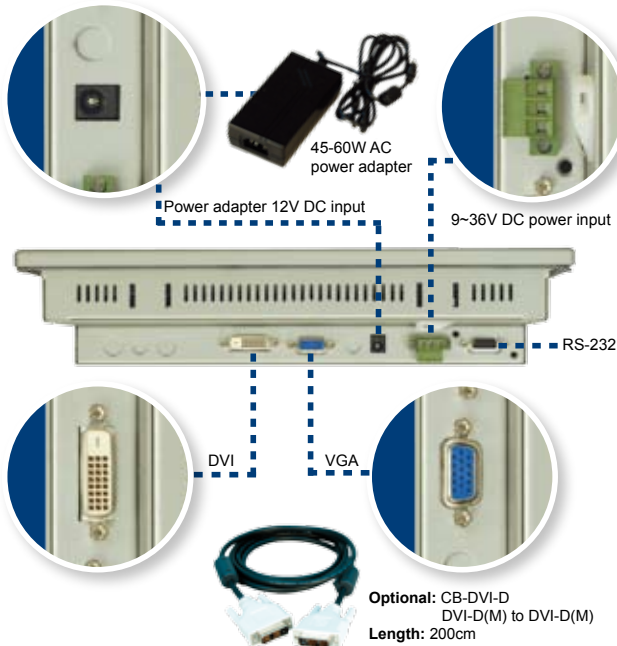


Ultra-Cooling Condition

Industrial Rugged LCD Monitor Advanced Features

■ Support analog VGA or DVI input

DM series support both analog VGA and DVI input. DVI (Digital Video Interface) is a replacement for the P&D, Plug & Display, standard, and a step up from the digital-only DFP format for older flat panels. DVI is becoming increasingly popular with video card manufacturers, and most cards purchased include both a VGA and a DVI output port.



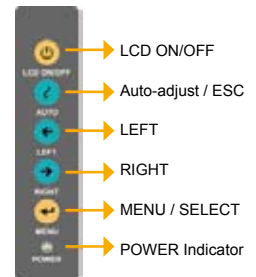
■ IP 65 Waterproof Aluminum front panel

IP65 standard is the highest dusty, water and oil proof level in ground usage, it absolutely prevents any micro-particle into the system from front panel, and let the system adapting harsh environment.



■ Full OSD Function in the front panel

IEI DM Series with full OSD function in the front panel, users can easily configure all monitor functions by the water proof OSD function keys. When using this OSD which located in the front panel, user can change the brightness of LCD panel and extend the panel life.



• OSD lock secures your settings
Pressing left and right buttons eight seconds, the OSD functions will be locked. Press eight seconds again, the OSD functions will be unlocked.

■ M models support 9~36V DC power input for mobile application

DM M models support 9~36V DC power input. Factories and mobile environment such as cars and engineer vehicles usually use not only 12V but also 24V DC as power source, 9~36V power input solution could adapt more appliance requirement.

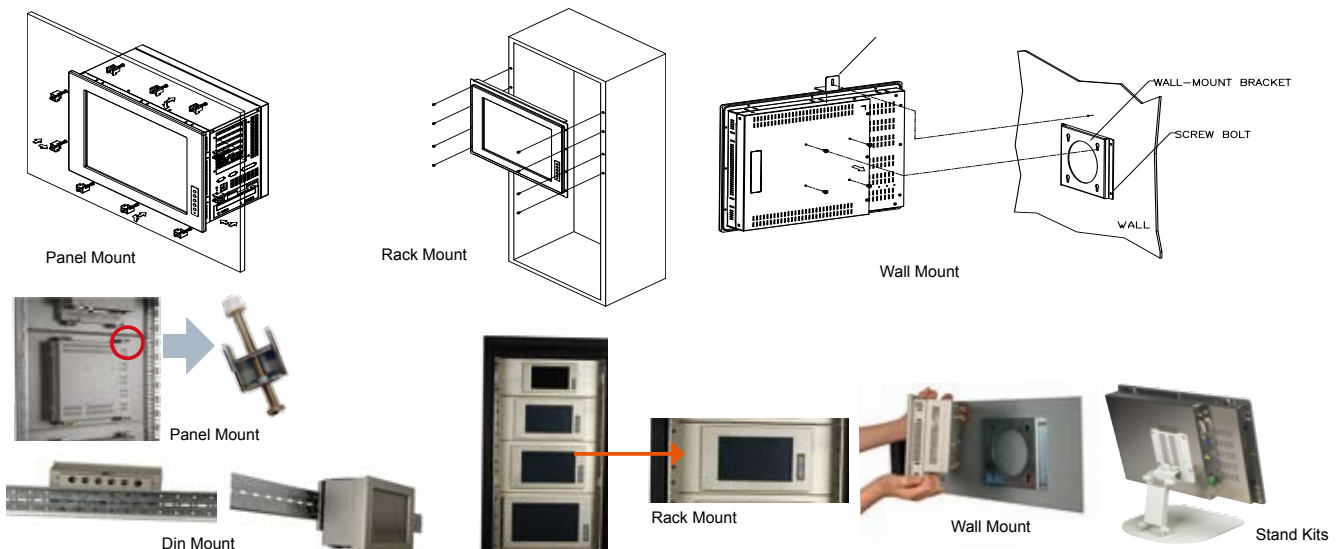


■ Hi-optical RS-232 interface touch screen

DM series provides RS-232 reserved port for touch screen. IEI DM provides T-R model with high strength Fiber Glass Touch Screen for appliances.



IEI Quick Mounting Technology

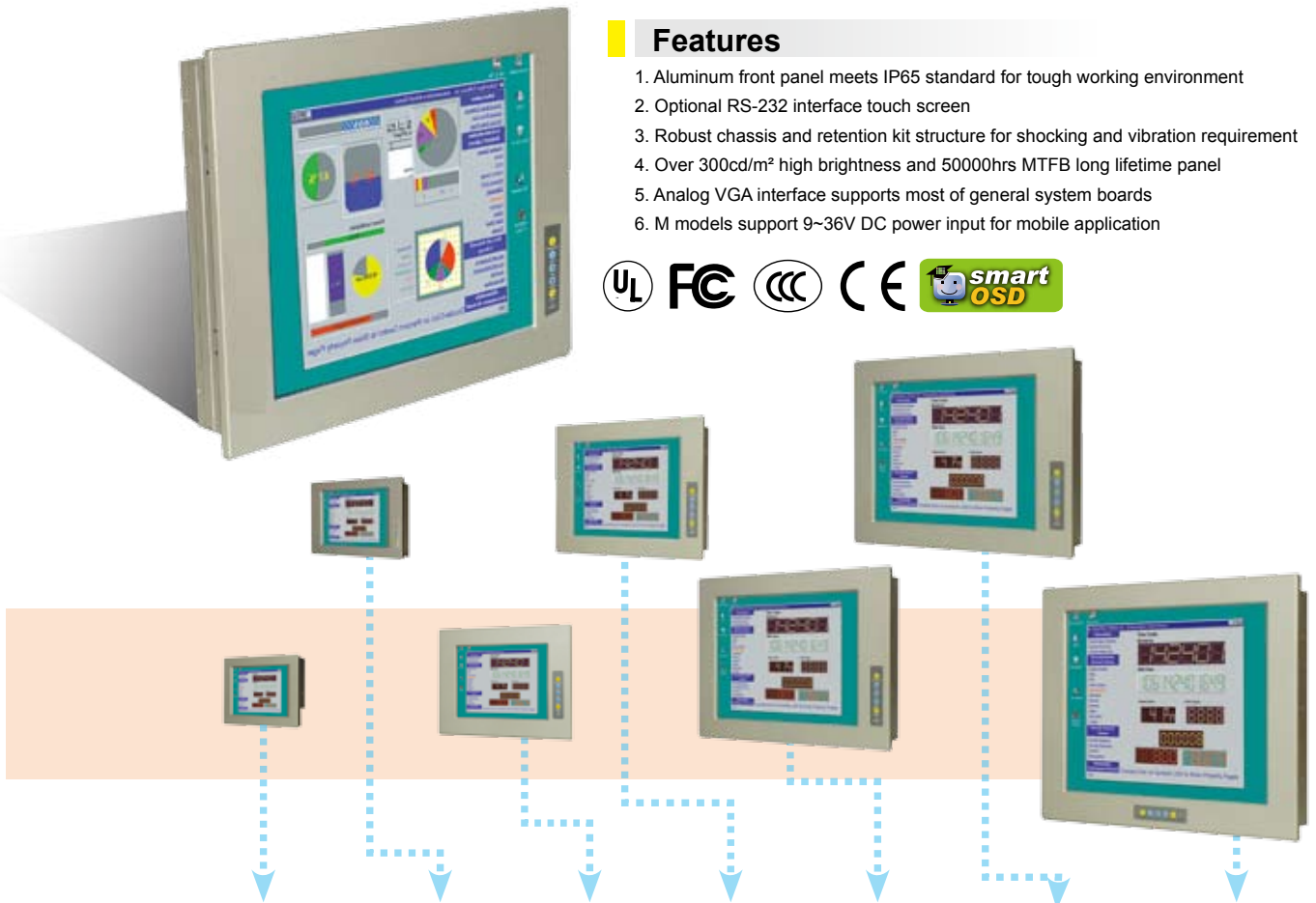


DM Series

6.5"~19" IP 65 industrial monitors, Robust, Shock Resistance and OSD Function

Features

1. Aluminum front panel meets IP65 standard for tough working environment
2. Optional RS-232 interface touch screen
3. Robust chassis and retention kit structure for shocking and vibration requirement
4. Over 300cd/m² high brightness and 50000hrs MTFB long lifetime panel
5. Analog VGA interface supports most of general system boards
6. M models support 9~36V DC power input for mobile application



Model	DM-65GS	DM-84GHS-R11	DM-104GS-R11	DM-121GS-R11		DM-150GS-R11	DM-170GS-R11	DM-190GS-R11
LCD Size	6.5"	8.4"	10.4"	12.1"		15"	17"	19"
Input Interface	Analog VGA	Analog VGA	Analog VGA	Analog VGA + DVI-D				
Max Resolution	640 x 480	800 x 600	800 x 600	800 x 600/ 1024 x 768		1024 x 768	1280 x 1024	1280 x 1024
Brightness (cd/m²)	400 / 500	400	230 / 400	400 / 450		350	300	300
Contrast Ratio	550 : 1	500 : 1	500 : 1	500 : 1 / 700 : 1		400:1	500:1	700:1
Display Color	262K	262K	262K	262K		262K	16.2M	16.2M
Pixel Pitch (mm)	0.207	0.213	0.264	0.3075 / 0.240		0.297	0.264	0.294
Front Frame	Aluminum							
Chassis	Heavy-duty steel	Heavy-duty steel						
View Angle (H/V)	140/120	120/100	120/100	140/110	160/160	120/100	140/130	140/130
Input Voltage	12VDC	12VDC or 9-36VDC						
OSD function	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Smart OSD	Yes							
Mounting	Wall/Arm/Din/ Panel/Rack	Wall/Panel/Rack/Arm (100x100)/Stand						
Color	Silver							
Dimension (W x H x D mm)	183 x 143 x 41	244 x 178 x 49	312 x 242 x 53	340 x 260 x 58		410 x 309 x 55.1	452.0 x 356.0 x 65.2	482 x 399 x 73
Operating Temperature	0~50°C							
Front Panel Protection	IP65							
Net Weight	1 kg	1.8 kgs	3 kgs	3.8 kgs		6 kgs	8.6 kgs	10 kgs
Power Adapter	25W, 63000-UP0251E12PL02-RS			45W, 63000-UP0451E12P81L-RS				

1

Application
Server
Platform

2

Single
Board
Computer

3

IBX Series
POS PC

4

AFOLUX
POS
Panel PC

5

Video
Capture
Card

6

KAMIO
RISC

7

IOVU
Open HMI

8

VITO
Universal
Controller

9

DINO
BLADE

10

LCD
Product
Series

11

Embedded
System

12

Industrial
Computer
Chassis

13

Power
Supply

14

Peripherals

Mounting Kits Information

	DM-65GS	DM-84GS	DM-104GS	DM-121GS	DM-150GS	DM-170GS	DM-190GS
Panel Mount Kits	PK-65M	PK-84M	PK-104M	PK-170M			PK-190M
Wall Mount Kits	WK-065MS-R10	WK-190MS-R10					
Rack Mount Kits	RK-065MS-R10	RK-084MS-R10	RK-104MS-R10	RK-121MS-R10	RK-150MS-R10	RK-170MS-R10	RK-190MS-R10
Din Mount Kits	DK-84MS			N/A			
LCD Monitor Arm	ARM-11				ARM-31		
LCD Monitor Stand	STAND-100-RS/STAND-150-RS				STAND-210-RS		

Packing List

Description	Remark
1 x AC Power Cable	
1 x VGA Cable	
1 x 45W AC Power Adapter	For DM-121GS / 150GS / 170GS / 190GS series
1 x 25W AC Power Adapter	For DM-65GS / 84GS / 104GS series
1 x User Manual	
1 x Power Cable for Terminal Block	For M model ONLY
1 x Touch Screen RS-232 Cable / Touch Pen / Driver CDROM	For T-R model
1 x Touch Screen USB Cable / Touch Pen / Driver CDROM	For USB/T-R model

Ordering Information

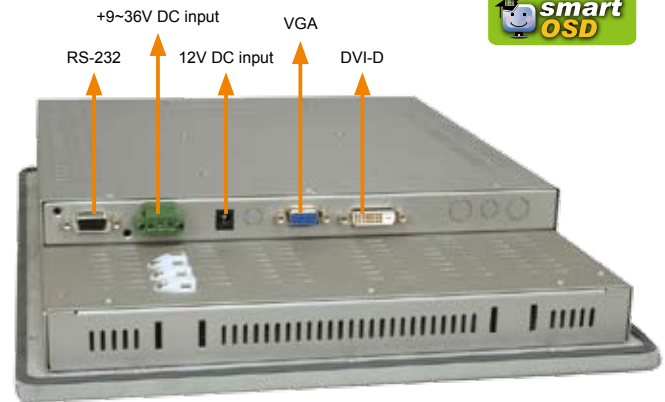
Note: The smartOSD function is only supported by revision 11 models and above

Part No.	Description
6.5"	DM-65GS/T-R 6.5" 400cd/m² VGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-65GHS/T-R 6.5" 500cd/m² High Luminance VGA LCD Monitor with VGA, Aluminum Front Panel, Silver Color, W/8.4" Touch Screen, RoHS
8.4"	DM-84GHS-R11/T-R 8.4" 450cd/m² High Luminance SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-84GHMS-R11/T-R 8.4" 450cd/m² High Luminance SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, 9~36V DC input, RoHS
10.4"	DM-104GS-R11/T-R 10.4" 230cd/m² SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-104GMS-R11/T-R 10.4" 230cd/m² SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, 9~36V DC input, RoHS
	DM-104GHS-R11/T-R 10.4" 400cd/m² High Luminance SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-104GHMS-R11/T-R 10.4" 400cd/m² High Luminance SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, 9~36V DC input, RoHS
12.1"	DM-121GS-R11/T-R 12.1" 400cd/m² SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-121GMS-R11/T-R 12.1" 400cd/m² SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, 9~36V DC input, RoHS
	DM-121GS-USB-R11/T-R 12.1" 400cd/m² SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W/12.1" USB Touch Screen, RoHS
	DM-121GMS-USB-R11/T-R 12.1" 400cd/m² SVGA LCD Monitor, Aluminum Front Panel, Silver Color, W/12.1" USB Touch Screen, 9~36V DC input, RoHS
	DM-121GXS-R11/T-R 12.1" 450cd/m² XGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-121GXMS-R11/T-R 12.1" 450cd/m² XGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, 9~36V DC input, RoHS
	DM-121GXS-USB-R11/T-R 12.1" 450cd/m² XGA LCD Monitor, Aluminum Front Panel, Silver Color, W/12.1" USB Touch Screen, RoHS
	DM-121GXMS-USB-R11/T-R 12.1" 450cd/m² XGA LCD Monitor, Aluminum Front Panel, Silver Color, W/12.1" USB Touch Screen, 9~36V DC input, RoHS
15"	DM-150GS-R11/T-R 15" 350cd/m² XGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-150GMS-R11/T-R 15" 350cd/m² XGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, 9~36V DC input, RoHS
	DM-150GS-USB-R11/T-R 15" 350cd/m² XGA LCD Monitor, Aluminum Front Panel, Silver Color, W/15" USB Touch Screen, RoHS
	DM-150GMS-USB-R11/T-R 15" 350cd/m² XGA LCD Monitor, Aluminum Front Panel, Silver Color, W/15" USB Touch Screen, 9~36V DC input, RoHS
17"	DM-170GS-R11/T-R 17" 300cd/m² SXGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-170GMS-R11/T-R 17" 300cd/m² SXGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, 9~36V DC input, RoHS
	DM-170GS-USB-R11/T-R 17" 300cd/m² SXGA LCD Monitor, Aluminum Front Panel, Silver Color, W/17" USB Touch Screen, RoHS
	DM-170GMS-USB-R11/T-R 17" 300cd/m² SXGA LCD Monitor, Aluminum Front Panel, Silver Color, W/17" USB Touch Screen, 9~36V DC input, RoHS
19"	DM-190GS-R11/T-R 19" 300cd/m² SXGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, RoHS
	DM-190GMS-R11/T-R 19" 300cd/m² SXGA LCD Monitor, Aluminum Front Panel, Silver Color, W / Touch Screen, 9~36V DC input, RoHS
	DM-190GS-USB-R11/T-R 19" 300cd/m² SXGA LCD Monitor, Aluminum Front Panel, Silver Color, W/19" USB Touch Screen, RoHS 7
	DM-190GMS-USB-R11/T-R 19" 300cd/m² SXGA LCD Monitor, Aluminum Front Panel, Silver Color, W/19" USB Touch Screen, 9~36V DC input, RoHS



