



AFOLUX

IEI AFOLUX Multimedia 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.



IP 64 Compliant



Stand



Remote Control for OSD Functions



Built-in Speakers



Touch Screen



Five Video Inputs

5-in-1
Multiple Video Inputs

Ambient
Light Sensor

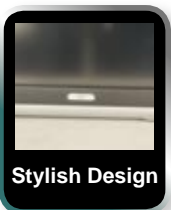
PIP Function

Remote Control

AFOLUX Multimedia Touch Monitor

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)
- 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

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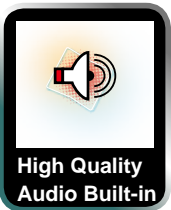
The clean and refreshingly simple looks of the AFOLUX monitors provide an aesthetic interface for public area applications (e.g. ATMs) and industrial solutions (e.g. operator terminal).



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.



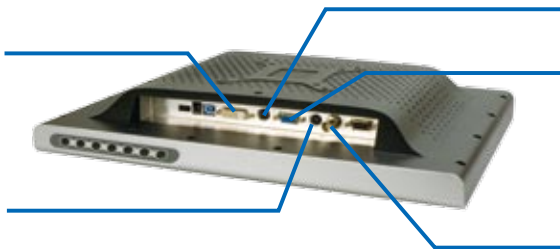
5 Video Inputs

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.

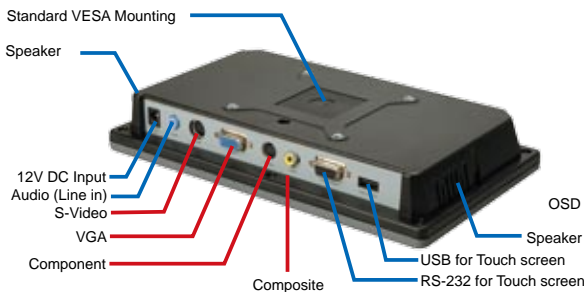
The 5-in-1 system connects to a wide range of devices and most electronic appliances.

(The AFL-07M/08M/10M/12M has a 4-in-1 system with VGA, S-Video, Component and Composite)



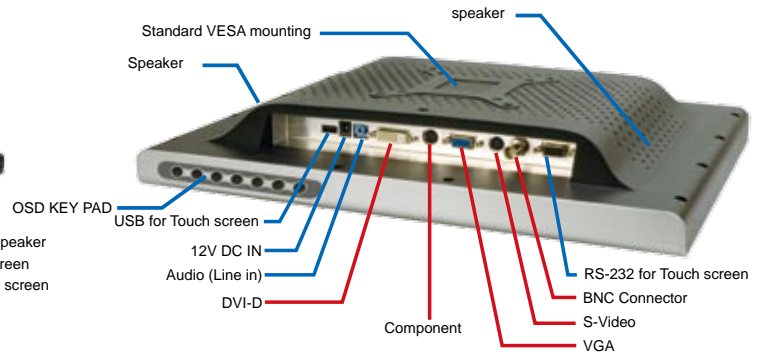
AFL-07M/08M/10M/12M

4-in-1 Multiple Video Input System



AFL-15M/17M/19M

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



PIP Functions

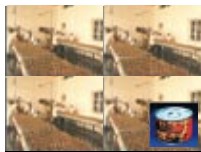
PIP enables a second video/image to be viewed in a small on-screen window. Images from other sources including DVR and DVD devices can also be viewed in the PIP window.

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)

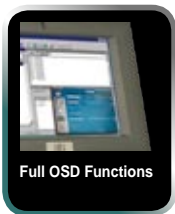


Picture In Picture
(Video on Graphics)



Side by Side
(Video & Graphics)

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

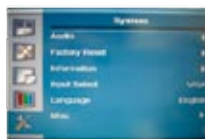


Full OSD Functions

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



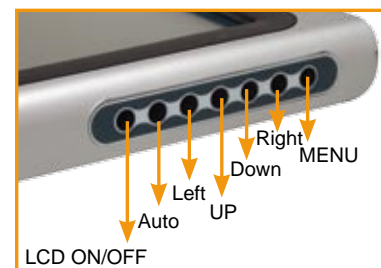
Color



PIP



Display

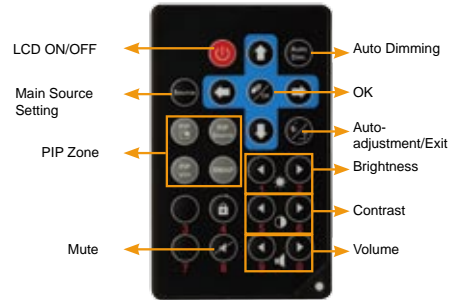


OSD Keypad is designed for AFL-15M/17M/19M



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



Higher Ambient Illuminance

Lower Ambient Illuminance

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.

