Industrial Monitor Redefine
DM-F Series

■ Flexible Video Input Selection

DM-F provides comprehensive video input from conventional analog VGA to broad bandwidth digital HDMI and DisplayPort, fulfilling different needs.

DisplayPort

Benefits of DisplayPort
- 17.28 Gbit/s broad bandwidth for faster transmission
- 15M for 1080p 60fps long transmission distance
- Blu-ray disc content support
- Lockable cables against vibration
- Downward convertible for HDMi and DVI

HDMI

Benefits of HDMI
- Single-link bandwidth to 340 MHz (10.2 Gbit/s)
- Blu-ray disc content support
- Downward convertible for DVI

■ Gamma Correction - Pursuit of Perfection
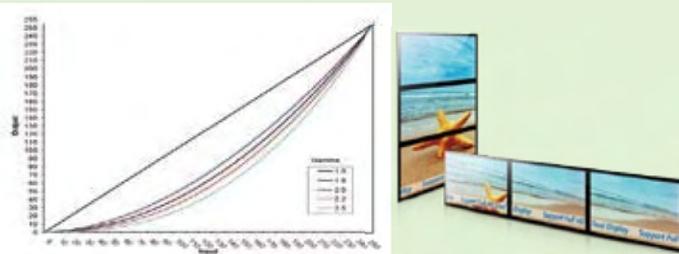
Gamma correction enables each panel model follow the specified look-up-table (LUT) in gamma curve doing color adjustment through software encode.

In this way, various monitors can display in an unified color by following Gamma 2.2 standard for PC products, ensuring color consistency for multiple monitor applications.

■ 9~36V Wide Range DC Input

Power requirement varies from applications. DM-F series provides 9~36V DC input which simplifies system integration through adapter or DC source.

■ OSD Keypad On Back

In order to keep the front simple and clean, DM-F series put membrane keypad on the back, which can also avoid user adjust the setting accidentally.

■ Cable Cover For Neat Cabling

DM-F series provides optional cable cover, helping users to collect cable neatly.

■ SmartOSD Remote Monitor Adjustment

Asides from physical membrane keypad, IEI also provides smartOSD software application helping users to adjust monitor color settings and power management setting from PC control terminal.

PIP On/Off
PIP Input Source
PIP Size

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

smartOSD
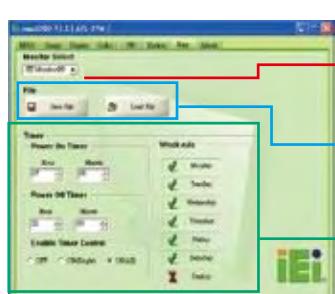
Monitor Select
Selects the monitor unit for which the system parameters will be adjusted

Settings Saving
Saves the referred settings of all the OSD functions as .dat files and load the settings

Power Management
Set up power cycle schedule to save power

DM-F Series

**12.1"~24" DM-F IP65 Industrial Monitor**

New

Features

- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Wide range 9V~36V DC input
- HDMI/DisplayPort/VGA Flexible video input solution
- Projective capacitive multi-touch/ resistive single touch options