TDM-121/150GMS

12.1"/15" Wide Range Temperature TFT LCD Monitor



Features

1. Wide Operating Temperature: -30°C~+70°C
2. 12.1" XGA High Resolution
3. Superior Image
4. M models support 9~36V DC power input for mobile application
5. DVI-D and Analog VGA input interface for comprehensive usage
6. IP 65 Compliant

Specifications

Model	TDM-121GMS-R11	TDM-150GMS-R11
LCD Size	12.1"	15"
Max Resolution (H x V)	1024 x 768 (XGA)	
Brightness (cd/m ²)	450	
Contrast Ratio	700:1	
Display Color	260k	16M
View Angle (H/V)	160/160	
Pixel Pitch (mm)	0.24	0.297
Operating Temperature	-30°C ~ +70°C	
Storage Temperature	-40°C ~ +80°C	
Lamp Life Time	50000hrs	
Input Interface	Analog VGA , DVI-D	
Front Frame	Aluminum	
Chassis	Heavy-duty Steel	
OSD Function	Yes	
Smart OSD	Yes	
Input Voltage	+9~+36V DC power input	
Mounting	Wall/Panel/Rack/Arm/Stand	
Front Panel Protection	IP65 Compliant	
Net Weight	3.3kgs	6kgs
Dimension (W x H x D mm)	340 x 260 x 58	410 x 309 x 55.1

IEI Strict Design Quality Verification

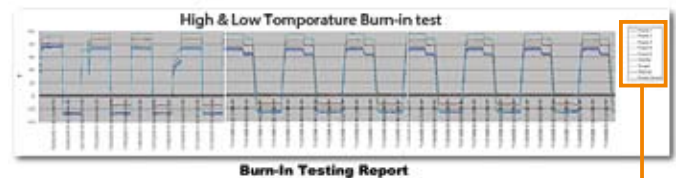
Typical monitors can only be used in environments that have temperatures in the 0°C~50°C range, Extended IEI environmental testing is performed to ensure the TDM series continues to function properly over its entire service life in a wide working temperature range of -30°C to +70°C. After being tested in the -30°C to +70°C temperature range, the TDM series was found to maintain its original luminance.



Continuous
1,600hrs
Burn-In Test



To assure the TDM can function properly in harsh working environment, the internal temperature of test chamber was set in the range -30°C to +70°C.



Nine thermocouples record all the temperature variations during the burn-in test and the TDM monitor functions during the test.

1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

10
LCD
Product
Series

11
Embedded
System

12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals

12.1" XGA Resolution: 1024X768

The TDM-121GMS supports higher resolutions and smaller pixel pitches (0.24mm versus 0.24mm) to deliver great computer displays.



TDM-121GMS



High Brightness: 450cd/m²

With a luminance of 450 cd/m², the TDM series offer an improvement over the 250 to 300cd/m² luminance typically available with other 12.1-inch TFT LCD modules. The high-brightness feature ensures the screen content is highly visible in all lighting conditions



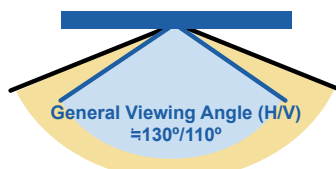
Normal Brightness



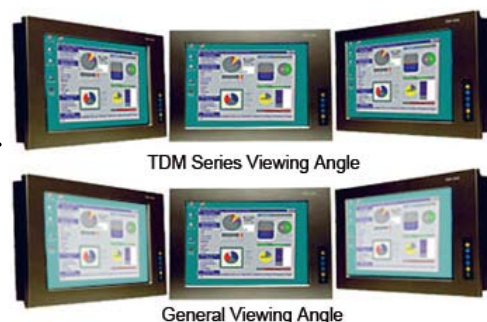
High Brightness

Wide Viewing Angles:160°

Typical small size monitors only support 130°/110° (H/V) viewing angle, but IEI TDM series can support maximum of viewing angle up to 160°/160° (H/V). Wide viewing angles let you not lose the screen brightness and possibly a change of displayed colors, when you view the monitor from the side.



TDM Series Viewing Angle (H/V)
≈160°/160°



TDM Series Viewing Angle

General Viewing Angle

Mounting Kits Information

	TDM-121GMS	TDM-150GMS
Panel Mount Kit	PK-170M	PK-170M
Wall Mount Kit	WK-190MS-R10	WK-190MS-R10
Stand	STAND-100-RS/STAND-150-RS	STAND-200-RS
Arm	ARM-11-RS	ARM-31-RS
Rack Mount Kit	RK-121MS-R10	RK-150MS-R10

Packing List

1 X TDM LCD monitor	1 X Screw set
1 X Power cable for terminal block	1 X Touch Panel RS-232 Cable/Touch Pen/Driver CD-ROM (For T-R model only)
1 X VGA cable	1 X 45W AC power adapter / AC power card (Operating Temperature : 0°C~ +40°C)
1 X User manual on CD-ROM	

Ordering Information

Note: The smartOSD function is supported by revision 11 models and above

TDM-121GMS-R11/T-R	12.1" 450cd/m ² XGA LCD Monitor, Aluminum Front Panel, W/12.1" Touch Screen, 9~36V input DC input, -30°C ~ +70°C Operating Temperature,RoHS
TDM-121GMS-USB-R11/T-R	12.1" 450cd/m ² XGA LCD Monitor, Aluminum Front Panel, W/12.1" USB Touch Screen, 9~36V input DC input, -30°C ~ +70°C Operating Temperature,RoHS
TDM-150GMS-R11/T-R	15" 450cd/m ² XGA LCD Monitor, Aluminum Front Panel, W/15" Touch Screen, 9~36V input DC input, -30°C ~ +70°C Operating Temperature,RoHS
TDM-150GMS-USB-R11/T-R	15" 450cd/m ² XGA LCD Monitor, Aluminum Front Panel, W/15" USB Touch Screen, 9~36V input DC input, -30°C ~ +70°C Operating Temperature,RoHS

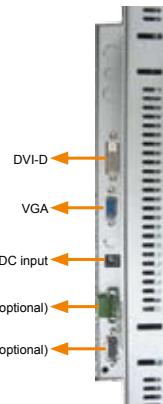
SRM-121/150GS

12.1"/15" Sunlight Readable TFT LCD Monitor

Fanless



With Auto-Dimming Function



Open Frame Available



SRM-KIT



Features

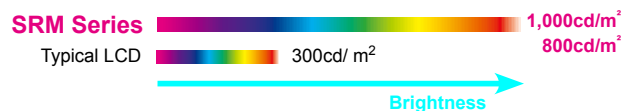
1. 800 and 1000 nits super high brightness
2. 12.1" Anti-reflection Technology
3. 15' Anti-glare Technology
4. Nature Color Matrix (NCM) Technology
5. Innovative auto-dimming function
6. Wide Operating Temperature: -10°C ~ +60°C
7. IP 65 Compliant

Specifications

Model	SRM-121GS-R11	SRM-150GS-R11
	SRM-KIT121G-R11	SRM-KIT150G-R11
LCD Size	12.1"	15"
Max Resolution (H x V)	800 x 600 (SVGA)	1024 x 768 (XGA)
Brightness (cd/m ²)	1000	800
Contrast Ratio	700:1	600:1
Display Color	262k	262k
View Angle (H/V)	130°/120°	150°/110°
Pixel Pitch (mm)	0.3075	0.297
Operating Temperature	-10°C ~ +60°C	
Storage Temperature	-20°C ~ +70°C	
Lamp Life Time	50000hrs	
Input Interface	Analog VGA , DVI-D	
Front Frame	Aluminum	
Chassis	Heavy-duty Steel	
OSD Function	Yes	
Smart OSD	Yes	
Input Voltage	+12VDC/+ 9 ~ +36VDC(optional)	
	+12VDC	
Mounting	Wall/Panel/Rack/Arm/Stand	
	Rack	
Front Panel Protection	IP65 Compliant	
	N/A	
Power Consumption	25W	30W
Net Weight	3.3kgs	6kgs
Dimension (W x H x D mm)	340 x 260 x 58	410 x 309 x 65.2
	316 x 224.4 x 47.9	364.1 x 262.5 x 46

Super High Brightness

Typical high brightness monitors usually have more than six CCFLs, but the IEI SRM monitors have super high brightness with only four CCFLs. IEI SRM panels are still readable in bright sunlight with fewer backlights and thereby not increasing power consumption or producing extra heat.



Wide Temperature Range

Extended IEI environment testing is performed to ensure the SRM series continue to function properly over its entire services life in a wide working temperature range of -10°C to +60°C C in order to accommodate a diverse industrial applications such as outdoor kiosks in winter and summer.

Conventional Operation: 0°C~50°C



Superior fanless design and low power consumption

SRM models are fanless and therefore use less power and are more silent than conventional high brightness monitors that generally use several high-speed cooling fans. SRM models use between 25W and 30W of power compared to the 40W to 50W used by conventional high-brightness monitors

1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

10
LCD
Product
Series

11
Embedded
System

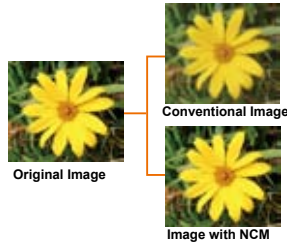
12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals

Natural Color Matrix (NCM) Technology

POS terminals and kiosks often display advertisements and colorful images, the colors of which must remain vivid and faithful to the original. The IEI SRM monitor with NCM optimization technology prevents this difference by separating color data and luminance components while controlling individual display colors for optimized performance.



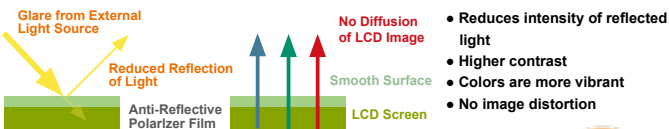
How does NCM Technology work?



Low Reflection through Anti-Reflection Technology

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. The SRM-121GS has special AR (anti-reflection) surface treatment to prevent reflection, ensuring excellent visibility in daylight conditions.

How does Anti-Reflection Surface work?



- Reduces intensity of reflected light
- Higher contrast
- Colors are more vibrant
- No image distortion

Anti-glare Technology

The SRM-150GS is equipped with anti-glare glass. Anti-glare glass is produced by laminating a matte surface layer to the LCD screen. When light hits this rough surface, it bounces off at different angles which reduces the intensity of light reflecting off of the surface and hitting your eyes.

Mounting Kits Information

	SRM-121GS	SRM-150GS
Panel Mount Kit	PK-170M	
Wall Mount Kit	WK-190MS-R10	
Rack Mount Kit	RK-121MS-R10	RK-150MS-R10
LCD Monitor Arm	ARM-11	ARM-31
LCD Monitor Stand	STAND-100-RS/ STAND-150-RS	STAND-210-RS

Packing List

1 X AC Power Cable	1 X User Manual-CD ROM
1 X VGA Cable	1 X Power Cable for Terminal Block (For M model only)
1 X DVI cable	1 X Touch Screen RS-232 Cable / Touch Pen / Driver CD ROM (For T-R model only)
1 X 45W AC Power Adapter	1 X Touch Screen USB Cable / Touch Pen / Driver CD ROM (For USB / T-R model only)
1 X Screw set	

Innovative Auto-Dimming Function

IEI SRM series with auto-dimming function can adjust brightness according to ambient light, so that SRM series can job properly under different lamp house average, and outdoor environment. This function not only saves unnecessary brightness that strains eyes strained and makes you tire but also saves energy saving. The SRM series auto-dimming default settings can be easily customized with the OSD menu to suit any environment.

Adjustable Backlight



Adjustable Ambient Brightness



Ordering Information

Note: The smartOSD function is supported by revision 11 models and above

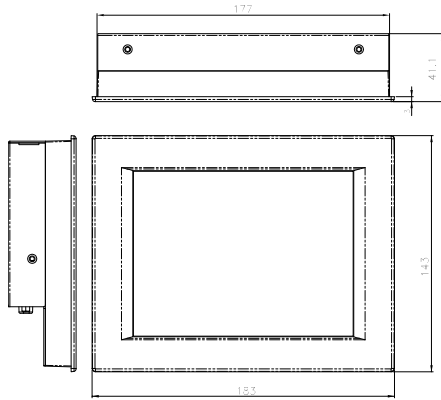
SRM-121GS

SRM-121GS-R11/T-R	12.1" 1000cd/m ² Sun Readable SVGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/12.1" Touch Screen, RoHS
SRM-121GS-USB-R11/T-R	12.1" 1000cd/m ² Sun Readable SVGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/12.1" USB Touch Screen, RoHS
SRM-121GMS-R11/T-R	12.1" 1000cd/m ² Sun Readable SVGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input, w/12.1" Touch Screen, RoHS
SRM-121GMS-USB-R11/T-R	12.1" 1000cd/m ² Sun Readable SVGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input, w/12.1" USB Touch Screen, RoHS
SRM-KIT121G-R11	12.1" 1000 cd/m ² Sun Rdadable SVGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input,RoHS

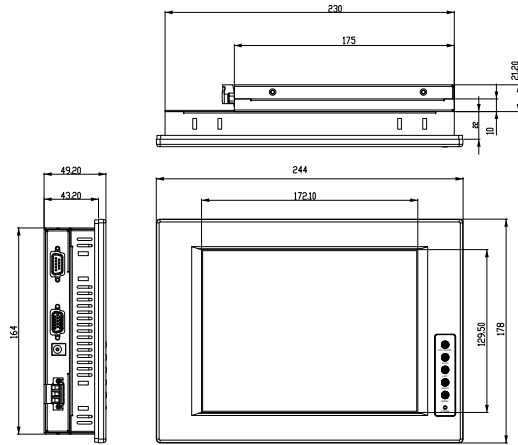
SRM-150GS

SRM-150GS-R11/T-R	15" 800cd/m ² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/12.1" Touch Screen, RoHS
SRM-150GS-USB-R11/T-R	15" 800cd/m ² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/12.1" USB Touch Screen, RoHS
SRM-150GMS-R11/T-R	15" 800cd/m ² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input, w/12.1" Touch Screen, RoHS
SRM-150GMS-USB-R11/T-R	15" 800cd/m ² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input, w/12.1" USB Touch Screen, RoHS
SRM-KIT150G-R11	15" 800 cd/m ² Sun Rdadable XGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input,RoHS