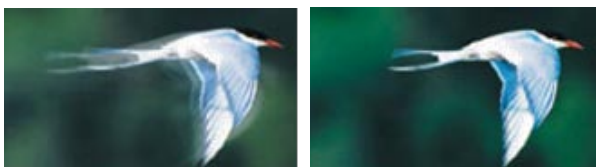
High Definition Multi-function Touch Monitor

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

Superior Image Quality-Testing

IEI Color Adjustment

Panel manufacturing processes may cause inconsistencies in an LCDs image quality. To ensure each panel produced has consistent image quality, each panel is tested by IEI's unique color adjustment system based on gamma curve, gray balance, and white balance measurement standards.



Color Adjustment Dark Room

GAMMA Curve Adjustment

If a display device does not have the proper gamma response, the picture will be less than satisfactory. If the gamma is too low, the picture will have too much contrast and will lose detail. If it is too high, the picture will be washed out.



Lower gamma value Proper gamma value Higher gamma value

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 withstand 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



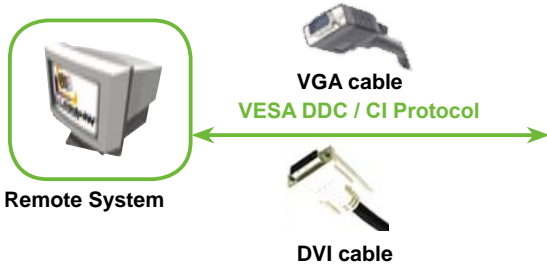
IEI smartOSD

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 !



IEI LCD Monitor

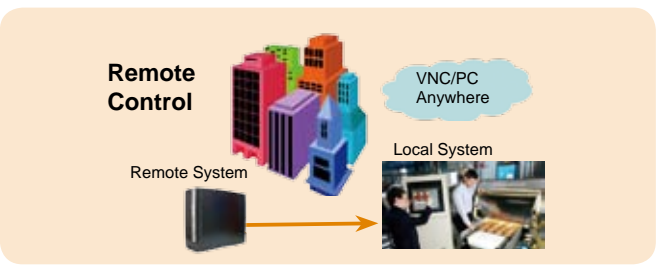
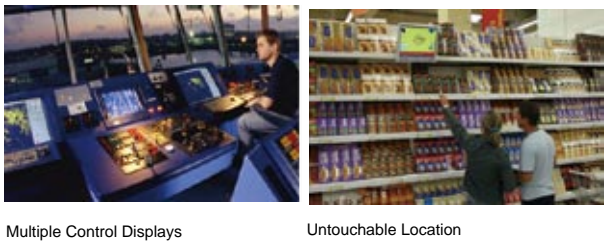
- AFOLUX** AFOLUX Touch Monitor
- SRM** Sunlight Readable Monitor
- TDM** Wide Temperature Monitor
- ISDM** Industrial Stainless Steel Display Monitor
- MDM** Multimedia Display Monitor
- DM** Industrial Display Monitor
- LCD Kit**

- Various Remote Management Functions**
- EDID Reading
 - Image/Color/Display Setting
 - Power Management
 - OSD Lock/Unlock
 - PIP Control

- Features**
- Excellent performance and flexibility over hardware OSD
 - Low cost implementation for existing monitors
 - No limitations to distance
 - Normal video cable (VGA/DVI) connection only

