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Industrial Flat Panel Monitors
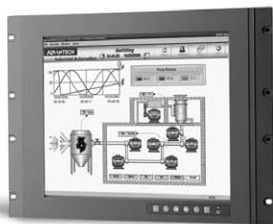
Industrial Flat Panel Monitors

FPM-3191   **FPM-3170**   **FPM-3150**   **FPM-2150**

	Model	FPM-3191G	FPM-3170G
Specifications			
LCD Display	Type	SXGA TFT LCD	SXGA TFT LCD
	Size	19"	17"
	Max. Resolution	1280 x 1024	1280 x 1024
	Max. Colors	262 K or above	16.7 M
	Viewing Angle(H, V o)	170, 170	170, 170
	Luminance(cd/m2)	300	250
	LCD MTBF (hrs)	50,000	30,000
	Contrast Ratio	700:1	500:1
Direct-VGA		Yes	Yes
DVI Input		-	Yes
Video Input		-	Yes
Key Pad	Data Entry Keys	-	-
	Function Keys	-	-
	Macro Function Keys	-	-
Control Board		-	-
Touch Screen (optional)		Resistive, Capacitive	Resistive
Power Supply (VAC)		100 ~ 220	100 ~ 230
Front Panel Compliance		NEMA4/IP65	NEMA4/IP65
Operating Temperature		0 ~ 50° C (32 ~ 122° F)	0 ~ 50° C (32 ~ 122° F)
Storage Temperature		-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)
Certifications		CE, FCC, BSMI, CCC	CE, FCC, BSMI, CCC
Dimensions (W x H x D)		482 x 399 x 66 mm (19" x 15.7" x 2.6")	482 x 354 x 68 mm (19" x 13.9" x 2.7")
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ADVANTECH   Industrial Flat Panel Monitors

Selection Guide

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FPM-3120

FPM-3220

FPM-3150G	FPM-2150G	FPM-3120	FPM-3220
XGA TFT LCD	XGA TFT LCD	SVGA TFT LCD	SVGA TFT LCD
15"	15"	12.1"	12.1"
1024 X 768	1024 X 768	800 X 600	800 X 600
16.2 M	262 K or above	262 K	262 K
140, 125	120, 100	90, 40	90, 40
400	250	100 (TV), 300 (TH)	100
50,000	30,000	20,000	20,000
500:1	400:1	150:1	150:1
Yes	Yes	Yes	Yes
-	-	-	-
-	-	-	-
-	-	-	60
-	-	-	10
-	-	-	10
-	-	-	-
Resistive	Resistive	Resistive, Capacitive	Resistive
100 ~ 230	100 ~ 230	100 ~ 230	100 ~ 230
NEMA4/IP65	NEMA4/IP65	NEMA4/IP65	NEMA4/IP65
0 ~ 50° C (32 ~ 122° F)	0 ~ 50° C (32 ~ 122° F)	0 ~ 50° C (32 ~ 122° F)	0 ~ 50° C (32 ~ 122° F)
-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)
CE, FCC, BSMI, CCC	CE, FCC, BSMI, CCC	CE, FCC, BSMI, CCC	CE, FCC, BSMI, CCC
422 x 310 x 86 mm (16.6" x 12.2" x3.4")	383 x 307 x 48 mm (15" x 12" x 1.9")	311 x 237 x 40 mm (12" x 9" x 1.6")	482 x 266 x 63 mm (19" x 10.5" x 2.5")
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All product specifications are subject to change without notice

Last updated : January 2005

FPM-3191G

Industrial 19" Flat Panel Monitor with Direct-VGA Port

NEW

Features

- 19" SXGA TFT LCD with resolution up to 1280 X 1024
- Stainless steel chassis with NEMA4/IP65-compliant aluminum front panel (optional stainless steel front panel available)
- Multi-scan function supports SXGA, XGA, SVGA, VGA, text mode
- High luminance up to 300 cd/m²
- Auto-recognition of input signal
- Supports panel, wall, rack mount or VESA arm mounting
- Anti-reflective screen with tempered glass
- Hard anodic coating to prevent panel abrasion and acid corrosion
- Stainless steel stand for freestanding applications