FHD · IP65 · 9~36V DC Input · High Brightness · Multi-touch

Specifications

Model		DM-F12A	DM-F15A	DM-F17A	DM-F22A	DM-F24A
LCD	LCD Display	12" (4:3)	15" (4:3)	17" (5:4)	21.5" (16:9)	24" (16:9)
	Max Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1280(W) x 1024(H)	1920(W) x 1080(H)	1920(W) x 1080(H)
	Brightness (cd/m²)	500	400	350	250	250
	Contrast Ratio	700 : 1	700 : 1	1000 : 1	1000 : 1	3000 : 1
	LCD Color	16.2M	16.2M	16.7M	16.7M	16.7M
	Pixel Pitch (mm)	0.24 x 0.24	0.29 x 0.29	0.26 x 0.26	0.25 x 0.25	0.28 x 0.28
	Viewing Angle (H-V)	160° /140°	160° / 140°	170° / 160°	170° / 160°	178°/178°
	Backlight MTBF (Hrs)	50000	50000	50000	30000	30000
Touchscreen & Controller		Resistive type 5-wire flat touch window/ Penmount 6000 Projected capacitive flat touch window/ EETI EXC7200			Projected capacitive flat touch window/ EETI EXC7200	Projected capacitive flat touch window/ EETI EXC3000
I/O Ports		1 x VGA (DB-15) 1 x HDMI 1 x Display Port 1.1 1 x USB 2.0 (Touch) 1 x RS-232 (Touch)[Reserved for resistive touch ATO] 1 x Lockable 9-36V DC jack 1 x 9-36V Terminal Block				
OSD	OSD Button	1 x 7 key membrane OSD keypad				
	Smart OSD Software	Smart OSD Software				
Physical	Construction Material	Aluminum front cover and sheet metal rear cover				
	Mounting	Panel Mount/ Rack Mount/ 100*100 VESA Mount				
	Enclosure Color	Black C				
	Dimensions (mm)	262.2 x 322.2 x 40.5	303 x 378.5 x 43.2	341.4 x 408.4 x 49.3	350.4 x 550.4 x 49.1	382 x 600 x 49.4
	Cutout Dimensions (mm)	234.8 x 303.8	284.6 x 68.1	323 x 398	340 x 532	358.6 x 578.6
	Weight (Net)	2.7	3.5	4.4	6.3	7.8
Environment	Operating Temperature (with air flow)	-10°C ~ 50°C				
	Storage Temperature	-20°C ~ 60°C				
	Humidity	10% to 95% (non-condensing)				
	IP Level	Front IP 65				
	Safety and EMC	CE & FCCcertified				
Power	Power Adapter	63040-010060-040-RS 12V 60W with lock				
	Power Input	9~36V DC				

DM-F12A/15A/17A

VGA
DisplayPort
9-36V terminal block
USB for touch screen
HDMI
9-36V lockable DC Jack
RS-232
(Reserved for resistive touch ATO)

DM-F22A/24A

9-36V terminal block   VGA   HDMI   USB for touch screen

9-36V lockable DC Jack   DisplayPort

Screen on/off   Auto-adjustment
Up   Menu
Left   Right
Down

Options

Item	DM-F12A	DM-F15A	DM-F17A	DM-F22A	DM-F24A
ARM	ARM-11-RS	ARM-31-RS	ARM-31-RS	ARM-31-RS	ARM-31-RS
Stand	STAND-A12-RS	STAND-A19-RS STAND-B19-RS	STAND-C19-RS STAND-A21-R10	STAND-C19-RS STAND-A21-R10	STAND-C19-RS STAND-A21-R10
Wall Mount Kit			WK-190MS-R10		
Panel Mount Kit		FPK-01-R10		FPK-02-R10	FPK-03-R10
Rack Mount Kit	FRK12-R10	FRK15-R10	FRK17-R10	N/A	
Cable Cover	N/A	DM-F-CC01-R10		DM-F-CC02-R10	
RS-232 Touch Cable Kit			DM-F-COMKIT-R10		
HDMI Cable			32012-000100-200-RS		
Display Port Cable			32004-000200-100-RS		

Packing List

Item	P/N	Q'ty	Description
Utility CD		1	Drivers and user manual
Power Adapter	63040-010060-040-RS	1	60W 12V DC adapter with lock
Power Cord		1	Depends on shipping region
Touch Pen	43125-0002C0-00-RS	1	Resistive touch only
USB Cable	32001-006100-100-RS	1	For touch screen
VGA Cable	32000-036200-RS	1	