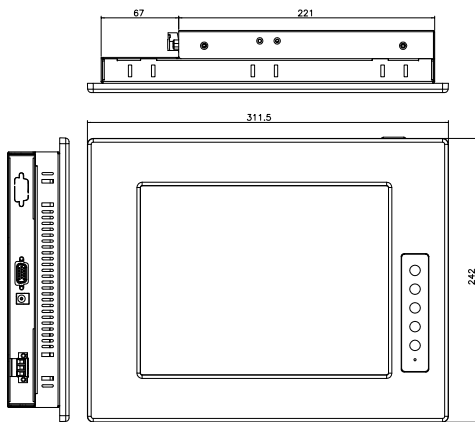
DM / TDM / SRM Series Dimensions



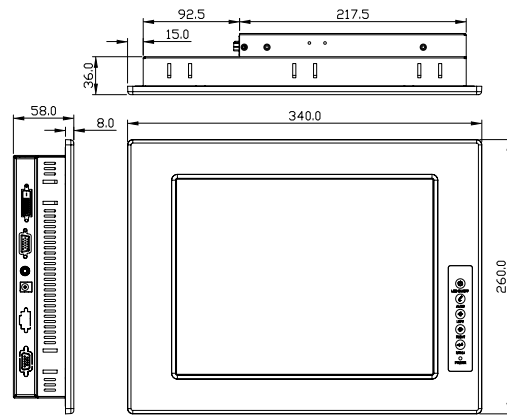
DM-65GS



DM-84GHS



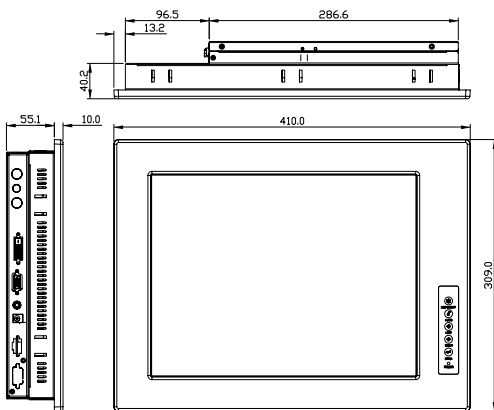
DM-104GS



DM-121GS

TDM-121GMS

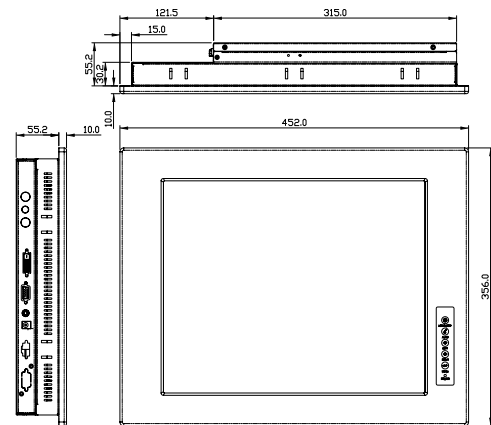
SRM-121GS



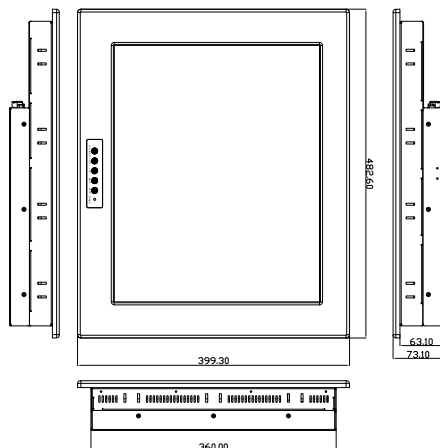
DM-150GS

TDM-150GMS

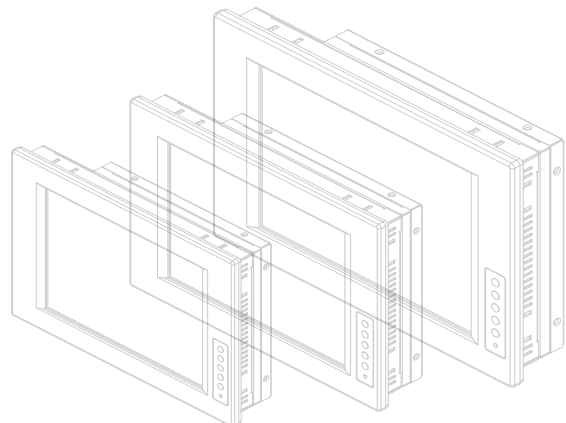
SRM-150GS



DM-170GS



DM-190GS



1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

10
LCD
Product
Series

11
Embedded
System

12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals

ISDM Series

8.4" ~ 19" Stainless Steel TFT LCD Monitor



ISDM-190G

Features

1. Stainless Steel chassis & bezel features corrosion resistance and hygienic properties
2. Full function OSD keys in back panel to help customers easy to control
3. IP 65 compliant front panel

Best solution for food, chemical and pharmaceutical industries

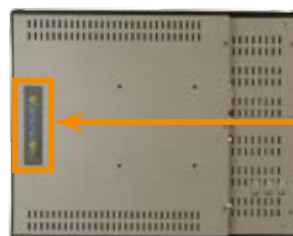
Stainless steel can resist corrosion in most acids, alkaline solutions, and chlorine bearing environments, properties which are utilized in process plants. In addition, the easy cleaning ability makes it the first choice for strict hygiene conditions, such as hospitals, kitchens, abattoirs and other food processing plants.

ISDM Stainless Steel Monitor

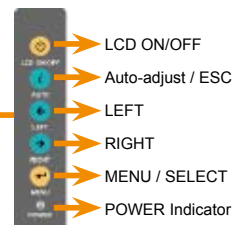


Stainless Steel Front Panel

Stainless Steel



Full function OSD keys in back panel



Specifications

Note: The smartOSD function is supported by revision 11 models and above

Model	ISDM-084GH-R11	ISDM-104G-R11	ISDM-121G-R11		ISDM-150G-R11	ISDM-170G-R11	ISDM-190G-R11
LCD Size	8.4" TFT	10.4" TFT	12.1" TFT		15" TFT	17" TFT	19" TFT
Input Interface	Analog VGA		Analog VGA + DVI-D				
Max Resolution	800 x 600	800 x 600	800 x 600 / 1024 x 768		1024 x 768	1280 x 1024	1280 x 1024
Brightness (cd/m²)	400	230 / 400	400 / 450		350	300	300
Contrast	500 : 1	500 : 1	500 : 1 / 700 : 1		400 : 1	500 : 1	700 : 1
LCD Color	262K	262K	262K		262K	16.2M	16.2M
Pixel Pitch (mm)	0.213	0.264	0.3075 / 0.240		0.297	0.264	0.294
Front Frame	Stainless Steel						
Chassis	Heavy-Duty Steel						
View Angle (H/V)	120/100	120/100	140/110	160/160	120/100	140/130	140/130
Power Adapter	25W 63000-UP0251E12PL02-RS		45W 63000-UP0451E12P81L-RS				
OSD function	YES						
Smart OSD	YES						
Mounting	Stand / Panel / Wall / Arm (100x100)						
Back Cover Color	Silver						
Dimension (WxHxD) (mm)	244 x 178 x 49	311.5 x 242 x 52.1	340 x 260 x 58		409.25x 308.25 x 63.2	452 x 356 x 63.2	482.6 x 399.3 x 71.6
Operation Temperature (°C)	0~50°C						
IP Level	IP 65						
Net Weight	2.3 kg	3.4 kg	4.4 kg		6.6 kg	9.2 kg	10.75 kg

Mounting Kits Information

	ISDM-84G	ISDM-104G	ISDM-121G	ISDM-150G	ISDM-170G	ISDM-190G
Panel Mount Kits	PK-84M	PK-104M	PK-170M			PK-190M
Wall Mount Kits	WK-190MS-R10					
Rack Mount Kits	N/A					
Din Mount Kits	N/A					
LCD Monitor Arm	ARM-11			ARM-31		
LCD Monitor Stand	STAND-100-RS/STAND-150-RS			STAND-210-RS		

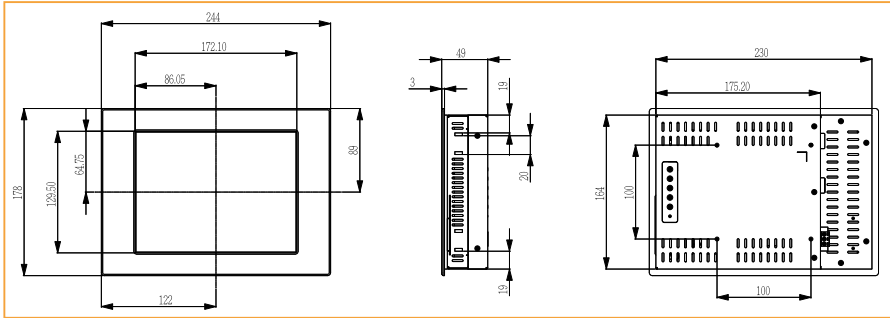
Ordering Information

Note: The smartOSD function is supported by revision 11 models and above

Part No.	Description
8.4" ISDM-084GHM-R11/T-R	8.4" 450cd/m ² High Luminance SVGA LCD Monitor with VGA and 9~36V DC Input, Stainless Steel Front Panel, W/8.4" Touch Screen, RoHS
ISDM-084GH-R11/T-R	8.4" 450cd/m ² High Luminance SVGA LCD Monitor with VGA, Stainless Steel Front Panel, W/8.4" Touch Screen, RoHS
10.4" ISDM-104G-R11/T-R	10.4" 230cd/m ² SVGA LCD Monitor with VGA, Stainless Steel Front Panel, W/10.4" Touch Screen, RoHS
ISDM-104GM-R11/T-R	10.4" 230cd/m ² SVGA LCD Monitor with VGA and 9~36V DC Input, Stainless Steel Front Panel, W/10.4" Touch Screen, RoHS
ISDM-104GH-R11/T-R	10.4" 400cd/m ² High Luminance SVGA LCD Monitor with VGA, Stainless Steel Front Panel, W/10.4" Touch Screen, RoHS
ISDM-104GHM-R11/T-R	10.4" 400cd/m ² High Luminance SVGA LCD Monitor with VGA and 9~36V DC Input, Stainless Steel Front Panel, W/10.4" Touch Screen, RoHS
12.1" ISDM-121G-R11/T-R	12.1" 400cd/m ² SVGA LCD Monitor, Stainless Steel Front Panel, W/12.1" Touch Screen, RoHS
ISDM-121GM-R11/T-R	12.1" 400cd/m ² SVGA LCD Monitor, Stainless Steel Front Panel, W/12.1" Touch Screen, 9~36V DC input, RoHS
ISDM-121G-USB-R11/T-R	12.1" 400cd/m ² SVGA LCD Monitor, Stainless Steel Front Panel, W/12.1" USB Touch Screen, RoHS
ISDM-121GM-USB-R11/T-R	12.1" 400cd/m ² SVGA LCD Monitor, Stainless Steel Front Panel, W/12.1" USB Touch Screen, 9~36V DC input, RoHS
ISDM-121GX-R11/T-R	12.1" 450cd/m ² XGA LCD Monitor, Stainless Steel Front Panel, W/12.1" Touch Screen, RoHS
ISDM-121GXM-R11/T-R	12.1" 450cd/m ² XGA LCD Monitor, Stainless Steel Front Panel, W/12.1" Touch Screen, 9~36V DC input, RoHS
ISDM-121GX-USB-R11/T-R	12.1" 450cd/m ² XGA LCD Monitor, Stainless Steel Front Panel, W/12.1" USB Touch Screen, RoHS
ISDM-121GXM-USB-R11/T-R	12.1" 450cd/m ² XGA LCD Monitor, Stainless Steel Front Panel, W/12.1" USB Touch Screen, 9~36V DC input, RoHS
15" ISDM-150G-R11/T-R	15" 350cd/m ² XGA LCD Monitor, Stainless Steel Front Panel, W/15" Touch Screen, RoHS
ISDM-150GM-R11/T-R	15" 350cd/m ² XGA LCD Monitor, Stainless Steel Front Panel, W/15" Touch Screen, 9~36V DC input, RoHS
ISDM-150G-USB-R11/T-R	15" 350cd/m ² XGA LCD Monitor, Stainless Steel Front Panel, W/15" USB Touch Screen, RoHS
ISDM-150GM-USB-R11/T-R	15" 350cd/m ² XGA LCD Monitor, Stainless Front Panel, W/15" USB Touch Screen, 9~36V DC input, RoHS
17" ISDM-170G-R11/T-R	17" 300cd/m ² SXGA LCD Monitor, Stainless Front Panel, W/17" Touch Screen, RoHS
ISDM-170GM-R11/T-R	17" 300cd/m ² SXGA LCD Monitor, Stainless Front Panel, W/17" Touch Screen, 9~36V DC input, RoHS
ISDM-170G-USB-R11/T-R	17" 300cd/m ² SXGA LCD Monitor, Stainless Front Panel, W/17" USB Touch Screen, RoHS
ISDM-170GM-USB-R11/T-R	17" 300cd/m ² SXGA LCD Monitor, Stainless Front Panel, W/17" USB Touch Screen, 9~36V DC input, RoHS
19" ISDM-190G-R11/T-R	19" 300cd/m ² SXGA LCD Monitor with VGA and DVI-D input, Stainless Steel Front Panel, Silver Color, W/19" Touch Screen, RoHS
ISDM-190GM-R11/T-R	19" 300cd/m ² SXGA LCD Monitor with VGA and DVI-D input and 9~36V DC Input, Stainless Steel Front Panel, W/19" Touch Screen, RoHS
ISDM-190G-USB-R11/T-R	19" 300cd/m ² SXGA LCD Monitor with VGA and DVI-D input, Stainless Steel Front Panel, W/19" USB Touch Screen, RoHS
ISDM-190GM-USB-R11/T-R	19" 300cd/m ² SXGA LCD Monitor with VGA and DVI-D input and 9~36V DC Input, Stainless Steel Front Panel, W/19" USB Touch Screen, RoHS

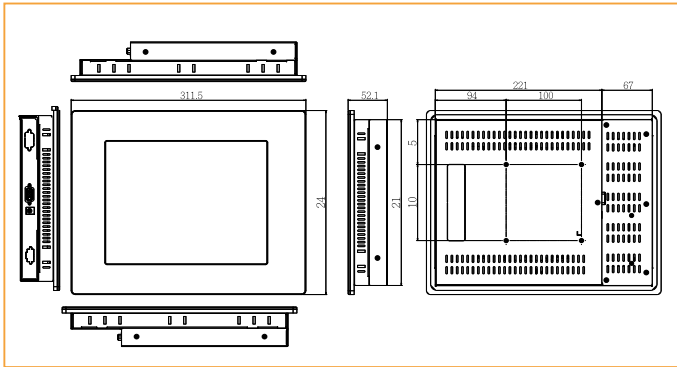
1
Application
Server
Platform2
Single
Board
Computer3
IBX Series
POS PC4
AFOLUX
POS
Panel PC5
Video
Capture
Card6
KAMIO
RISC7
IOVU
Open HMI8
VITO
Universal
Controller9
DINO
BLADE10
LCD
Product
Series11
Embedded
System12
Industrial
Computer
Chassis13
Power
Supply14
Peripherals