Introduction

FPM-3191G is a 19" color TFT LCD flat panel monitor specifically designed for industrial applications. With a viewing size as large as 19", it presents an ample display area as well as vivid and sharp images for your HMI. It features Direct-VGA signal transmission and the on-screen display function makes it easy to adjust the images on the screen. The stainless steel chassis and the NEMA4/IP65 compliant aluminum front panel enable installation in applications with water and dust. An optional stainless steel front panel is available by request.

Specifications

- **Front Panel** Stainless, NEMA4/IP65 compliant. (aluminum optional)
- **Mounting** Panel, wall, rack mount or VESA arm
- **Dimensions (WxHxD)** 482 x 399 x 66 mm (19" x 15.7" x 2.6")
- **Net Weight** 9.2 kg (20.3 lbs)
- **I/O Port** VGA, DC power input, power switch, and RS-232 port (Touchscreen version only)
- **Control** OSD (On Screen Display) Control Pads on the front panel
- **Power** External 60 W power adapter, with AC 100 V ~ 220 V input and DC +12 V @ 5 A output
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature** -20 ~ 60° C (-4 ~ 140° F)
- **Storage Humidity** 5 ~ 90% non-condensing
- **Vibration (operating)** 5 ~ 17 Hz, double-amplitude displacement 17 ~ 500 Hz, 1.0 G peak to peak
- **BSMI, CE, CCC and FCC compliant**

LCD Display

- **Display Type** SXGA TFT LCD
- **Display Size** 19"
- **Max. Colors** Full color (16.7 million)
- **Max. Resolution** 1280 x 1024
- **Viewing Angle** 170° (H), 170° (V)
- **Luminance** 300 cd/m²
- **Storage Temperature** -20 ~ 60° C (-4 ~ 140° F)
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Backlight Lifetime** 50,000 hrs
- **Contrast Ratio** 700: 1 (typ.)

Touchscreen (Optional)

- **Type** 8 Wire, analog resistive or capacitive sensor
- **Resolution** 1024 x 1024
- **Light Transmission** 79 % (resistive), 88% (capacitive)
- **Controller** RS-232 interface
- **Power Consumption** +5 V @ 200 mA
- **OS Support** Windows® 2000/XP
- **Lifespan** 1 million touches at a single point (resistive)
  225 million touches (capacitive)

Ordering Information

- **FPM-3191GA** Industrial 19" TFT LCD display with 19" Rack-Mount Bezel, VGA/DVI/Video interface and AC 100 ~ 220 V input 48 W power adapter
- **FPM-3191GA-R** FPM-3191GA with resistive touchscreen (RS-232 interface)
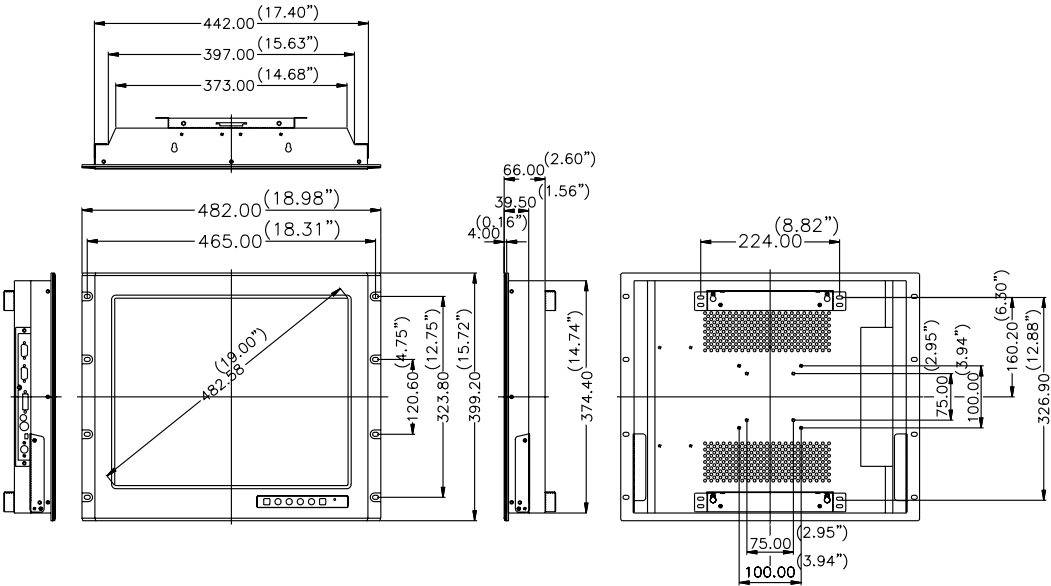- **FPM-3191GA-C** FPM-3191GA with capacitive touchscreen (RS-232 interface)