Ordering Information

| PN	Description
DM-F12A/R-R10	12" 600 cd/m² XGA LCD monitor, Aluminum front panel, Black color, W/ USB resistive touch screen, 9 ~36V DC input, R10
DM-F12A/PC-R10	12" 600 cd/m² XGA LCD monitor, Aluminum front panel, Black color, W/ USB projected capacitive touch screen, 9 ~36V DC input, R10
DM-F15A/R-R10	15" 400 cd/m² XGA LCD monitor, Aluminum front panel, Black color, W/ USB resistive touch screen, 9 ~36V DC input, R10
DM-F15A/PC-R10	15" 400 cd/m² XGA LCD monitor, Aluminum front panel, Black color, W/ USB projected capacitive touch screen, 9 ~36V DC input, R10
DM-F17A/R-R10	17" 350 cd/m² SXGA LCD monitor, Aluminum front panel, Black color, W/ USB resistive touch screen, 9 ~36V DC input, R10
DM-F17A/PC-R10	17" 350 cd/m² SXGA LCD monitor, Aluminum front panel, Black color, W/ USB projected capacitive touch screen, 9 ~36V DC input, R10
DM-F22A/PC-R10	21.5" 250 cd/m² FHD LCD monitor, Aluminum front panel, Black color, W/ USB projected capacitive touch screen, 9 ~36V DC input, R10
DM-F24A/PC-R10	24" 250 cd/m² FHD LCD monitor, Aluminum front panel, Black color, W/ USB projected capacitive touch screen, 9 ~36V DC input, R10

DM-F12A Dimensions
*(Unit: mm)*
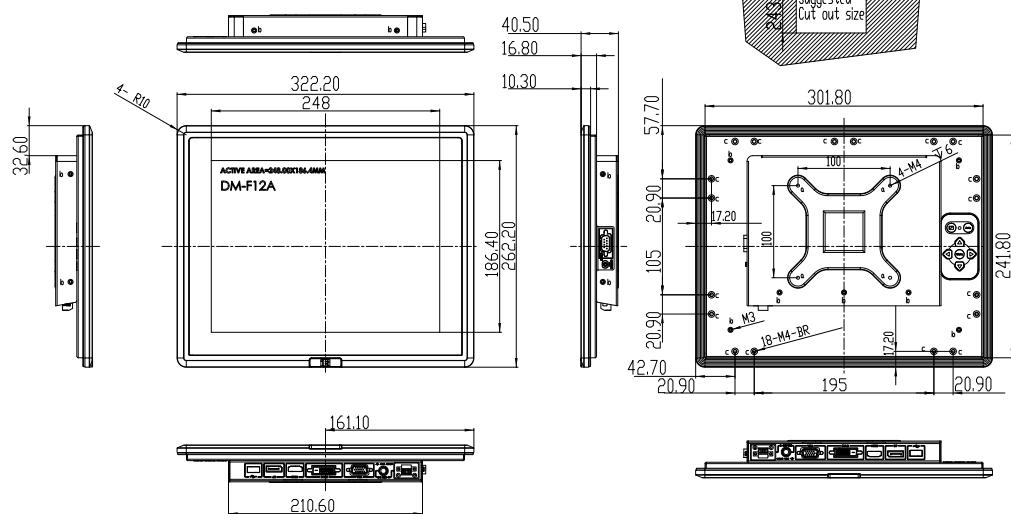
## DM-F15A Dimensions
(Unit: mm)
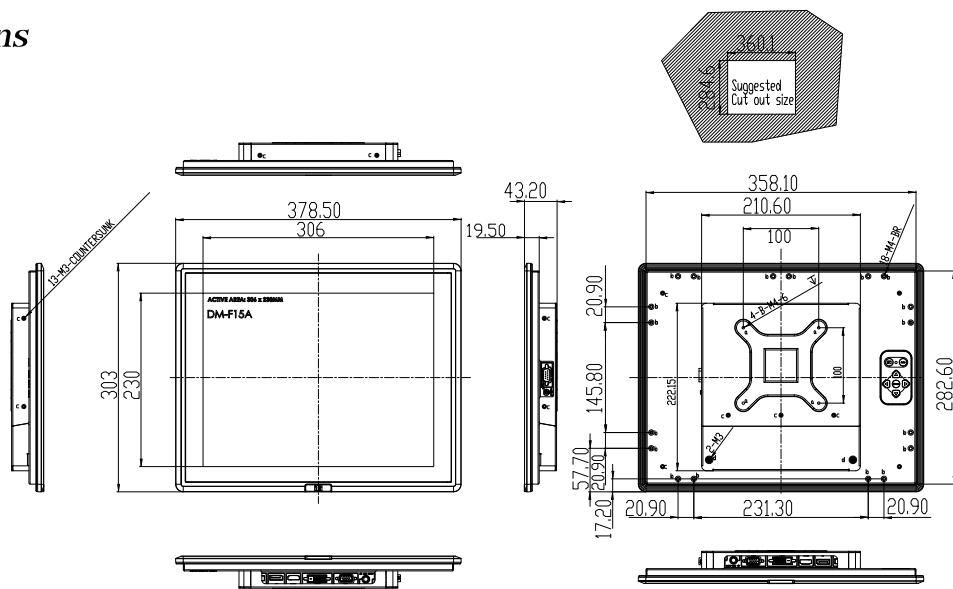
DM-F17A Dimensions
(Unit: mm)