Dimensions

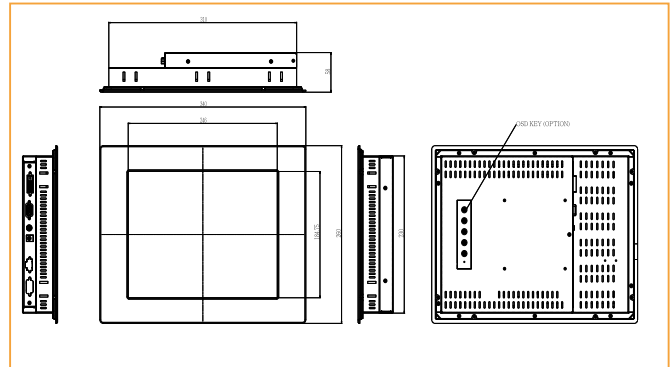


ISDM-84GH

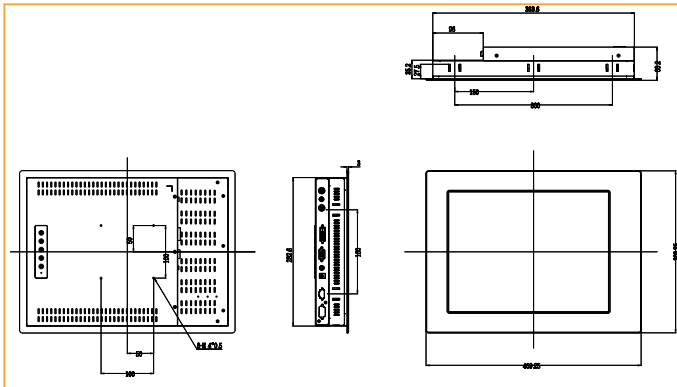
ISDM-104G



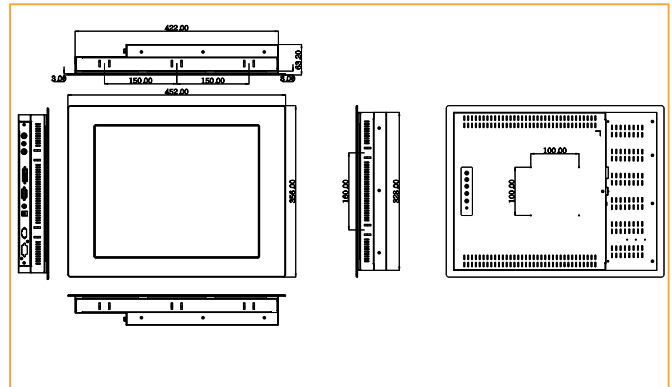
ISDM-121G



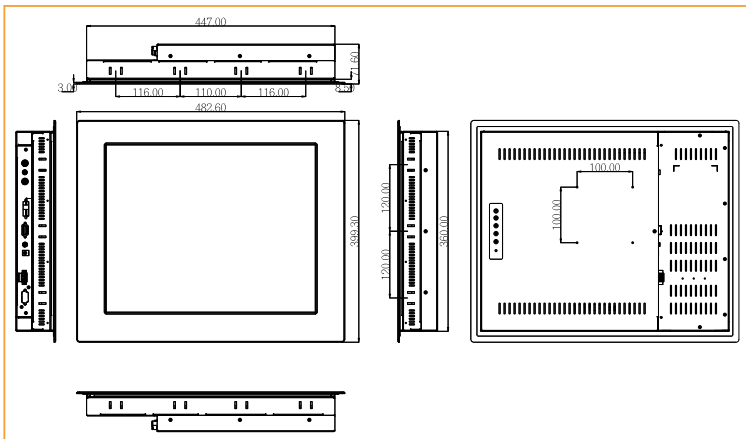
ISDM-150G



ISDM-170G



ISDM-190GS



Packing List

Description
1 x AC Power Cable
1 x VGA Cable
1 x 45W AC Power Adapter (For ISDM-121G / 150G / 170G / 190G series)
1 x 25W AC Power Adapter (For ISDM-084GH / 104G series)
1 x User Manual
1 x Power Cable for Terminal Block (For M model ONLY)
1 x Touch Screen RS-232 Cable / Touch Pen / Driver CDROM (For T-R model ONLY)
1 x Touch Screen USB Cable / Touch Pen / Driver CDROM (For USB/T-R model)

LCD Kits Series

6.5" ~ 19" LCD Kits with OSD Function



Features

1. Robust chassis and retention kit structure for shocking and vibration requirement
2. Over 300cd/m² high brightness and 50000hrs MTBF long lifetime panel
3. Analog VGA interface supports most of general system boards
4. 800 and 1000 nits super high brightness available



1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

10
LCD
Product
Series

11
Embedded
System

12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals

Specifications

Note: The smartOSD function is supported by revision 11 models and above

	LCD-KIT65G-R11	LCD-KIT07G-R11	LCD-KIT084GH-R11	LCD-KIT104G-R11	LCD-KIT121G-R11	LCD-KIT150G-R11	LCD-KIT170G-R11	LCD-KIT190G-R11	SRM-KIT121G-R11	SRM-KIT150G-R11
LCD TYPE	6.5" TFT	7" TFT	8.4" TFT	10.4" TFT	12.1" TFT	15" TFT	17" TFT	19" TFT	12.1"TFT	15"TFT
Input Interface	VGA	VGA	VGA	VGA	VGA	VGA+DVI-D	VGA+DVI-D	VGA+DVI-D	VGA+DVI-D	VGA+DVI-D
Max Resolution	640 x 480 (VGA)	800 x 480 (WVGA)	800 x 600 (SVGA)	800 x 600 (SVGA)	800 x 600 (SVGA) 1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)	800 x 600 (SVGA)	1024 x 768 (XGA)
Backlight MTBF	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs
Contrast	450:1	400:1	400:1	500:1	500:1 / 700:1	400:1	500:1	700:1	700:1	600:1
LCD Color	262K	262K	262K	262K	262K	262K	16.2M	16.2M	262k	262k
Brightness (cd/m²)	400	350	400 (High Luminance)	230	400	350	300	300	1000	800
	500 (High Luminance)			400 (High Luminance)	450 (High Luminance)					
AD BOARD	AV-9350	AV-5350	AV-5350	AV-5350	AV-5300	AV-5300	AV-5300	AV-5300	AV-5300	AV-5300
Adapter (12VDC output to LCD kit)	25W 63000-UP0251E12PL02-RS				45W 63000-UP0451E12P81L-RS					
Chassis	Heavy-duty steel									
View Angle (H/V)	140°/120°	140°/110°	120°/100°	100°/120°	140°/100°	120°/100°	140°/130°	140°/130°	130°/120°	150°/110°
					160°/160°					
OSD function	Yes									
Smart OSD	Yes									
Mounting	Panel									
Dimension (W)X(H)X(D) (mm)	203.4 x 121 x 34	195 x 115 x 35	234 x 147 x 35.3	242.2 x 209 x 33.6	294 x 240.7 x 42	364.1 x 262.5 x 41.9	390.4 x 300 x 46.9	427.9 x 327.4 x 48.4	316 x 224.4 x 47.9	364.1 x 262.5 x 46
Operation Temperature (°C)	0°C ~ 50°C								-10°C ~ +60°C	

Ordering Information

Note: The smartOSD function is supported by revision 11 models and above

Part No.	Description
6.5" LCD-KIT65G-R11	6.5" 400cd/m ² VGA TFT LCD kit ,VGA input, RoHS
6.5" LCD-KIT65GH-R11	6.5" 500cd/m ² High Luminance VGA TFT LCD kit, VGA input, RoHS
7" LCD-KIT07G-R11	7" 350cd/m ² WVGA TFT LCD kit ,VGA input, RoHS
8.4" LCD-KIT084GH-R11	8.4" 400cd/m ² High Luminance SVGA TFT LCD kit, VGA input, RoHS
8.4" LCD-KIT084GHM-R11	8.4" 400cd/m ² High Luminance SVGA TFT LCD kit, VGA input, 9~36 V DC input, RoHS
10.4" LCD-KIT104G-R11	10.4" 230cd/m ² SVGA TFT LCD kit, VGA input, RoHS
10.4" LCD-KIT104GM-R11	10.4" 230cd/m ² SVGA TFT LCD kit, VGA input, 9~36 V DC input, RoHS
10.4" LCD-KIT104GH-R11	10.4" 400cd/m ² High Luminance SVGA TFT LCD kit, VGA input, RoHS
10.4" LCD-KIT104GHM-R11	10.4" 400cd/m ² High Luminance SVGA TFT LCD kit, VGA input, 9~36 V DC input, RoHS
12.1" LCD-KIT121G-R11	12.1" 400cd/m ² SVGA TFT LCD kit, VGA and DVI-D input, RoHS
12.1" LCD-KIT121GM-R11	12.1" 400cd/m ² SVGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS
12.1" LCD-KIT121GX-R11	12.1" 450cd/m ² XGA TFT LCD kit, VGA and DVI-D input, RoHS
12.1" LCD-KIT121GXM-R11	12.1" 450cd/m ² XGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS
15" LCD-KIT150G-R11	15" 350cd/m ² XGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS
15" LCD-KIT150GM-R11	15" 350cd/m ² XGA TFT LCD kit, VGA and DVI-D input, RoHS
17" LCD-KIT170G-R11	17" 300cd/m ² SXGA TFT LCD kit, VGA and DVI-D input, RoHS
17" LCD-KIT170GM-R11	17" 300cd/m ² SXGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS
19" LCD-KIT190G-R11	19" 300cd/m ² SXGA TFT LCD kit, VGA and DVI-D input, RoHS
19" LCD-KIT190GM-R11	19" 300cd/m ² SXGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS
SRM-KIT121G-R11	12.1" 1000 cd/m ² Sun Rdadable SVGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input,RoHS
SRM-KIT150G-R11	15" 800 cd/m ² Sun Rdadable XGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input,RoHS

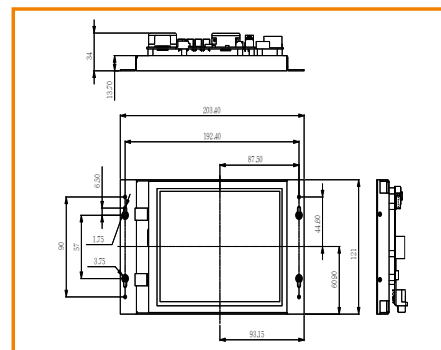
1000 nits Super High Brightness!

800 nits Super High Brightness!

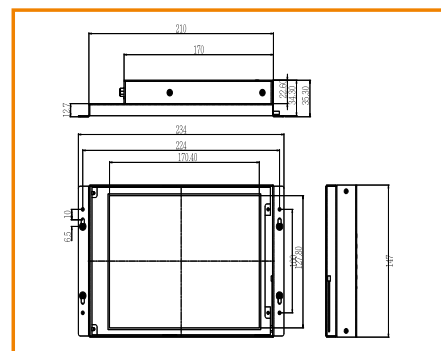
Remark: All the 9~36V DC input models are built to order.

Dimensions

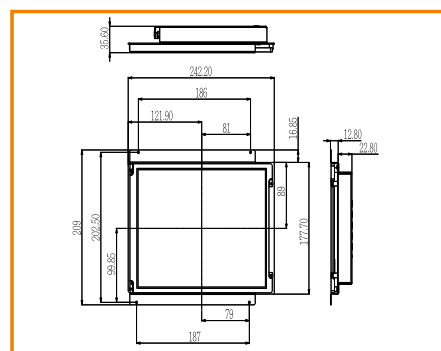
LCD-KIT65G



LCD-KIT084G

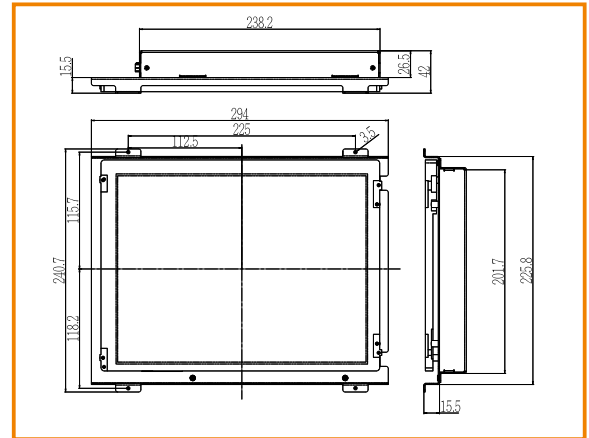


LCD-KIT104G



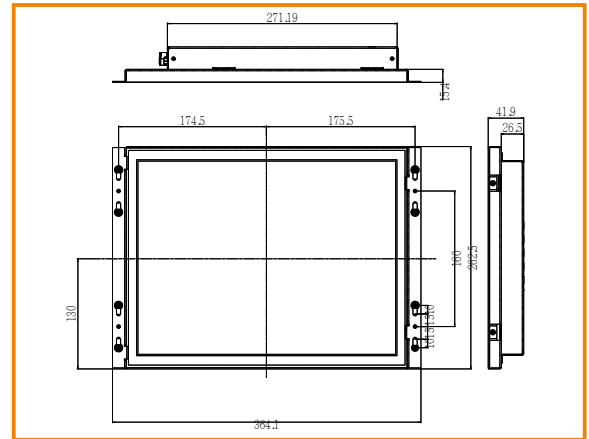
LCD-KIT121G

SRM-KIT121G

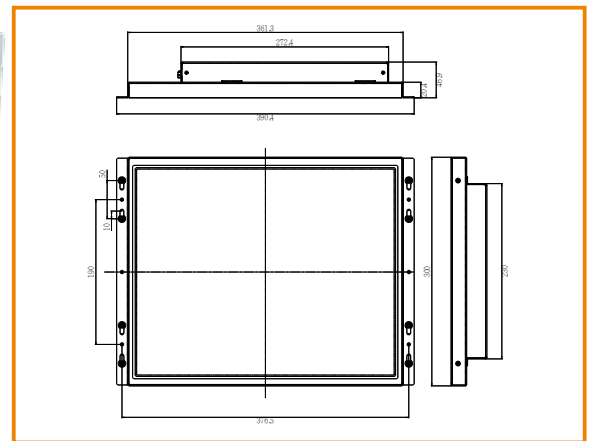


LCD-KIT150G

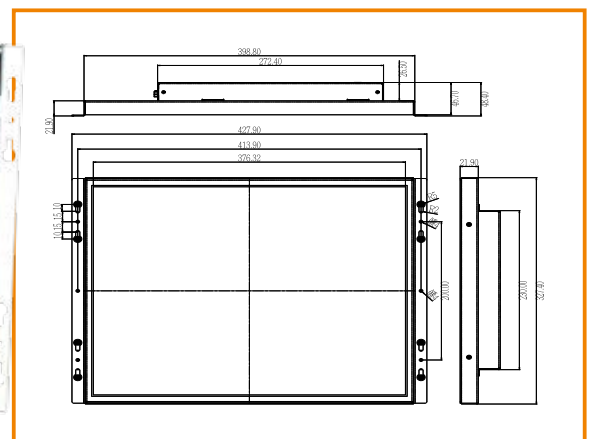
SRM-KIT150G



LCD-KIT170G



LCD-KIT190G



1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

10
LCD
Product
Series

11
Embedded
System

12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals

Touch Screen Series

6.5" ~ 19" Resistive LCD Touch
Screen Kits

1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

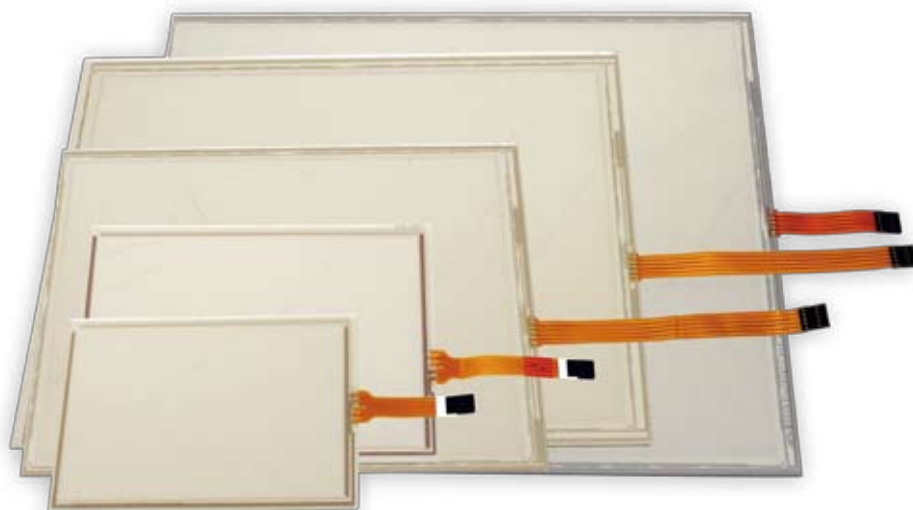
10
LCD
Product
Series

11
Embedded
System

12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals



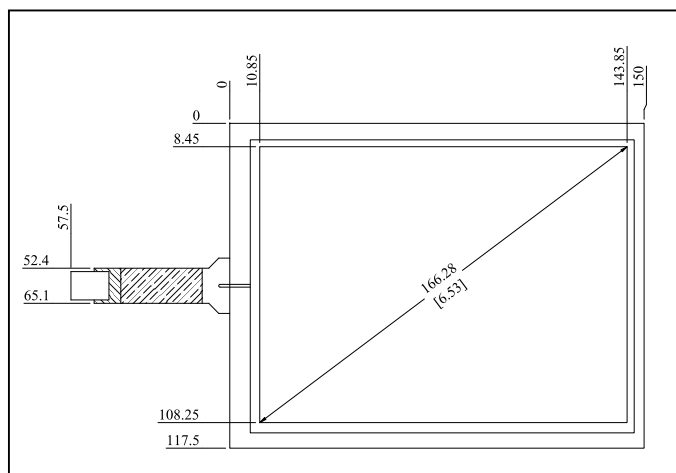
Features

1. Optical clarity: Total transmission 78 % or more
2. Input through a special stylus or finger 100g or less.
3. High reliability and durability in the field