Option

- **1962319130** Stainless steel front panel by request

Dimensions

Unit: mm

Cut-out dimension: 444 x 376 mm (17.48" x 14.84")

Side View
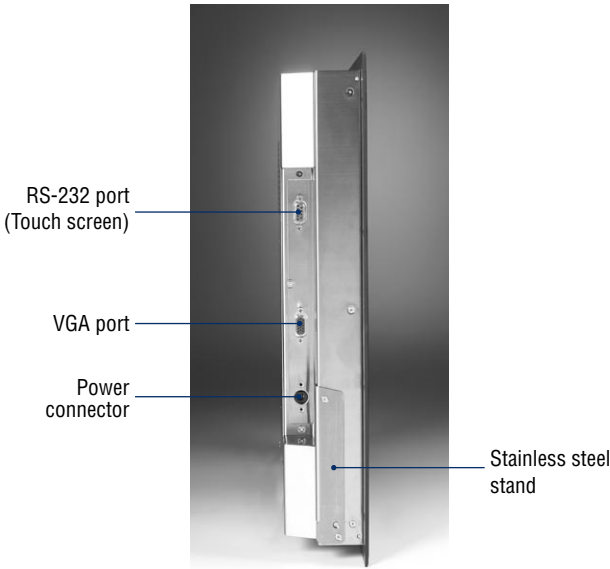
RS-232 port
(Touch screen)

VGA port

Power
connector

Stainless steel
stand

1 Software
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3 TPC
4 FPM
5 ATM & AWS
6 DA&C
7 cPCI
8 ADAM-3000
9 Motion Control
10 ICOM
11 eConnectivity
12 UNO
13 ADAM-4000
14 ADAM-5000
15 ADAM-6000
16 ADAM-8000
17 BAS

FPM-3170G

Industrial 17" Flat Panel Monitor with VGA/DVI-D/Video/S-Video Port

Features

- 17" SXGA TFT LCD with resolution up to 1280 x 1024
- Stainless steel chassis
- NEMA4/IP65-compliant aluminum front panel
- Multi-scan function supports SXGA, XGA, SVGA, VGA, text mode
- High luminance up to 250 cd/m²
- Auto-recognition of input signal
- Supports panel, wall, rack mount or VESA arm
- Multi-signal input supports VGA
- Anti-reflective screen with tempered glass
- Hard anodic coating to prevent panel abrasion and acid corrosion

Introduction

The FPM-3170G is a 17-inch color TFT LCD flat panel monitor specifically designed for industrial applications. With a viewing size as large as 17", it presents an ample display area as well as vivid and sharp images for your HMI. The FPM-3170G features multi-signal input to support VGA, DVI-D, Video and S-Video interfaces. You can thus upgrade the display without making changes to the existing system. Its on-screen display function also makes it easy to adjust the images on the screen. The whole chassis is designed in stainless steel and the front panel is made of aluminum with NEMA4/IP65 compliance.