Overcome Operation Obstacles

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

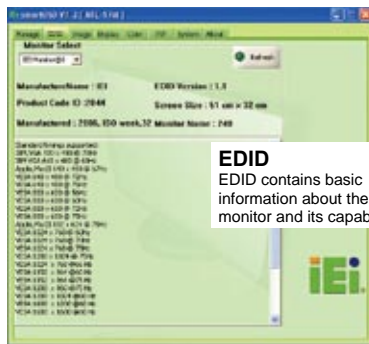


100% Compatible With VESA DDC/CI Protocol

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



EDID
EDID contains basic information about the monitor and its capabilities

2. Image Setting



Image
Brightness
Contrast
Sharpness

3. Display Setting



Display
Phase
Clock

4. Color Setting



Color
User Red Gain
User Green Gain
User Blue Gain
Color Temperature
Gamma

5. Picture in Picture Setting



PIP
PIP On/Off
PIP Input Source
PIP Size

6. System Setting



System
Monitor Power Control
Auto Brightness
Main Source Input
Volume
Misc (Factory Reset/OSD Lock/OSD Unlock)
Mute

7. Monitor Power Management and File Saving



Monitor Select

Selects the monitor 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.

MSSC Command List

Codes	VCP Code Names	Codes	VCP Code Names
10h	Brightness	0eh	Clock
12h	Contrast	3eh	Phase
14h	Select color temperature	8ch	Sharpness
16h	Red Video Gain	60h	Main Source
18h	Green Video Gain	62h	Volume



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



AFL-10M/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.

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



POS



Outdoor KIOSK



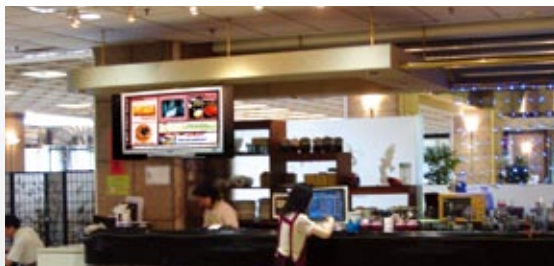
KIOSK



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.

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



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")

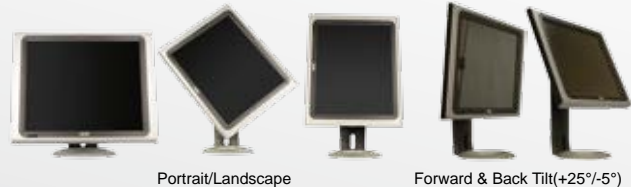
(Support up to 7.5 kg)



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")



Wall mount kits

AFLWK-12

(For 7"~12")



AFLWK-19

(For 15"~19")



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/m ²)	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							
Construction 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 Temperature, 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 Temperature, 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	
Safety / EMC	CE / FCC / UL / CCC							
Front Panel Protection	IP 64 Compliant							

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)