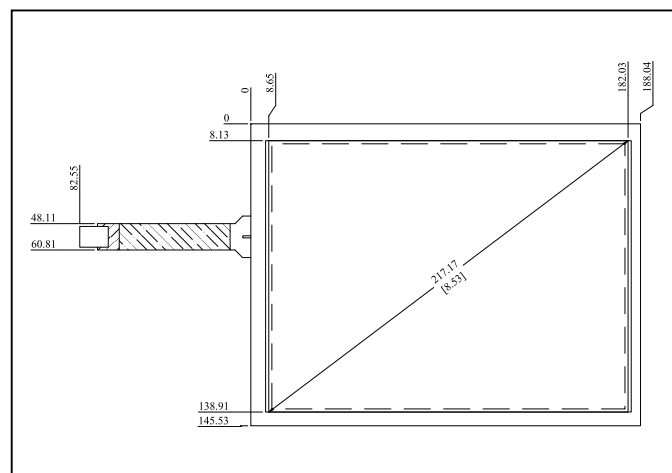
Ordering Information

Touch Screen Kit		IEI Products	Sensor
RS-232	USB		
T-R065G	T-R065G-USB	DM-65GS, LCD-KIT65G	4-Wire
T-R084G	T-R084G-USB	DM-84GS, ISDM-84G, LCD-KIT84G	4-Wire
T-R104G	T-R104G-USB	DM-104GS, ISDM-104G, LCD-KIT104G	5-Wire
T-R121G	T-R121G-USB	DM-121GS, ISDM-121G, LCD-KIT121G	5-Wire
T-R150G	T-R150G-USB	DM-150GS, ISDM-150G, LCD-KIT150G	5-Wire
T-R170G	T-R170G-USB	DM-170GS, ISDM-170G, LCD-KIT170G	5-Wire
T-R190G	T-R190G-USB	DM-190GS, ISDM-190G, LCD-KIT190G	5-Wire

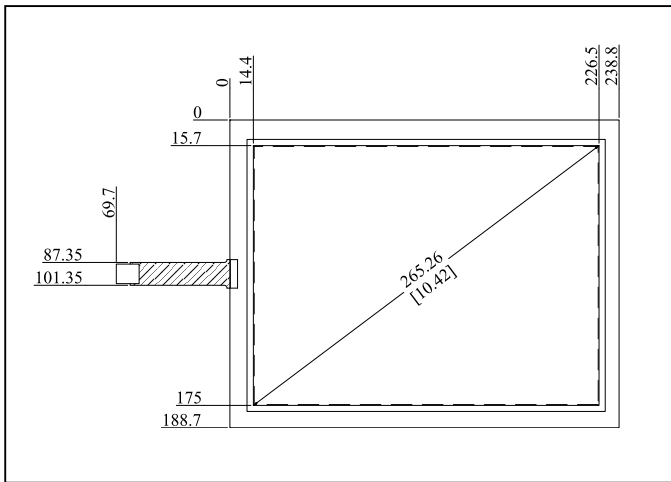
T-R065G



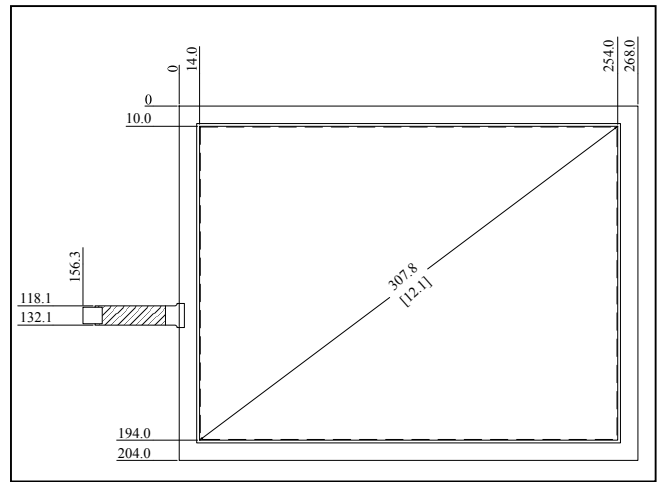
T-R084G



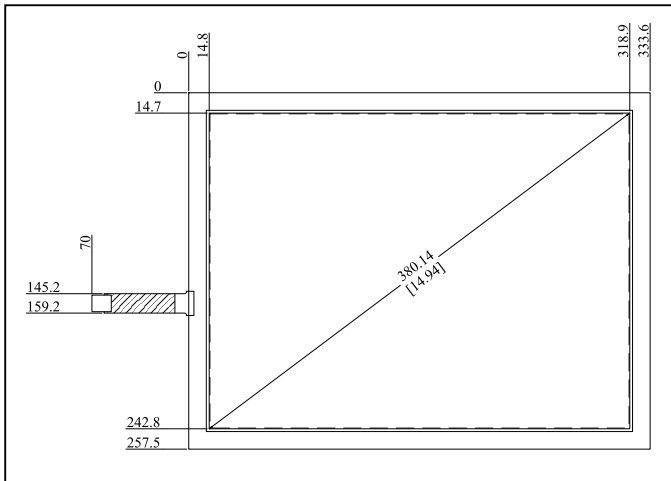
T-R104G



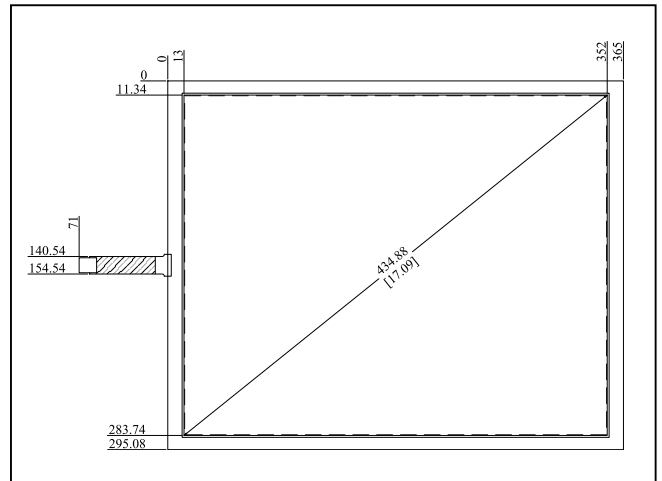
T-R121G



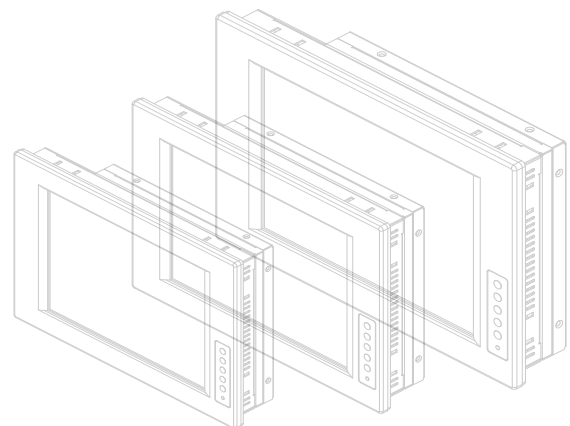
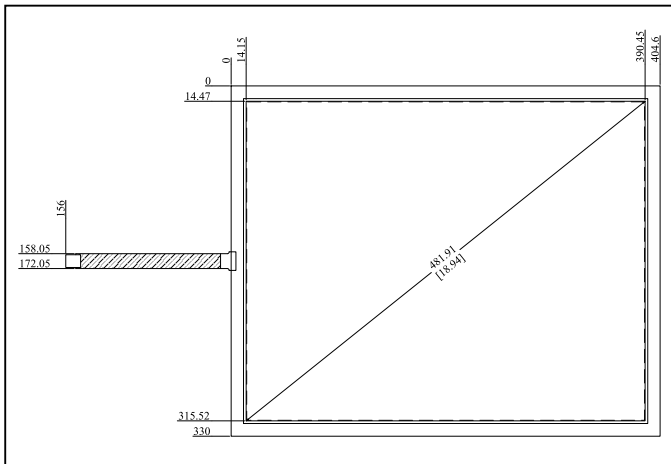
T-R150G



T-R170G



T-R190G



1

Application
Server
Platform

2

Single
Board
Computer

3

IBX Series
POS PC

4

AFOLUX
POS
Panel PC

5

Video
Capture
Card

6

KAMIO
RISC

7

IOVU
Open HMI

8

VITO
Universal
Controller

9

DINO
BLADE

10

LCD
Product
Series

11

Embedded
System

12

Industrial
Computer
Chassis

13

Power
Supply

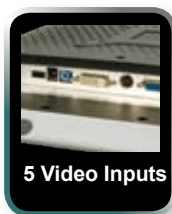
14

Peripherals

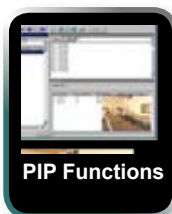
Light Industry LCD Monitor

High Quality Image/Multiple Video Inputs/PIP

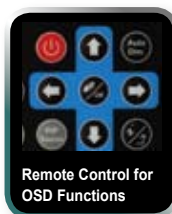
IEI's light industry rugged line LCDs is ideal for your digital signage or surveillance needs. These units have 5-in-1 multiple video inputs, picture in picture function, wide viewing angles, high contrast ratios, fast response times and auto dimming depends on the ambient light condition. Rated IP65/IP 64 (AFOLUX Series), these LCDs can withstand harsh weather conditions and protect against rain and dust. They protect against malicious or accidental impact. They can be housed in a variety of harsh environments.



5 Video Inputs



PIP Functions



Remote Control for
OSD Functions



Ambient Light
Sensor

1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

10
LCD
Product
Series

11
Embedded
System

12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals

5 Video Inputs



MDM Series
Sizes: 15" to 19"

Video Screen and
superior image



MDM-W201S
Sizes: 20.1"

Stylish and
light weight



**AFOLUX Touch
Monitor Series**

Sizes: 7" to 19"

Multi-function Display

Multimedia Display Monitor

IEI's new series of industrial multimedia display monitors is highlighted by the 5-in-1 multi-video input interface designed to easily connect to almost any current PC, embedded system, DVD player or other device. Also, equipped with versatile functions such as PIP (Picture in Picture) function, allows the screen to display two images at the same time.



Production Management



Digital Surveillance

Outdoor Digital Signage Display

Wide Screen Multimedia Display Monitor

The MDM-W201S is a heavy-duty, durable, 1680x1050 high-resolution touch-screen display with high contrast ratios, 178°/178° super wide viewing angles and multiple video input connectors. The MDM-W201S is ideal for implementation in outdoor advertising platforms and information kiosks at gas stations, theme parks, train stations and other outdoor venues.



Digital Signage Display

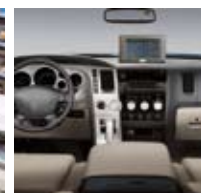
Service Automation Display

AFOLUX Touch Monitor

The innovative yet elegant AFOLUX multimedia monitors with built-in speakers and easily implemented in diverse applications including motor vehicleless surveillance devices and digital signage solution.



POS



Car Monitor

AFOLUX Touch Monitor



7"~19" AFOLUX Multimedia Touch Monitor

The innovative yet elegant AFOLUX Multimedia monitors with built in speakers are easily implemented in diverse applications including motor vehicles, surveillance devices and digital signage solutions.



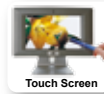
Five Video Inputs



Remote Control for OSD Functions



Built-in Speakers



Touch Screen



IP 64 Compliant



Stand



Ambient Light Sensor



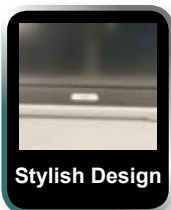
PIP Function



Features

- 7"~19" TFT LCD Monitor
- Elegant design with durable and light plastic construction
- Multiple video inputs are suitable for more applications
- Built-in speakers
- Ambient light sensor (ALS) detects ambient light for automated screen adjustments to optimize viewing. (For AFL-15M/17M/19M only)

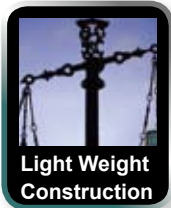
- IEI patent smartOSD function
- Remote control for OSD functions
- Picture-in-Picture (PIP) function
- Supports panel, wall, rack or VESA stand mounting (Optional)
- Supports RS-232 or USB touch screen panel (Optional)
- IP 64 compliant plastic front panel
- RoHS compliant



Stylish Design

Stylish Design

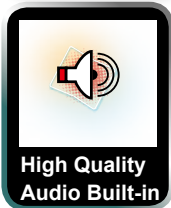
The clean and refreshingly simple looks of the AFOLUX monitors provide an aesthetic interface for public area applications (e.g. ATMs) and industrial solutions (e.g. operator terminal).



Light Weight Construction

Light Weight Construction

Light weight construction ensures the AFOLUX can be rack mounted, panel mounted and mounted on a VESA stand.



High Quality Audio Built-in

High Quality Audio Built-in

Two built-in speakers deliver dual 1.5/3 watts sound for your multimedia enjoyment.

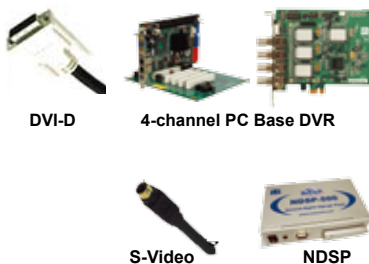


5 Video Inputs

5 Video Inputs

The AFL-15M/17M/19M have multiple video inputs through common video connectors including VGA, DVI-D, S-Video, component and BNC video input interfaces.

The 5-in-1 system connects to a wide range of devices and most electronic appliances. (The AFL-07M/08M/10M/12M has a 4-in-1 system with VGA, S-Video, Component and Composite)

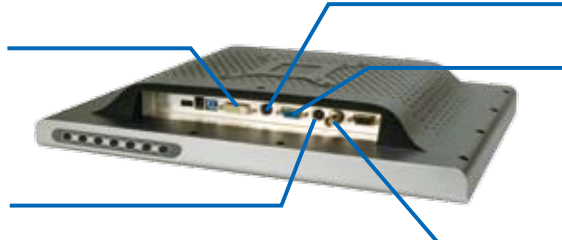


DVI-D

4-channel PC Base DVR

S-Video

NDSP



DVD Player (High Definition)

Component

VGA

Fanless System

CCD Camera

BNC

1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

10
LCD
Product
Series

11
Embedded
System

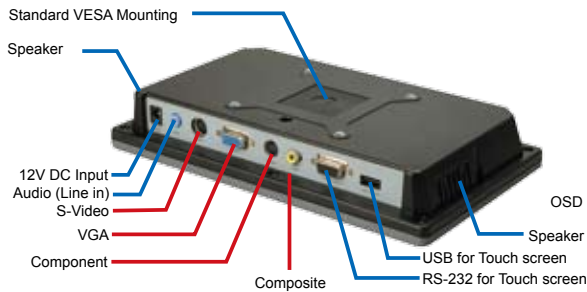
12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals

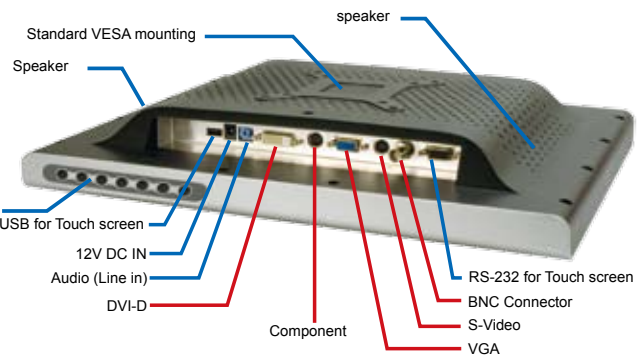
AFL-07M/08M/10M/12M

4-in-1 Multiple Video Input System



AFL-15M/17M/19M

5-in-1 Multiple Video Input System (DVI-D Added)



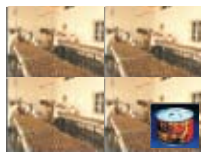
PIP Functions

PIP enables a second video/image to be viewed in a small on-screen window. Images from other sources including DVR and DVD devices can also be viewed in the PIP window.