Specifications

- **Front Panel** — Aluminum, NEMA4/IP65 compliant
- **Mounting** — Panel, Wall, rack mount or VESA arm
- **Dimensions (W x H x D)** — 482 x 354 x 68 mm (19" x 13.9" x 2.7")
- **Net Weight** — 12.7 kg (27.9 lb)
- **I/O Port** — VGA, DVI, Video, S-Video, DC power input, power switch, and RS-232 port (Touchscreen version only)
- **Control** — OSD (on screen display) control pads on the front panel
- **Power** — External 48 W power adapter, with AC 100 V ~ 230 V input and DC +12 V @ 4 A output
- **Operating Temperature** — 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature** — -20 ~ 60° C (-4 ~ 140° F)
- **Storage Humidity** — 5 ~ 95% non-condensing
- **Vibration (operating)** — 5 ~ 17 Hz, double-amplitude displacement 17 ~ 500 Hz, 1.0 G peak to peak
- **CE, FCC, BSMI, and CCC compliant**

LCD Display

- **Display Type** — SXGA TFT LCD
- **Display Size** — 17"
- **Max. Colors** — Full color (16.7 million)
- **Max. Resolution** — 1280 x 1024
- **Viewing Angle** — 170° (H), 170° (V)
- **Luminance** — 250 cd/m²
- **Storage Temperature** — -20 ~ 60° C (-4 ~ 140° F)
- **Operating Temperature** — 0 ~ 50° C (32 ~ 122° F)
- **Backlight Lifetime** — 50,000 hrs
- **Contrast Ratio** — 500:1 (typ.)

Touchscreen (Optional)

- **Type** — 8 wire, analog resistive sensor
- **Resolution** — Continuous
- **Light Transmission** — 72%
- **Controller** — RS-232 interface
- **Power Consumption** — +5 V @ 200 mA
- **OS Support** — Windows® 2000/XP
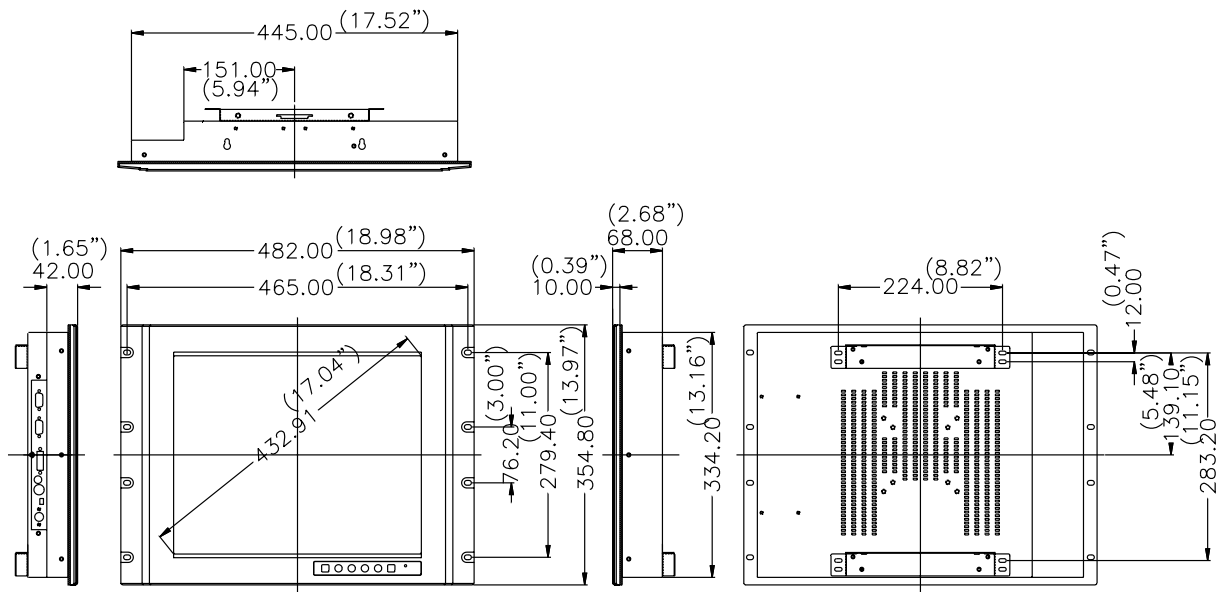- **Lifespan** — 1 million touches at a single point