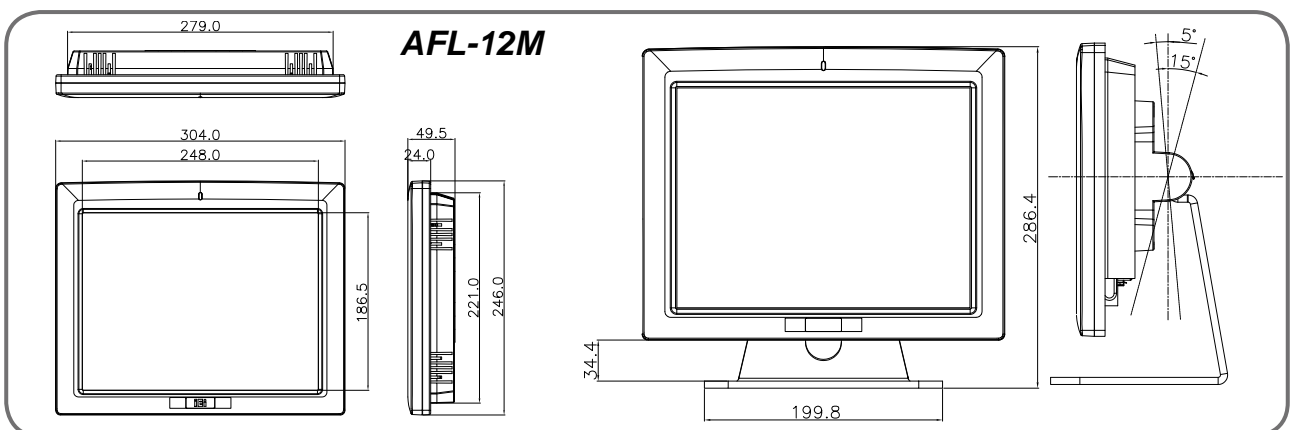
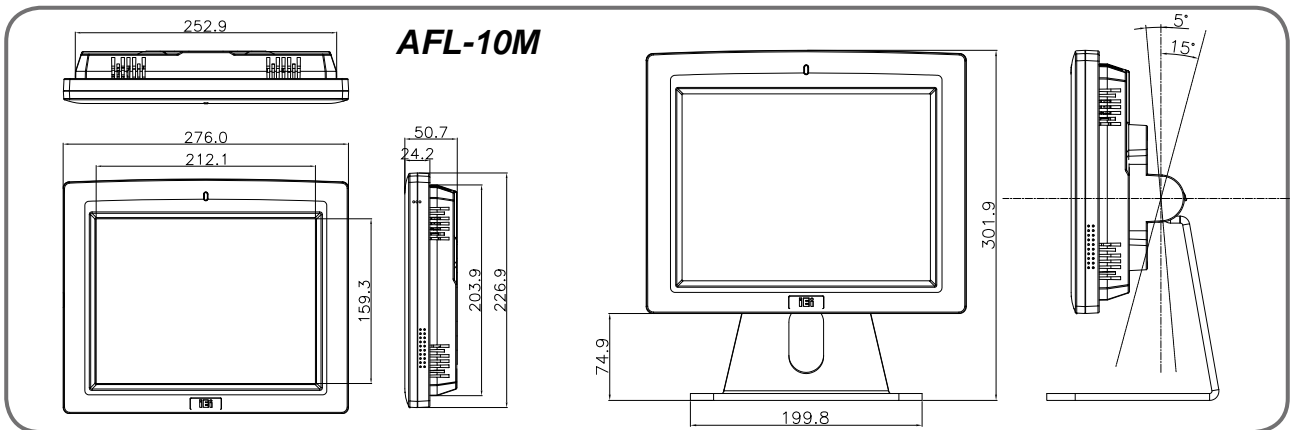
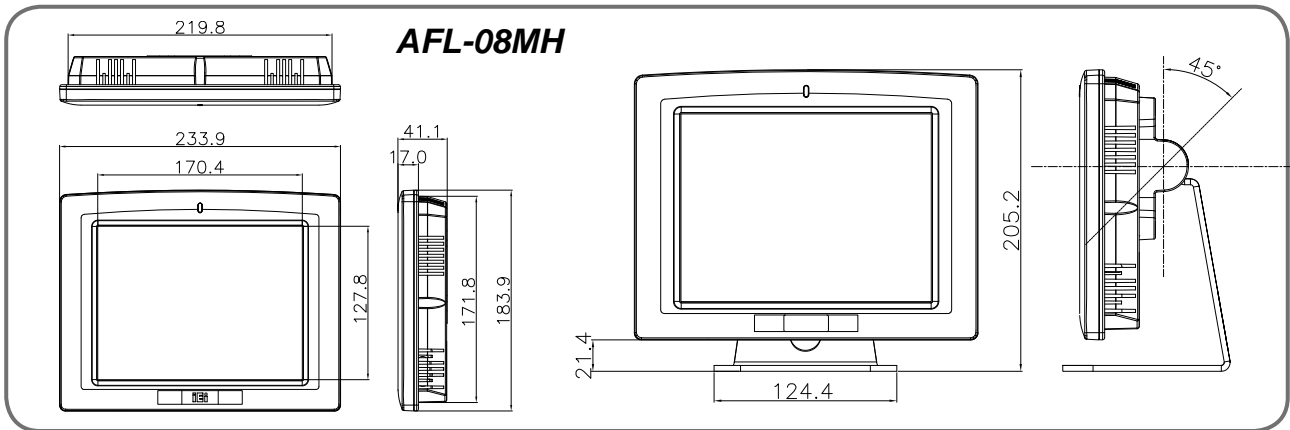
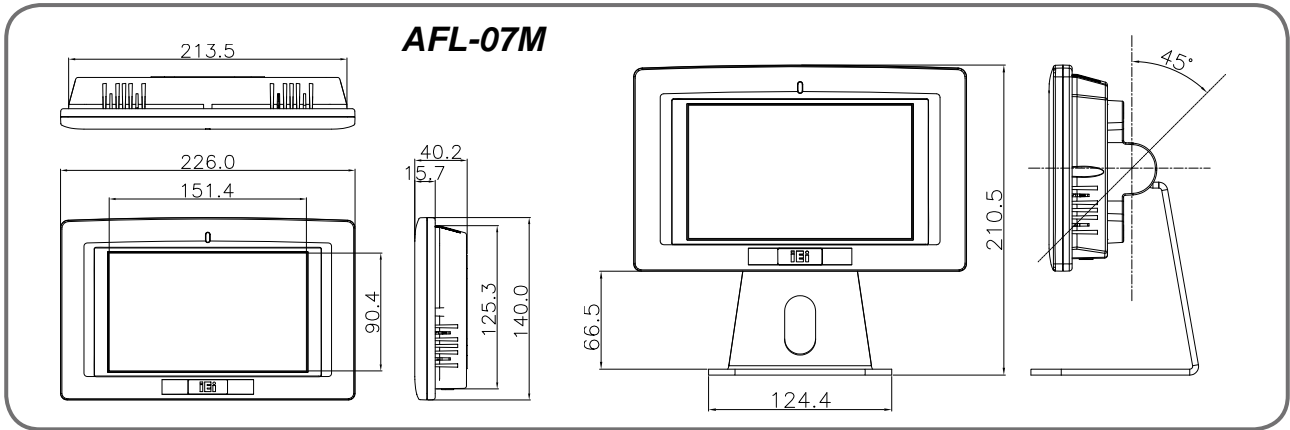
Input Voltage	9~30VDC
Input Current	Max. 8A at 6VDC
Output	12V@5A
Max. Total Output	60W
Performance Characteristics	Noise & ±Ripple:<320mV, Line Regulation: <120mV, Load Regulation: <120mV
Transient toggle rate	250Hz (50% duty ratio)
Transient current step	From 0% to 50% and 50% to 100% of max current
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