The small onscreen window can be easily resized and moved to a specified onscreen location. Alternatively, "picture-outside-picture" (POP) can be implemented by dividing the screen into two equally sized portions with two different outputs being displayed on either screen.

PIP Settings :

- Three sizes including small, medium and large
- Four positions including upper left, lower left, upper right and lower right.
- Independent PIP window color controls (brightness, contrast, hue and saturation)
- A blend function makes the PIP transparent



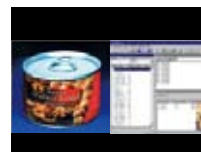
Picture In Picture
(Video on Video)



Side by Side
(Video & Video)

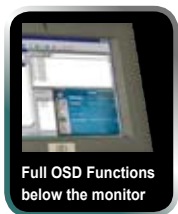


Picture In Picture
(Video on Graphics)



Side by Side
(Video & Graphics)

Main screen and sub screen
can't display BNC/S-Video
or VGA/YpPr inputs at the
same time



Full OSD Functions

Integrated OSD functions under the front panel enables convenient monitor configuration. Image, display ,PIP, color and system configurations can all be set with the hidden OSD.



Image



System



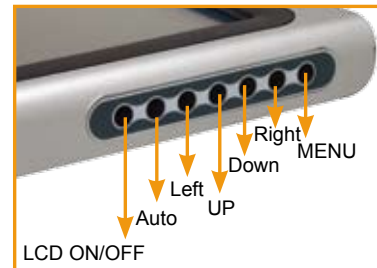
Color



PIP



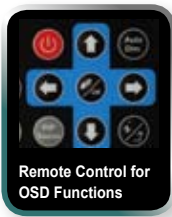
Display



OSD Keypad is designed for AFL-15M/17M/19M

OSD Lock Secures Your Settings

Prevents changes to monitor settings and maintains an optimized image.
(For R11 revision models and above)



Remote Control for OSD Functions

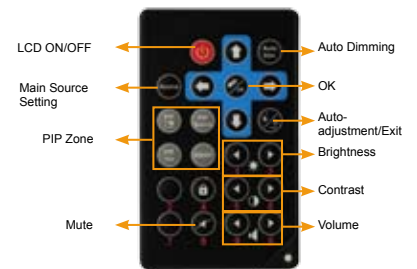
Hot-keys on the remote control include PIP zone, main source setting, auto-dimming, brightness, contrast and volume. Remote control hot-keys ensure easy configuration of the AFOLUX.



Ambient Light Sensor

The AFOLUX 15M, 17M and 19M models with a mbient light sensor ensures your monitor performs optimally in all lighting conditions. The ambient ALS can be turned on or off according to the users preference and the operational environment. Some of the AFL benefits include:

- Reduces cost of operation by reducing the power usage
- Extends backlight life
- Provides comfortable viewing



ALS is placed on the front side ,where there is an opening for light

Superior Image Quality-Functions

Advanced patented imaging technology on the AFOLUX LCD controller ensures the IEI AFOLUX has superior video quality.

Multi-function Touch Monitors

The AFOLUX multimedia touch monitors with the advanced LCD monitor controller supports resolutions up to and including WUXGA. The monitors are mid-range cost effective LCD TVs with PC and HDTV connectivity.

High Definition Multi-function Touch Monitor

With VGA/YPbPr video input, the AFOLUX multimedia monitors can accept 1080i high resolution images. Advanced patented imaging technology on the AFOLUX LCD controller includes Response Time Compensation (RTC) and Directional Correlation Deinterlacing (DCDi) and ensures the IEI AFOLUX has superior video image quality.

Response Time Compensation

Motion blur in motion videos is prevented by RTC technology that enables the LCDs to respond as fast as CRTs.



Without RTC

With RTC

DCDi Technology

Jagged edges on diagonal lines caused by interpolation are eliminated with the DCDi video mode algorithm.



Without DCDi

With DCDi

Industrial Grade Compliance

Industrial Grade Compliance

IP 64 Compliant

The IP 64 compliant AFL-xxM series front panel guarantees the highest level of ingress protection against dust and low pressure water spray. The AFOLUX monitors can with stand any industrial environment where dust and drizzle is encountered.

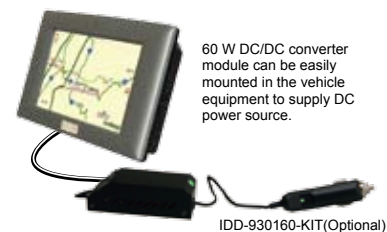
RS-232 or USB Touch Panel

AFL-xxM series supports 4/5 wire resistive touch screen via an RS-232 or a USB interface. The optional touch panel can withstand the demanding requirements of harsh industrial environments and outdoor applications such as POS, kiosks, retail, transportation, gaming, and surveillance.

The touch panel with PIP assists production management



Best Choices for Multimedia Applications



AFL-07M/08M/10M Transportation

Small size industrial –grade LCDs are ideal for in-vehicle systems in trucks, public transport vehicles, and police cars. AFL in-vehicle LCDs used in car navigation systems and as monitors for rear-seat entertainment systems are able to withstand vibrations caused by the motion of the vehicle.



- Wide Screen for AFL-07M
- Multiple Video Input
- Internal Speakers (1.5W/1.5W)
- Remote Control for OSD Functions



Car



Bus



Train



- Internal Speakers (1.5W/1.5W)
- Superior Image Quality
- Multiple Video Input
- Remote Control for OSD Functions

AFL-12M/15M Retail Solution

Our touch solutions provide reliable interaction making them ideal for use in retail applications. The touch function will speed up the point of sale transactions, and self-service viable.



POS



Outdoor KIOSK



KIOSK



- 160°/160° Wide Viewing Angles
- Remote Control for OSD Functions
- Superior Image Quality
- Internal Speakers (3W/3W)

AFL-17M/19M Advertising and Gaming Platform

The AFOLUX monitors deliver superior picture quality and 160°/160° wide viewing angles make it the best platform for advertising and gaming.



Digital Signage



Gaming Machine

Industrial Grade Compliance

VESA Mounting Standards

The AFL-M series has four mounting holes compliant with the VESA mounting standard (75mm x 75mm/100mm x 100mm) on the rear panel for stand mounting and other mounting methods.

Stand KIT

Easy Stand

STAND-A08 (for 7" and 8.4")

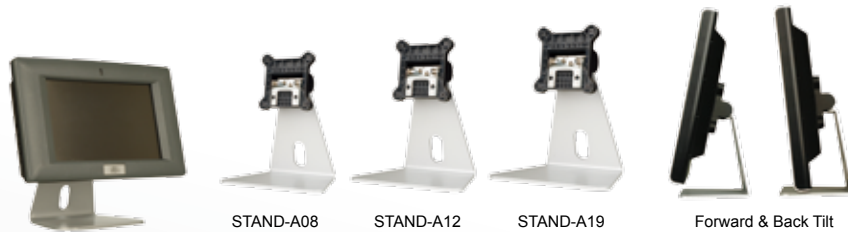
(Support up to 5 kg)

STAND-A12 (for 10.4" and 12.1")

(Support up to 5 kg)

STAND-A19 (for 15", 17" and 19")

(Support up to 7.5 kg)



Comfortable Stand

STAND-B19 (for 15", 17" and 19")

(Support up to 7.3 kg)



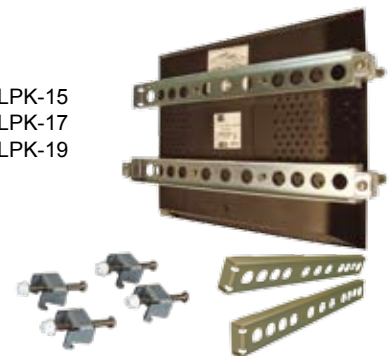
Panel mount kits

AFLPK-08 (for 7" and 8.4")

AFLPK-12 (for 10.4" and 12.1")



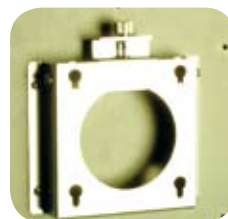
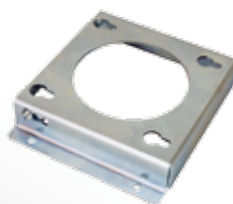
AFLPK-15
AFLPK-17
AFLPK-19



Wall mount kits

AFLWK-12

AFLWK-19



1

Application
Server
Platform

2

Single
Board
Computer

3

IBX Series
POS PC

4

AFOLUX
POS
Panel PC

5

Video
Capture
Card

6

KAMIO
RISC

7

IOVU
Open HMI

8

VITO
Universal
Controller

9

DINO
BLADE

10

LCD
Product
Series

11

Embedded
System

12

Industrial
Computer
Chassis

13

Power
Supply

14

Peripherals

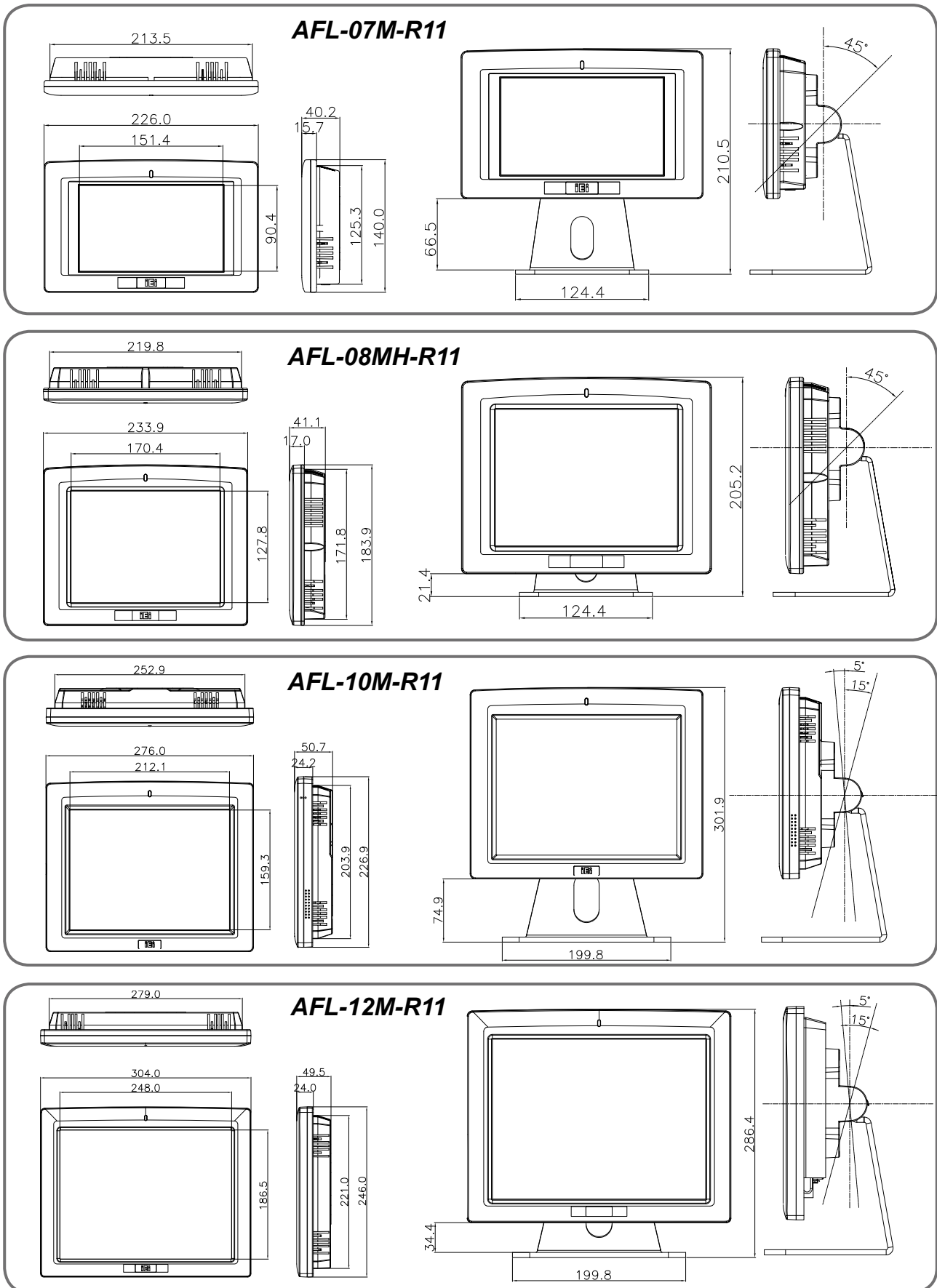
AFOLUX All-in-one Monitor Selection Guide

Note: The smartOSD function is supported by revision 11 models and above



Model	AFL-07M-R11	AFL-08MH-R11	AFL-10M-R11	AFL-12M-R11	AFL-15M-R11	AFL-17M-R11	AFL-19M-R11
Display Size	7"	8.4"	10.4"	12.1"	15"	17"	19"
Max Resolution	800 x 480 (WVGA)	800 x 600 (SVGA)	800 x 600 (SVGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)
Brightness (cd/m²)	350	450	400	450	350	300	300
Contrast Ratio	400:1	500:1	500:1	700:1	400:1	800:1	800:1
LCD Color	262K	262K	16.2M	262K	262K	16.7M	16.7M
Pixel Pitch (mm)	0.1905(H) x 0.1905(V)	0.213(H) x 0.213(V)	0.264(H) x 0.264(V)	0.240(H) x 0.240(V)	0.297(H) x 0.297(V)	0.264(H) x 0.264(V)	0.294(H) x 0.294(V)
Viewing Angle (H/V)	140°/100°	120°/100°	120° / 100°	160°/160°	120°/100°	160°/160°	
Backlight MTBF (Hrs)	50000	50000					
Input Video Signal Connector	1. Composite (NTSC/PAL) 2. YPbPr 3. S-Video 4. VGA				1. BNC Connector (NTSC/PAL) 2. YPbPr 3. S-Video 4. VGA 5. DVI		
Audio In	AMP 1.5W + AMP 1.5W (internal speaker)					AMP 3W + AMP 3W (internal speaker)	
Extension	IR Sensor (Remote Control)				1. Ambient Light Sensor 2. IR Sensor (Remote Control)		
Construction Front Panel	ABS and PC Plastic front frame						
Contraction Chassis	Aluminum Chassis						
Power Adapter	36W				60W		
On Screen Display (OSD)	Remote Control for OSD Functions				1. OSD Keypad below the Front Panel 2. Remote Control for OSD Functions		
Smart OSD	Yes						
User's Controls	Image (Brightness, Contrast ,Sharpness), Display (Auto Adjust, Phase , Clock,Display Control) PIP(Pip On/Off, Pip Input Select, Pip Size, Pip Position ,Pip Color Controls, Blend) Color (Auto Color, Color Tmperature, sRGB) System (Audio, Factory Reset , Information, Input select, Misc)				OSD Buttons: Power, Left, Up, Down, Right ,Menu OSD:Image (Brightness, Contrast ,Sharpness), Display (Auto Adjust, Phase, Clock,Display Control) PIP(Pip On/Off, Pip Input Select, Pip Size, Pip Position ,Pip Color Controls, Blend) Color (Auto Color, Color Tmperature, sRGB) System(Audio, Factory Reset , Information, Input select, Misc)		
Mounting	Panel / Wall mounting (VESA 75 x 75mm)		Panel / Wall mounting (VESA 75 x 75mm / 100 x 100mm)		Wall mounting (VESA 100 x 100mm)		
Dimension (WxHxD) (mm)	226 x 140 x 40.18	233.86 x 183.86 x 41.09	276 x 227 x 50.7	304 x 246 x 49.5	393.06 x 308.06 x 61	428 x 350 x 65	469.94 x 382.46 x 67
Operation Temperature (°C)	0~+50°C						
Net Weight (Kg)	0.88	1.14	1.33	2.12	3.2	5.0	5.6
Safeay / EMC	CE / FCC / UL / CCC						
Front Panel Protection	IP 64 Compliant						

Dimensions (Unit:mm)

1
Application
Server
Platform2
Single
Board
Computer3
IBX Series
POS PC4
AFOLUX
POS
Panel PC5
Video
Capture
Card6
KAMIO
RISC7
IOVU
Open HMI8
VITO
Universal
Controller9
DINO
BLADE10
LCD
Product
Series11
Embedded
System12
Industrial
Computer
Chassis13
Power
Supply14
Peripherals

- AFL-15M-R11**

Top view dimensions: 320.0 (width), 393.1 (inner width), 306.0 (outer width), 230.0 (height).