Ordering Information

- **FPM-3170G** — Industrial 17" TFT LCD display with 19" Rack-Mount Bezel, VGA/ DVI/ Video interface and AC 100~230 V input 48W power adapter
- **FPM-3170G-R** — FPM-3170G with analog resistive touchscreen (RS-232 interface)

ADVANTECH | Industrial Flat Panel Monitors

Dimensions

Unit: mm

445.00 (17.52")
151.00 (5.94")

(1.65") 42.00
482.00 (18.98")
465.00 (18.31")
(2.68") 68.00
(0.39") 10.00
(13.97") 354.80
(8.82") 224.00
(0.47") 12.00
432.91 (17.04")
(3.00") 76.20
(11.00") 279.40
(13.16") 334.20
(5.48") 139.10
(11.15") 283.20

Cut-out dimension: 451 x 340 mm (17.8" x 13.4")

Side View

RS-232 port (Touch screen)
VGA port
DVI-D port
S-Video port
Power connector
Power ON/OFF

1 Software
2 IPPC
3 TPC
4 FPM
5 ATM & AWS
6 DA&C
7 cPCI
8 ADAM-3000
9 Motion Control
10 ICOM
11 eConnectivity
12 UNO
13 ADAM-4000
14 ADAM-5000
15 ADAM-6000
16 ADAM-8000
17 BAS

FPM-3150G

Industrial 15" Flat Panel Monitor with Direct-VGA Port

NEW

Features

- 15" XGA TFT LCD with resolution up to 1024 X 768
- Stainless steel chassis
- NEMA4/IP65-compliant aluminum front panel
- High luminance up to 400 cd/m²
- Auto-recognition of input signal
- Rack, panel or wallmount
- Supports VESA arm, desktop stand
- Anti-reflective screen with tempered glass
- Hard anodic coating to prevent panel abrasion and acid corrosion

Introduction

The FPM-3150G is a 15-inch color TFT LCD flat panel monitor specifically designed for industrial applications. With a viewing size as large as 15", it presents an ample display area as well as vivid and sharp images for your HMI. The FPM-3150G features Direct-VGA signal transmission, which allows a regular VGA control card to be used in your system. Users can thus upgrade the display without making changes to the existing system. Its on screen display function also allows users to adjust the images on the screen with ease. The whole chassis is stainless steel and the front panel is made of aluminum with NEMA4/IP65 compliance.

Specifications

- **Front Panel**   Aluminum, NEMA4/IP65 compliant
- **Mounting**   Panel mount, wallmount, desktop, VESA arm, or 19" rackmount with optional mounting kit
- **Dimensions (W x H x D)** 422 x 310 x 86 mm (16.6" x 12.2" x 3.4")
- **Net Weight**   6.2 kg (13.6 lb)
- **I/O Port**   VGA, DC power input, power switch, and RS-232 port (Touchscreen version only)
- **Control**   OSD (on screen display) Control Pads on the front panel
- **Power**   External 48 W power adapter, with AC 100 V ~ 230 V input and DC +12 V @ 4 A output
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature** -20 ~ 60° C (-4 ~ 140° F)
- **Storage Humidity**   5 ~ 95% non-condensing
- **Vibration (operating)** 5 ~ 17 Hz, double-amplitude displacement 17 ~ 500 Hz, 1.0 G peak to peak
- **CE, FCC, BSMI, and CCC compliant**