DM−F22A Dimensions
(Unit: mm)

532

340

Suggested Cut Out Size

550.40

49.07

358.40

ACTIVE AREA: 477.0 X 269.80 MM

530

179.55   179.55   17.20

17.20

89.55

100

338

89.55

100

DM−F24A Dimensions
(Unit: mm)

574.60

358.60

Suggested Cut Out Size

600

533.40

49.39
25.46
10.30

382   300.90

574.60

459.10

20.90   20.90

20.90   139.10   20.90

260

84.55   20.90

356.60

74.55

20.90

20.90   139.10   20.90

20.90   459.10
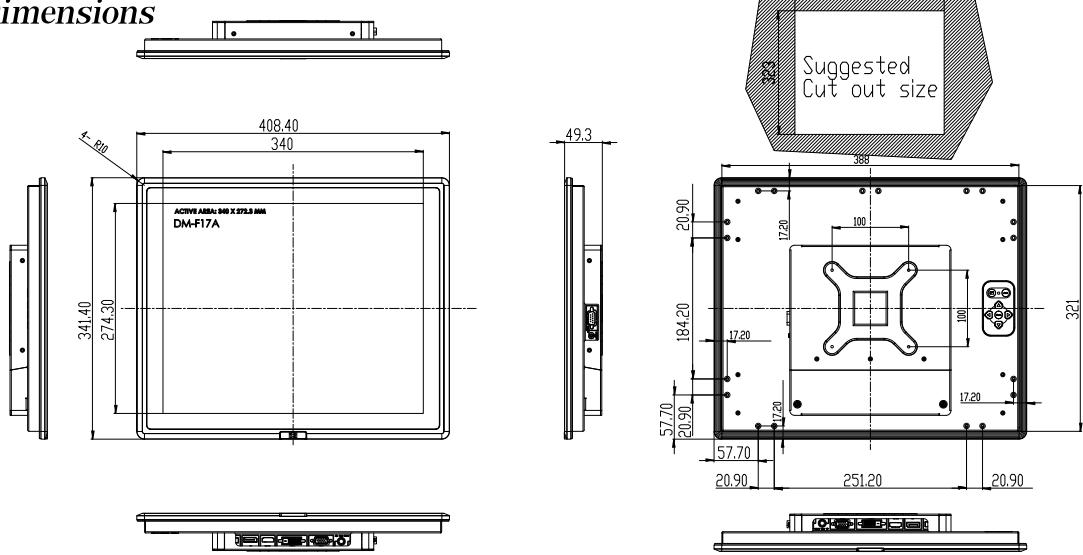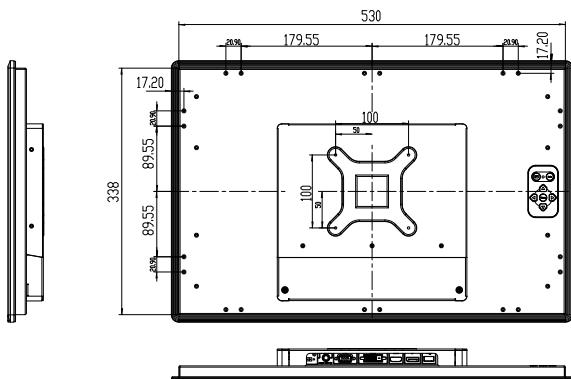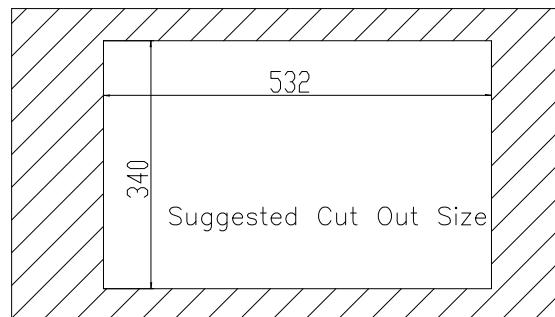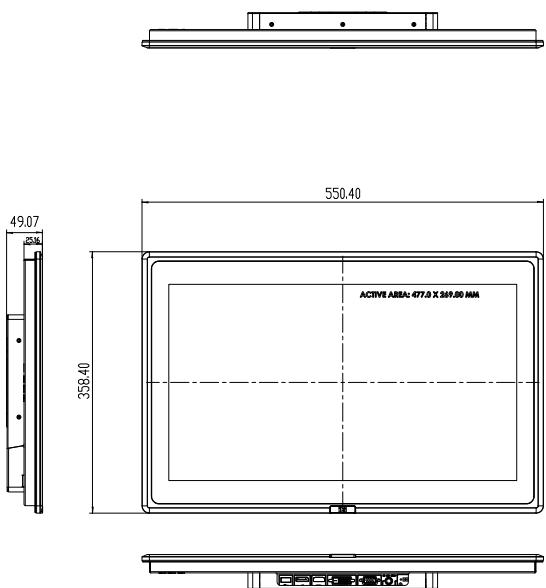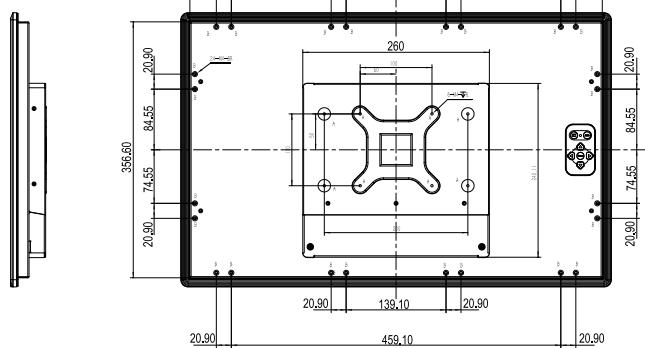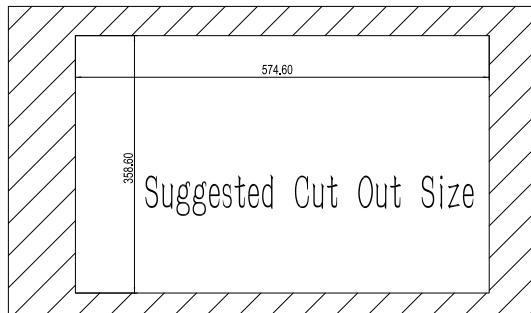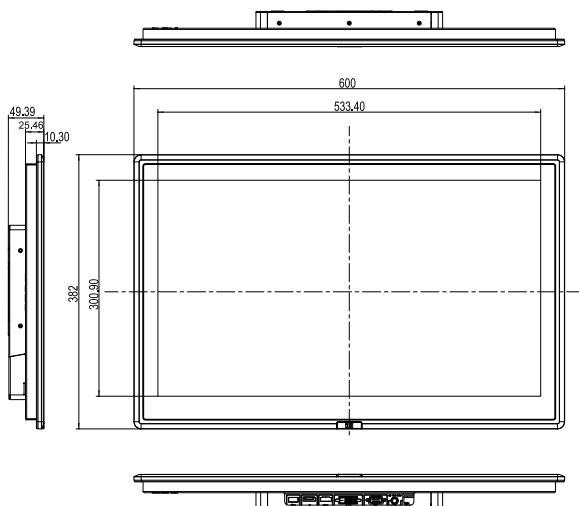
Intelligent Industrial Panel PC