Front view dimensions: 60.0 (top bezel), 30.0 (bottom bezel), 199.0 (inner width), 234.6 (outer width), 308.1 (height), 57.3 (stand height), 239.0 (stand width).

Side view dimensions: 371.3 (height), 5° (tilt), 15° (swivel).

AFL-17M-R11

Top view dimensions: 351.4 (width), 428.0 (inner width), 339.9 (outer width), 272.3 (height).

Front view dimensions: 64.0 (top bezel), 34.0 (bottom bezel), 261.0 (inner width), 261.0 (outer width), 350.0 (height), 36.3 (stand height), 239.0 (stand width).

Side view dimensions: 392.4 (height), 5° (tilt), 15° (swivel).

AFL-19M-R11

Top view dimensions: 384.0 (width), 469.9 (inner width), 378.4 (outer width), 303.1 (height).

Front view dimensions: 67.0 (top bezel), 36.0 (bottom bezel), 264.2 (inner width), 300.0 (outer width), 382.5 (height), 20.1 (stand height), 239.0 (stand width).

Side view dimensions: 408.5 (height), 5° (tilt), 15° (swivel).

Options

	AFL-07M	AFL-08MH	AFL-10M	AFL-12M	AFL-15M	AFL-17M	AFL-19M
Panel Mounting kits	AFLPK-08		AFLPK-12		AFLPK-15	AFLPK-17	AFLPK-19
Wall Mounting kits	AFLWK-12				AFLWK-19		
Rack Mounting Kits	AFLRK-07	AFLRK-08	AFLRK-10	AFLRK-12	AFLRK-15	AFLRK-17	N/A
LCD Monitor Stand	STAND-A08/STAND-100-RS/STAND-150-RS		STAND-A12/STAND-100-RS/STAND-150-RS		STAND-A19/STAND-B19/STAND-210-RS		

Packing List

Item	Part No.	Remark
Power Cord	32000-000002-RS	Length:180cm
VGA Cable	32000-036200-RS	Length:180cm
Audio Cable	32000-036500-RS	Length:180cm
Component Cable	32000-083700-RS	Length:10cm
Component Extend Cable	32000-088100-RS	Length:170cm
DVI Cable	32000-086600-RS	Length:180cm for AFL-15M / 17M / 19M
36W Power Adapter	63000-FSP0361AD101C-RS	for AFL-07M / 08M / 10M / 12M
60W Power Adapter	63000-FSP0601AD101C-RS	for AFL-15M / 17M / 19M
User's Manual CD-ROM	7B000-000087-RS	
Remote Control	7Z000-8T00322ICP01G-RS	
Touch Pen	XTR104-0002-RS	for Touch Screen Models
Touch Screen RS-232 Cable	32000-000098-RS	Length:180cm for Touch Screen Models
Touch screen USB cable	32000-045801-RS	Length: 150cm for touch screen models



Optional 60W DC/DC Converter Module Spec (P/N:IDD-930160-KIT)

Input Voltage	9~30VDC
Input Current	Max. 8A at 6VDC
Output	12V@5A
Max. Total Output	60W
Performance Characteristics	Noise & $\pm$ Ripple: <320mV, Line Regulation: <120mV, Load Regulation: <120mV
Transient toggle rate	250Hz (50% duty ratio)
Transient current step	From 0% to 50% and 50% to 100% of max current
Efficiency	typ. 95% (Vin=12V, 80% of full load)
Dimensions	42mm x 103mm x 31mm
Mounting Kit	12mm x 80mm
Cable Length	180cm
Operating Temperature	-40°C~85°C



Ordering Information

Note: The smartOSD function is supported by revision 11 models and above

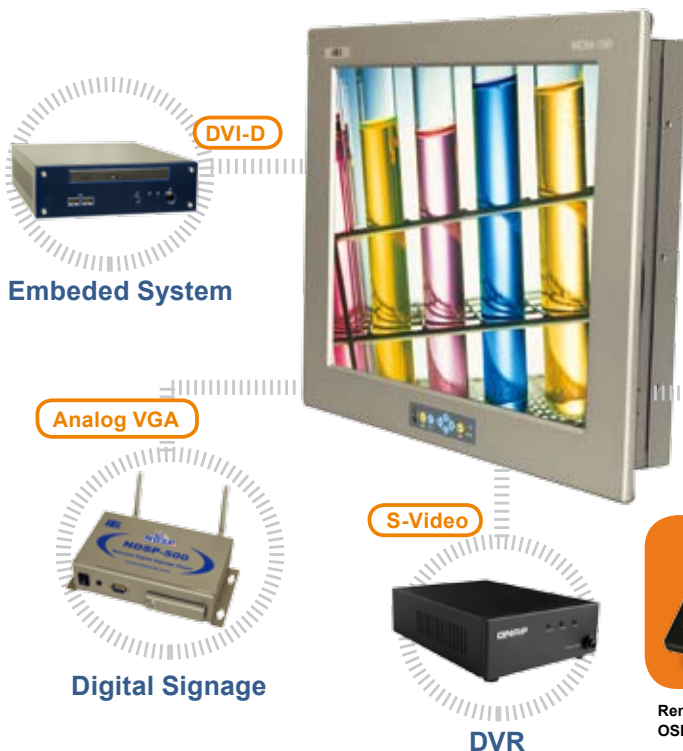
AFL-07M/T-R-R11	7" 350cd/m ² WVGA LCD monitor, plastic front panel, gray color, with 7" RS-232 and USB touch screen, RoHS
AFL-08MH/T-R-R11	8.4" 450cd/m ² SVGA LCD monitor, plastic front panel, gray color, with 8.4" RS-232 and USB touch screen, RoHS
AFL-10M/T-R-R11	10.4" 400cd/m ² SVGA LCD monitor, plastic front panel, gray color, with 10.4" RS-232 and USB touch screen, RoHS
AFL-12M/T-R-R11	12.1" 450cd/m ² XGA LCD monitor, plastic front panel, gray color, with 12.1" RS-232 and USB touch screen, RoHS
AFL-15M/T-R-R11	15" 350cd/m ² XGA LCD monitor, plastic front panel, gray color, with 15" RS-232 touch screen, RoHS
AFL-15M-USB/T-R-R11	15" 350cd/m ² XGA LCD monitor, plastic front panel, gray color, with 15" USB touch screen, RoHS
AFL-17M/T-R-R11	17" 300cd/m ² SXGA LCD monitor, plastic front panel, gray color, with 17" RS-232 touch screen, RoHS
AFL-17M-USB/T-R-R11	17" 300cd/m ² SXGA LCD monitor, plastic front panel, gray color, with 17" USB touch screen, RoHS
AFL-19M/T-R-R11	19" 300cd/m ² SXGA LCD monitor, plastic front panel, gray color, with 19" RS-232 touch screen, RoHS
AFL-19M-USB/T-R-R11	19" 300cd/m ² SXGA LCD monitor, plastic front panel, gray color, with 19" USB touch screen, RoHS

MDM Series 15"/17"/19" Multimedia Industrial Grade TFT LCD Monitor



Features

- 15", 17", 19" TFT LCD Monitor
- 5-in-1 Multiple video input supports DVI-D, Analog VGA, Component, Composite and S-Video interfaces suitable for most devices currently in use
- Picture in Picture function
- Ambient Light Sensor intelligently adjusts brightness according to ambient light
- Remote control for OSD function
- IP 65 waterproof aluminum front panel
- OSD lock secures your settings
- IP 65 waterproof aluminum front panel



Component Video

DVD Player(HD)

Composite Video

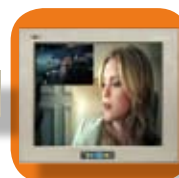
CCD Cameras



Remote Control for OSD Function



Ambient Light Sensor



PIP Function

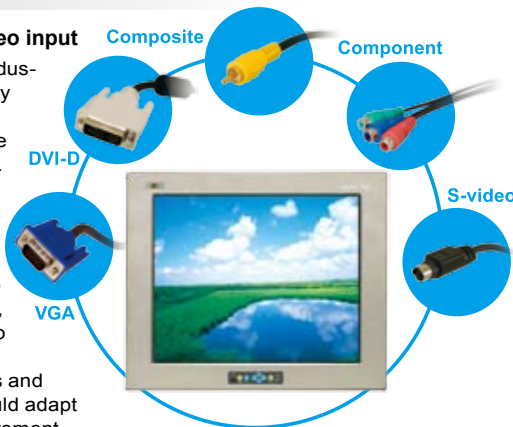


Optional 5-wire resistive touch Screen with RS-232 interface

Convenience

5-in-1 Multiple video input

IEI's new series of industrial multimedia display monitors are highlighted by their diverse video input interfaces. The 5-in-1 input interface design supports VGA, DVI-D, Component Video, Composite Video and S-Video video input interfaces, that easily connects to most PCs, embedded systems, DVD players and other devices and could adapt more appliance requirement.



Remote Control for OSD Function

OSD functions are accessed via a water proof keys on the front panel. Front panel OSD functions simplify system configuration. The remote control that comes with the monitor is equipped with its own OSD functions that allows users to configure the monitor from remote locations.

Superior Image Quality

DCDi Edge Processing

Eliminates the jagged edges along diagonal image lines resulting from video interpolation.



Without DCDi



With DCDi

3D Digital COMB-Filter

3D Digital comb filter ensures perfect color separation in the finest details by removing cross color and dot interference.



Analog COMB-Filter



3D Digital COMB-Filter

Response Time Compensation

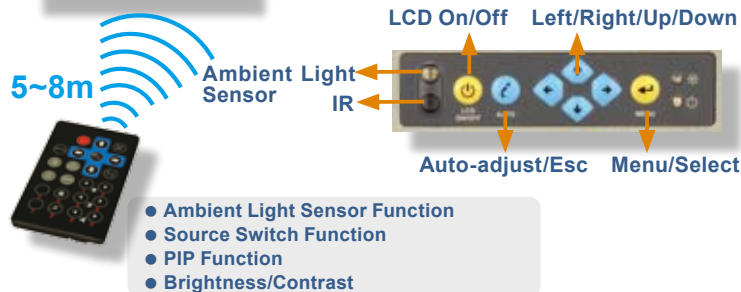
MDM monitors feature fast response time compensation that affects the quality of dynamic images on the screen, resulting in motion images that are clean and crisp.



Without RTC



With RTC



- Ambient Light Sensor Function
- Source Switch Function
- PIP Function
- Brightness/Contrast

Uniqueness

Ambient Light Sensor

With a smart sensor that auto-detects the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

- Power Consumption Saving
- Avoid Eye Strained and Tired
- Extend Lamp Lifetime



Dimly Lit Room



Well Lit Room

Variable PIP window up to 640 X 480



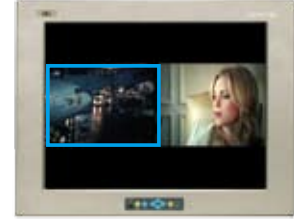
Size One



Size two



Size Three



Size Four

PIP also allows users to change the position in four forms.



Position 1



Position 2



Position 3



Position 4

Reliability

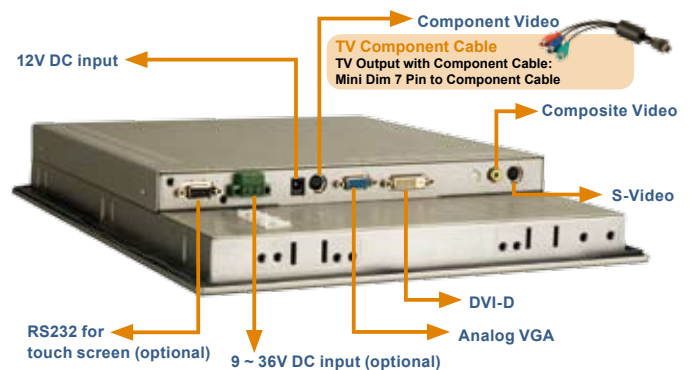
IEI Real Color Control

Due to panel manufacturing processes, inconsistencies may arise in an LCDs image quality.

To ensure each panel produced conforms to the highest industry standards for consistent image quality, each panel is tested by IEI's unique color correction system based on gamma curve, gray balance, and white balance, and white balance measurement standards. IEI is proud to be the only manufacturer in the IPC industry to completely color correct every panel produced.



I/O PORT

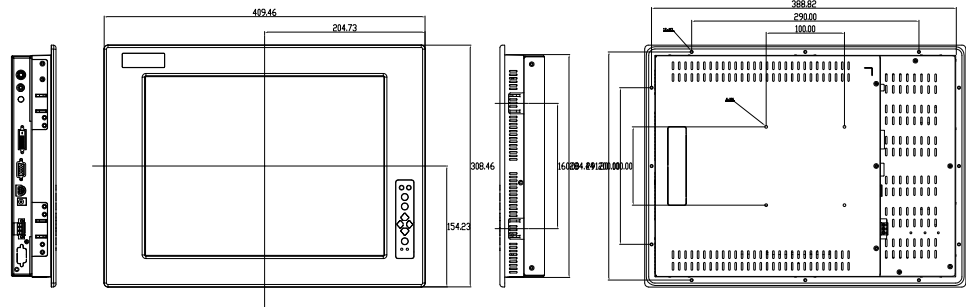


Specifications

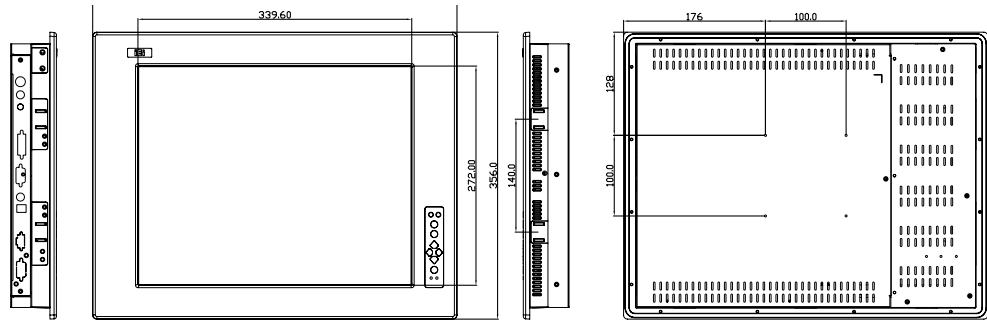
Model	MDM-150S-R11	MDM-170S-R11	MDM-190S-R11
LCD Size	15"	17"	19"
Input Interface	Analog VGA \ DVI-D \ Component Video (Y/Cr/ Cb) \ Composite \ S-Video		
Max Resolution (H/V)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)
Brightness (cd/m ²)	350	300	300
Contrast Ratio	400:1	500:1	700:1
Display Color	262K	16.2M	16.2M
Pixel pitch (mm)	0.297	0.264	0.294
View Angle (H/V)	120/100	140/130	140/130
Lamp Life Time	50000hrs		
Front Frame	Aluminum		
Chassis	Heavy-duty steel		
Input Voltage	12VDC or 9VDC~36VDC(optional)		
OSD function	Ambient Light Sensor/Display control/Image Control/ PIP Control/PIP color Control/System control/OSD configuration		
Smart OSD	Yes		
Mounting	Wall/Panel/Rack/Arm(100X100)/Stand		
Net Weight	5.2 Kg	7.5 Kg	9.6 Kg
Dimension (W x H x D mm)	410 X 309 X 65.1	452.0 X 356.0 X 65.2	482 X 399 X 73
Operating Temperature	0°C~50°C		
Front Panel Protection	IP65 Compliant		

Dimensions

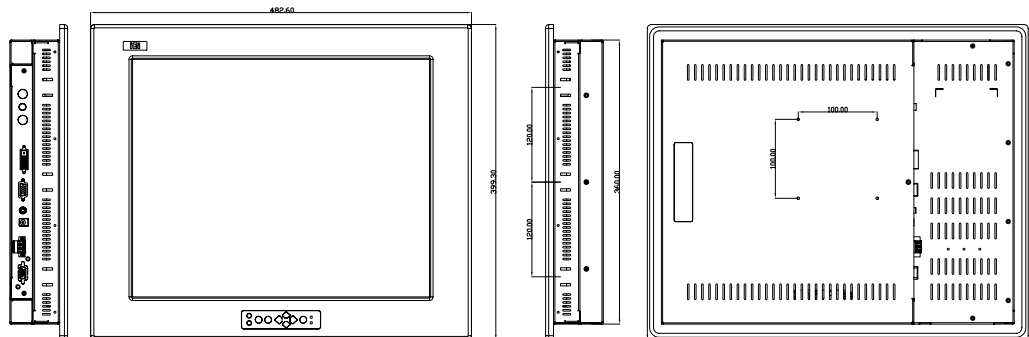
MDM-150S



MDM-170S



MDM-190S



Mounting Kits Information

	MDM-150S	MDM-170S	MDM-190S
Panel Mount Kits	PK-170M		PK-190M
Wall Mount Kits	WK-190MS-R10		
Rack Mount Kits	RK-150MS-R10	RK-170MS-R10	RK-190MS-R10
LCD Monitor Arm	ARM-31	ARM-31	ARM-31
LCD Monitor Stand	STAND-200-RS	STAND-200-RS	STAND-200-RS

Packing List

1xMDM-150S / MDM-170S / MDM-190S industrial LCD monitor	1xRemote Control Bracket
1xDVI Cable	1xAC Power Cable
1xVGA Cable	1xWire Strain Band
1xRemote Control	1xScrew Set
1xComponent Cable	1xPower Cable for Terminal Block(for M model)
1xUser's Manual-CD-ROM	1xTouch Screen RS-232 Cable/Touch Pen/ Driver CD-ROM(for T-R model)
1x45W AC Power Adapter	1xTouch Screen USB Cable/Touch Pen/Driver CD-ROM (for USB/T-R model).