LCD Display

- **Display Type**   XGA TFT LCD
- **Display Size**   15"
- **Max. Colors**   Full color (16.2 (6 bit + FRC) million)
- **Max. Resolution**   1024 X 768
- **View Angle**   140° (H), 125° (V)
- **Luminance**   400 cd/m²
- **Storage Temperature** -20 ~ 60° C (-4 ~ 140° F)
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Backlight Lifetime** 50,000 hrs
- **Contrast Ratio**   350 : 1

Touchscreen (Optional)

- **Type**   8 wire, analog resistive sensor
- **Resolution**   Continuous
- **Light Transmission** 75%
- **Operating Pressure** 30 ~ 45 grams for stylus pen, contact bounce < 10 ms
- **Controller**   RS-232 interface
- **Power Consumption** +5 V @ 200 mA
- **OS Support**   Windows® 2000/XP
- **Lifespan**   1 million touches at a single point

Ordering Information

- **FPM-3150G**   Industrial flat panel monitor with 15" LCD display, VGA interface, and AC 100~230 V input 48W power adapter
- **FPM-3150G-R**   FPM-3150G with analog resistive touchscreen (RS-232 interface)
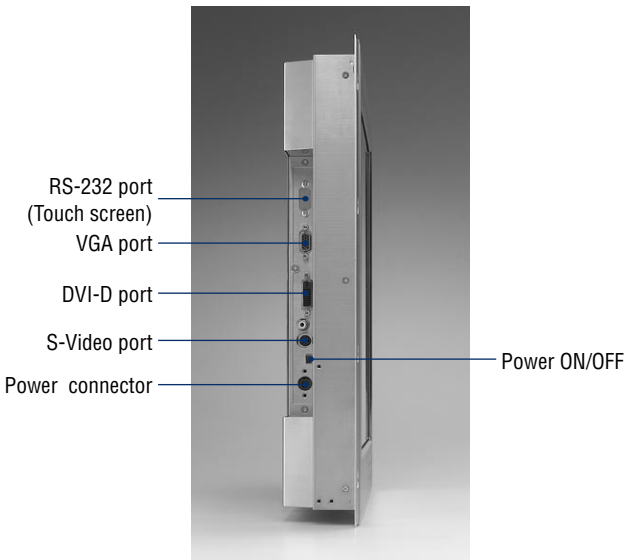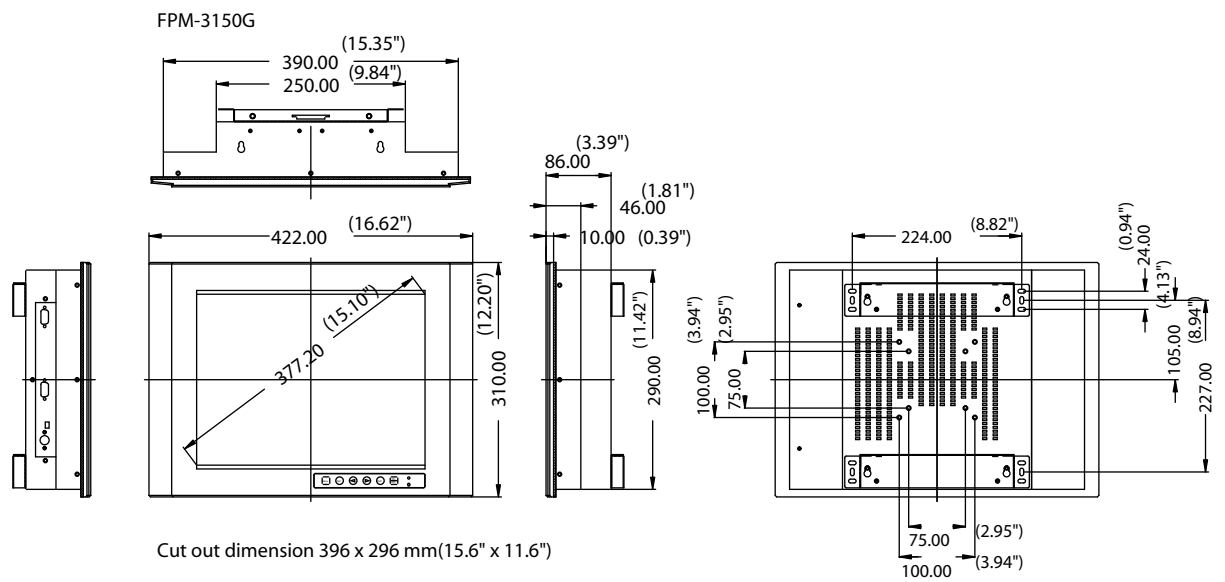- **FPM-3150 Rack-MT**   Mounting kit for 19" industrial rack