PPC-F Series

iRIS™

IPMI 2.0 Compliant

IEI Remote Intelligent Management System

PPC-F supports iEi iRIS remote management, helping users to manage multiple devices through single management interface, elevating work efficiency. iRIS solution only requires a module and internet connection!

| iRIS solution | **+** | Network | **+** | QNAP NAS | ➜ | Complete IoT Solution! |
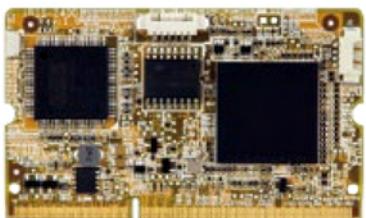
■ Remote Power Management

Users can remote control all the iRIS devices power on/off and set up power cycle, simplify power control process.

ON   **OFF**   **Unify industrial automation process through simple setting!**

■ 24 Hours Active Recovery

Remote troubleshooting everywhere, no need to send out maintenance staff anymore!

| **Automatic Error Alert**	**Automatic Error Alert**	**Automatic Error Alert**
System sends alert by email/ SMS to designated members when error happens	Real-time record main screen video for trouble diagnosis	Maintainers can troubleshoot the error through remote KVM

Minimize downtime and improve service quality for Kiosk, ticket machine applications!

Latest Intel® Cost Effective Mainstream H81 Platform

■ Platform Transition

45nm Process Technology	32nm Process Technology		22nm Process Technology	
Nehalem	**Westmere**	**Sandy Bridge**	**Ivy Bridge**	**Haswell**
4 series	5 series	6 series	7 series	8 series
Intel® Core™ Micro Architecture	Intel® Core™ Micro Architecture	Intel® Core™ Micro Architecture	Intel® Core™ Micro Architecture	2013 NEW Intel® Micro Architecture
TOCK	**TICK**	**TOCK**	**TICK**	

4th Generation Intel Core Processor Family:
Latest Micro architecture with
exciting performance on
Intel's 22nm Process Technology

TOCK

■ Major Advantage of PPC-F H81 Platform

More Embedded CPU Choice
Intel selects more embedded CPUs in Haswell generation, including 35W/45W/54W/65W for PPC-F H81 platform. It is more flexible to choose suitable CPU for different system requirements.

2.5" SATA 3.0 HDD/SSD

SATA 3.0 support
PPC-F series introduce latest SATA 3.0 interface, supporting bandwidth up to 6Gb/s which is twice faster than SATA 2.0! Both 2.5" SATA HDD and SSD can use SATA 3.0 interface.

SATA 1.0	1.5Gb/s
SATA 2.0	3Gb/s
SATA 3.0	6Gb/s

WIN

■ PCIe Mini Card Expansion

PPC-F reserves 2 full size PCIe mini card expansion, with wide variety of IEI PCIe mini card solution, it is flexible and easy to add extra functions on the system.

iRiS™
IPMI 2.0 Compliant

WIFI-RT5392-SB-R10
WIFI-RT3593-DB-R10

MPCIE-LAN-R10   MPCIE-3G-R10   MPCIE-USB3-R10   IVCME-C604

PCIe mini card*2
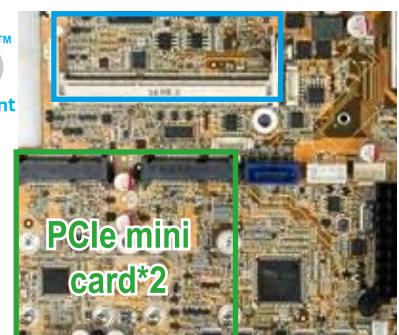
■ FHD Industrial Panel PC Available

Going big is the market trend on industrial panel PC and monitor products, IEI launches new PPC-F series industrial panel PC along with DM-F monitor series. Users can enjoy high quality graphic and more data display at the same time from FHD panels.