Ordering Information Note: The smartOSD function is supported by revision 11 models and above

MDM-150S

Part No.	Description
MDM-150S-R11/T-R	15" 350 cd/m ² XGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with touch scree, RoHS
MDM-150MS-R11/T-R	15" 350 cd/m ² XGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with 9~36V DC in and touch screen, RoHS
MDM-150S-USB-R11/T-R	15" 350 cd/m ² XGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with USB touch screen, RoHS
MDM-150MS-USB-R11/T-R	15" 350 cd/m ² XGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with 9~36V DC in and USB touch screen, RoHS

MDM-170S

Part No.	Description
MDM-170S-R11/T-R	17" 300 cd/m ² SXGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with touch scree, RoHS
MDM-170MS-R11/T-R	17" 300 cd/m ² SXGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with 9~36V DC in and touch screen, RoHS
MDM-170S-USB-R11/T-R	17" 300 cd/m ² SXGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with USB touch screen, RoHS
MDM-170MS-USB-R11/T-R	17" 300 cd/m ² SXGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with 9~36V DC in and USB touch screen, RoHS

MDM-190S

Part No.	Description
MDM-190S-R11/T-R	19" 300 cd/m ² SXGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with touch scree, RoHS
MDM-190MS-R11/T-R	19" 300 cd/m ² SXGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with 9~36V DC in and touch screen, RoHS
MDM-190S-USB-R11/T-R	19" 300 cd/m ² SXGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with USB touch screen, RoHS
MDM-190MS-USB-R11/T-R	19" 300 cd/m ² SXGA LCD Monitor with VGA, DVI-D, S-video, composite, component video (Y / Cr / Cb) inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with 9~36V DC in and USB touch screen, RoHS

1
Application
Server
Platform

2
Single
Board
Computer

3
IBX Series
POS PC

4
AFOLUX
POS
Panel PC

5
Video
Capture
Card

6
KAMIO
RISC

7
IOVU
Open HMI

8
VITO
Universal
Controller

9
DINO
BLADE

10
LCD
Product
Series

11
Embedded
System

12
Industrial
Computer
Chassis

13
Power
Supply

14
Peripherals

MDM-W201S

20.1" Multimedia Industrial TFT LCD Monitor



The MDM-W201S is a heavy-duty, durable, high-resolution touch-screen display with high contrast ratios and multiple video input connectors including VGA, DVI-D, Component, Composite and S-Video. The MDM-W201S also supports multiple video signals including NTSC and PAL.

The MDM-W201S is designed for outdoor applications or applications in similarly demanding environments. The MDM-W201S is ideal for implementation in outdoor advertising platforms and information kiosks at gas stations, theme parks, train stations and other outdoor venues.



Remote Control for OSD Function



Ambient Light Sensor



PIP Function



Optional 8-wire resistive touch screen



16:10 Wide Screen

Features

1. 20.1" TFT LCD wide screen
2. 16:10 aspect ratio
3. High definition resolution: 1680 x 1050
4. Supports resolutions from VGA to UXGA, HDTV 1080i and NTSC/PAL
5. Ultra wide viewing angle: 178°(H)/178°(V) Super IPS technology
6. High contrast ratio (800:1)
7. Fast response time (14 msec)
8. Multiple Video Input Selections: VGA, DVI, S-Video, Component and Composite
9. Variable PIP window
10. Built-in ambient light sensor (ALS)
11. Optional 8-wire resistive touch systems (For VGA or DVI Signal Inputs)
12. IP 65 front panel compliance

Enhanced Viewing Experience

■ 1680 x 1050 High Resolution Picture Quality

The 1680 x 1050 WSXGA+ format MDM-W201S models have sharp and clear screen images required for applications such as digital imaging and multimedia presentations. Great pictures are guaranteed with the 16.7M color (8-bit/color) display.

■ 178° Ultra View allows multi-direction viewing

S-IPS (In-Plane-Switching) technology on the MDM-W201S reduces the color variations and maintains the color accuracy, the low gamma distortion and the high contrast ratio of the on-screen image from any viewing angle.



Digital Signage Display



Wide viewing angles for multi-viewer applications

■ 16:10 Wide Screen for multi-display

16:10 wide screen landscape display is an ideal design for the multi-display such as digital surveillance or multi-operating-system.



Wide screen design for the multi-display requirement

■ Portrait Display Improves Your View

The MDM-W201S can be a portrait orientation display to save the space and display better images for web pages and forms in full-page orientation where the entire contents of the application can be viewed on the screen.

Tuning a monitor's display by driving software.
(Only for DVI and VGA inputs)



DVI input - VGA input

IP 65 compliant aluminum front panel

IP 65 standard is the highest dusty, water and oil proof level in ground usage, it absolutely prevents any micro-particle in to the system from front panel, and let the system adapting harsh environment.



■ Superior Video Quality

Advanced patented imaging technology on the MDM-W201S LCD controller ensures superior video quality.



AV-5962

With VGA/YPbPr video input, the AFOLUX multimedia monitors can accept 1080i high resolution images.

● Response Time Compensation

The MDM-W201S features fast response time compensation that affects the quality of dynamic images on the screen, resulting in moving images that are clean and crisp.



Without RTC



With RTC

● DCDi Edge Processing

Eliminates the jagged edges analog diagonal image lines resulting from video interpolation.



Without DCDi



With DCDi

Convenience

5-in-1 Multiple Video Inputs and Variable PIP (Picture-in-Picture) up to 640x480

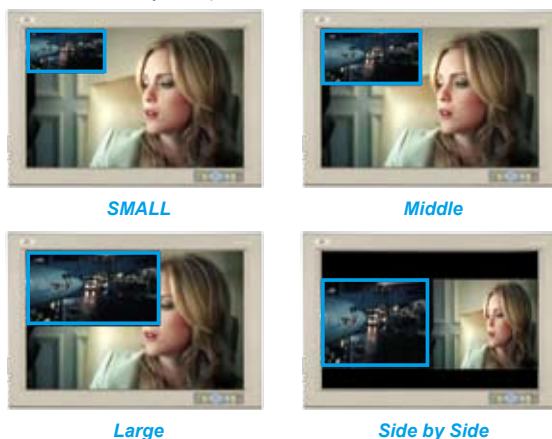
The MDM-W201S has 5-in-1 input interface to support VGA, DVI-D, Component Video, Composite Video and S-Video multiple video input interfaces that easily connect to most PCs, embedded systems, DVD players and other video output devices.

5-in-1 Multiple Video Inputs



Variable PIP: Size and Position Adjustable

Users can select any two signal inputs as picture in picture screens. The second screen size can be adjusted up to 640x480

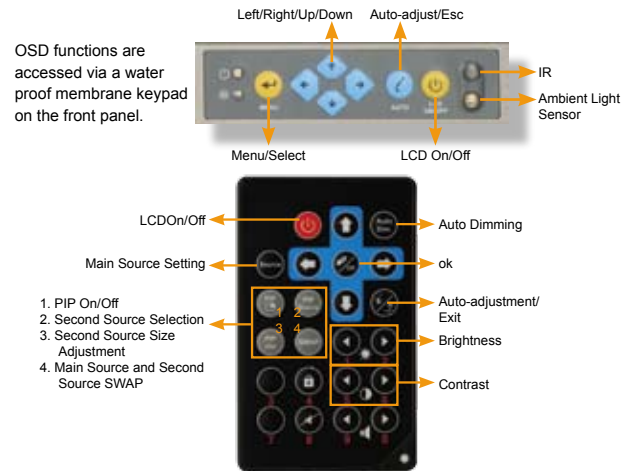


Changeable Position allows users move the second screen easily



Remote Control for OSD Functions

Hot-keys on the remote control include PIP zone, main source setting, auto-dimming, brightness and contrast adjustments.



The remote control that comes with the monitor is equipped with its own OSD functions that allows users to configure the monitor from remote locations.

Ambient Light Sensor

The MDM-W201S has a smart sensor that could auto detect the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

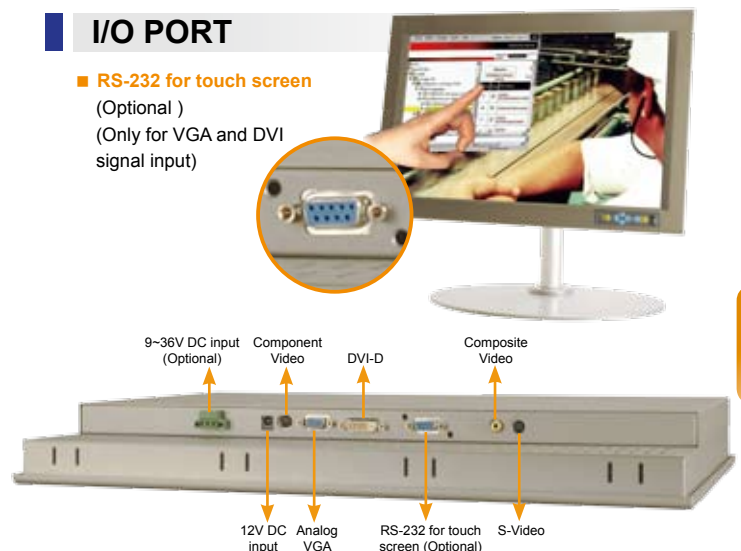
- Reduces cost of operation by reducing the power usage
- Extends backlight life
- Provides comfortable viewing



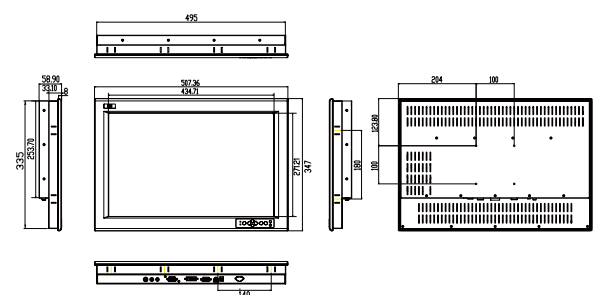
I/O PORT

RS-232 for touch screen

(Optional)
(Only for VGA and DVI signal input)



Dimensions



Mounting Options

Model	MDM-201S
Panel Mount Kits	PK-201M
Wall Mount Kits	WK-201MS-R10
Rack Mount Kits	N/A
Din Mount Kits	N/A
LCD Monitor Arm	ARM-31
LCD Monitor Stand	Stand-200-RS



Wall Mount



Stand Kits



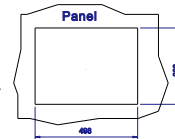
Arm Kits



Panel Mount Kits

How to panel mount?

Step 1: Cut out a section from the panel that corresponds to the dimensions of the MDM-W201S display monitor chassis. (Suggested cut out dimensions on the panel-Width:498 mm/Height:338 mm)



Step 2: Insert the panel mounting clamps into the pre-formed holes along the edges of the chassis, behind the aluminum frame. There are a total of 12 panel mounting clamps for MDM-W201S.



Step 3: Tighten the screws that pass through the panel mounting clamps until the plastic caps at the front of all the screws are firmly secured to the panel.

Specifications

Case/bezel color	Silver heavy-duty steel chassis and aluminum front bezel
Display size	20.1" diagonal
Aspect Ratio	16:10
Optimal (native) resolution	1680x1050 (WSXGA+)
Colors	16.7M (8-bit color)
Brightness	LCD panel 300 cd/m ²
Response time	14 ms (typical)
Viewing angle (H/V)	178°/178°
Contrast Ratio (typical)	800:1
Pixel Pitch	258 mm (w) x 258 mm (h)
Input video signal connectors	D-Sub 15 pins VGA type, DVI-D 24 pins, S-Video, Component, Composite
Power Source	100-240 VAC Universal +9~+36VDC (Optional)
Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 60°C
Humidity	5%~95% @ 60°C, non-condensing (operating)
Shock	10G acceleration peak to peak. (11ms)
Vibration	-5~17Hz 0.1" double amplitude displacement -17~640 Hz 1.5G acceleration peak to peak
Backlight lamp life	50,000 hours to half brightness
User's controls	OSD Buttons: menu, up, down, right, left, LCD on/off, auto adjust OSD: Image (Brightness, Contrast, Sharpness) Display (auto adjust, phase, clock, display control) Picture in Picture (on/off, input select, size, position, color controls, blend) Color (auto color, color temperature, sRGB) System (factory reset, information, input select, OSD configuration, auto brightness)
Smart OSD	Yes
Mounting options	100 mm VESA mount
Touch Interface	USB or Serial (Optional)
Front Panel Protection	IP 65 Compliant
Dimensions (WxHxD mm)	507.36 x 347 x 58.90
Net Weight	8.4 kg
Other Features	Ambient Light Sensor; Remote Control for OSD functions

Ordering Information

Note: The smartOSD function is supported by revision 11 models and above

Part No.	Description
MDM-W201S-R11/T-R	20.1" 300 cd/m ² WSXGA LCD Monitor with VGA, DVI-D, S-Video, composite, Component Video inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with touch screen, RoHS
MDM-W201MS-R11/T-R	20.1" 300 cd/m ² WSXGA LCD Monitor with VGA, DVI-D, S-Video, composite, Component Video inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with 9~36V DC in and touch screen, RoHS
MDM-W201S-USB-R11/T-R	20.1" 300 cd/m ² WSXGA LCD Monitor with VGA, DVI-D, S-Video, composite, Component Video inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with USB touch screen, RoHS
MDM-W201MS-USB-R11/T-R	20.1" 300 cd/m ² WSXGA LCD Monitor with VGA, DVI-D, S-Video, composite, Component Video inputs, integrated auto-dimming and remote control, aluminum front panel with silver color, equipped with 9~36V DC in and USB touch screen, RoHS

Packing List

1 x LCD monitor	1 x Remote Control Bracket
1 x DVI Cable	1 x AC Power Cable
1 x VGA Cable	1 x Wire Strain Band
1 x Remote Control	1 x Screw Set
1 x Component Cable	1 x Power Cable for Terminal Block (for M model)
1 x User's Manual-CD-ROM	1 x Touch Screen RS-232 Cable / Touch Pen / Driver CD-ROM (for T-R model)
1x 60W AC Power Adapter	1 x Touch Screen USB Cable / Touch Pen / Driver CD-ROM (for USB / T-R model)



Remote Control



Remote Control Bracket



Component Cable