Option

- **1962315270**   Stainless steel front panel by request

Dimensions

Unit: mm

FPM-3150G

(15.35")
390.00
(9.84")
250.00

(3.39")
86.00

(1.81")
46.00
10.00 (0.39")

(16.62")
422.00

(15.10")
377.20

(12.20")
310.00

(11.42")
290.00

(3.94")
(2.95")

100.00
75.00

(8.82")
224.00

(0.94")
24.00
(4.13")
105.00

(8.94")
227.00

75.00 (2.95")
100.00 (3.94")

Cut out dimension 396 x 296 mm(15.6" x 11.6")

Side View

RS-232 port
(Touch screen)

VGA port

Power ON/OFF
Power connector

Rack Mount
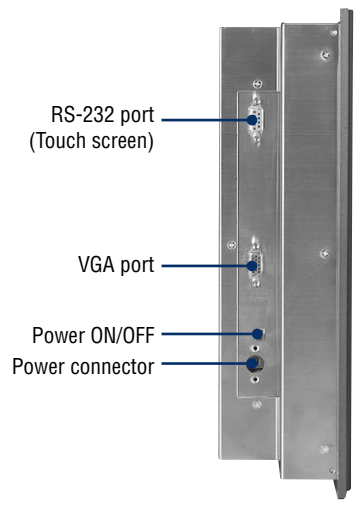
1 Software
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6 DA&C
7 cPCI
8 ADAM-3000
9 Motion Control
10 ICOM
11 eConnectivity
12 UNO
13 ADAM-4000
14 ADAM-5000
15 ADAM-6000
16 ADAM-8000
17 BAS

FPM-2150G

15" Flat Panel Monitor with Direct-VGA Port

Features

- 15" XGA TFT LCD with resolution up to 1024 x 768
- Multi-scan function supports XGA, SVGA, VGA
- Front accessible display on/off switch
- Auto-recognition of input signal
- Supports panel, rack, wall mount, desktop and VESA arm
- NEMA4/IP65 compliant Al-Mg front panel
- Anti-reflective screen with tempered glass
- Hard anodic coating to prevent panel abrasion and acid corrosion

Introduction

FPM-2150G is an industrial-grade 15" TFT LCD flat panel monitor with an Al-Mg front panel, a modern appearance, and one of the most competitive prices for 15" LCD monitors on the market. The FPM-2150G is also extremely light and thin, and provides many industrial-grade features such as a NEMA4/IP65 certified front panel, stainless steel chassis, VESA mounting flexibility, and more. The FPM-2150G is especially suitable for industrial PCs such as IPC-610 or IPC-6806. This combination leads to an extremely reliable and tough system,, ready to operate in a wide variety of industrial applications.