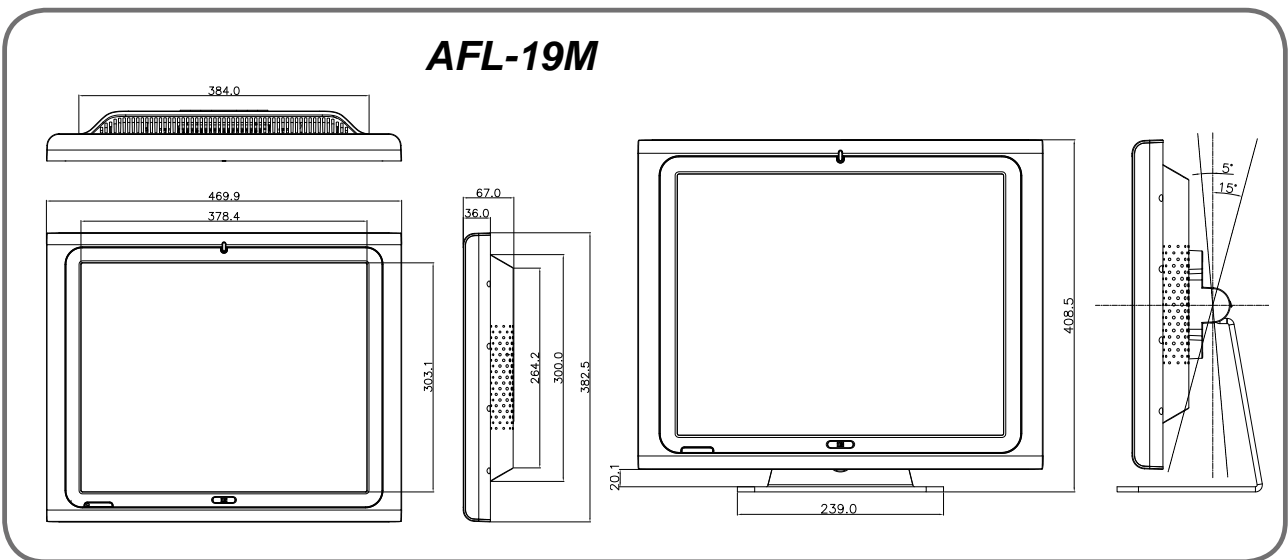
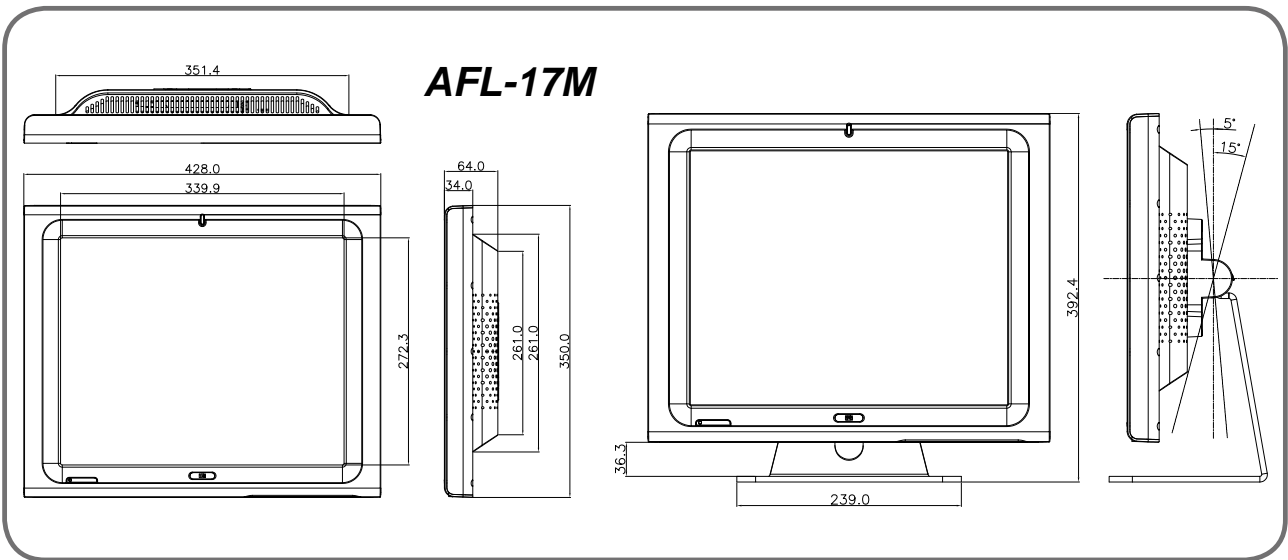
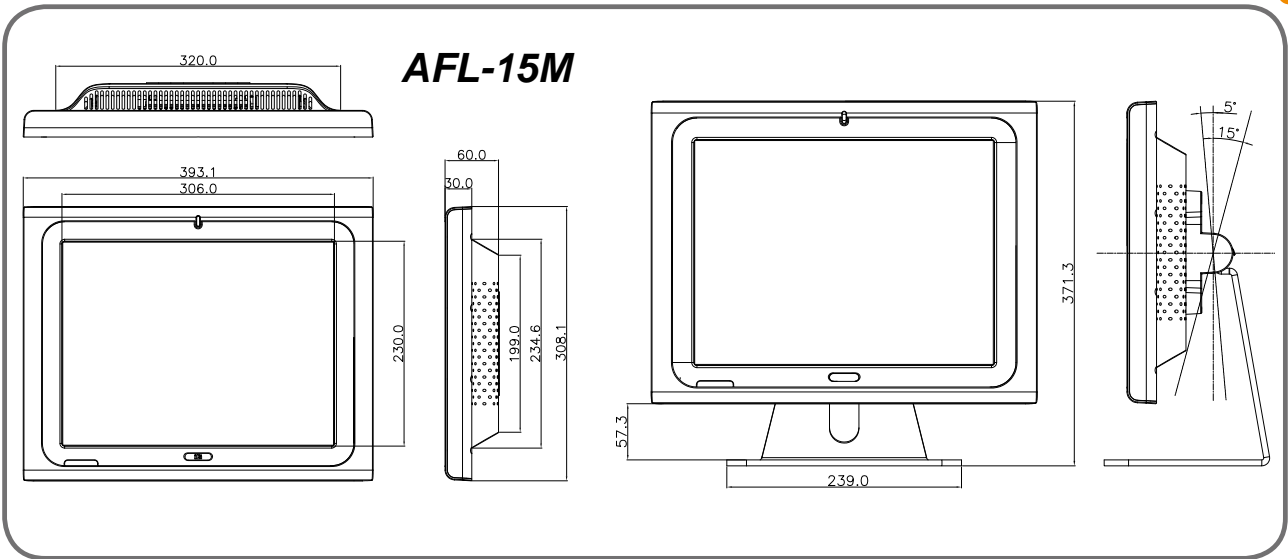


Ordering Information Note: The smartOSD function is supported by revision 11 models and above

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

Dimensions







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