Specifications

- **Display Interface**   RGB (VGA)
- **Control**   OSD (on screen display) control pads on the front panel
- **Front Panel**   Al-Mg, NEMA4/IP65 compliant
- **Mounting**   Panel, rack, wall mount, desktop and VESA arm
- **Dimensions (W x H x D)** 383 x 307 x 48 mm (15" x 12" x 1.9")
- **Net Weight**   3.7 kg (8.2 lb)
- **Power**   External 48 W power adapter, AC 100 V ~ 240 V input, +12 V @ 4 A output
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature**   -20 ~ 60° C (-4 ~ 140° F)
- **Storage Humidity**   5 ~ 95 % non-condensing
- **Vibration (operating)**   5 ~ 17 Hz, double-amplitude displacement 17 ~ 500 Hz, 1.0 G peak to peak
- **CE, FCC, BSMI, CCC compliant**

Touchscreen (Optional)

- **Type**   8 wire, analog resistive
- **Resolution**   Continuous
- **Light Transmission**   75%
- **Controller**   RS-232 interface
- **Power Consumption**   +5 V @ 200 mA
- **OS support**   Windows® 2000/XP
- **Lifespan**   1 million touches at a single point

LCD Display

- **Display Type**   XGA TFT LCD
- **Display Size**   15"
- **Max. Colors**   262 K
- **Max. Resolution**   1024 x 768
- **View Angle**   120° (H), 100° (V)
- **Luminance**   350 cd/m^2
- **Storage Temperature**   -20 ~ 60° C (-4 ~ 140° F)
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Backlight Lifetime**   50,000 hrs
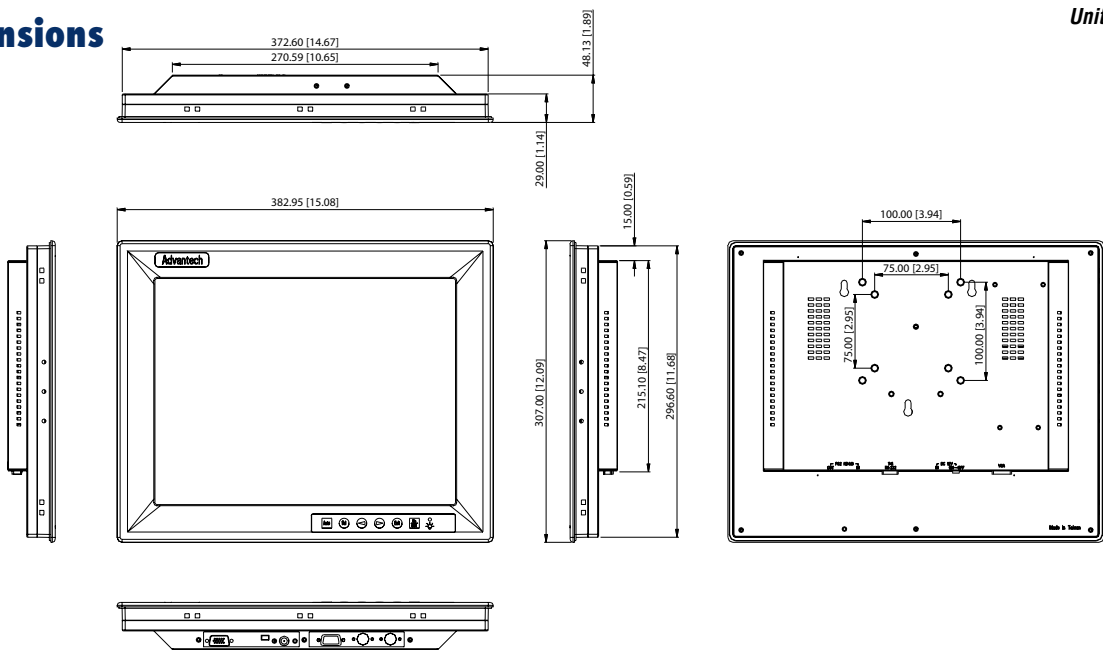- **Contrast Ratio**   400 : 1

Ordering Information

- **FPM-2150GA**   Industrial slim type 15" TFT LCD with direct VGA port, black
- **FPM-2150GA-R**   Industrial slim type 15" TFT LCD with direct VGA port, resistive touch screen, black

Dimensions

Unit: mm

372.60 [14.67]
270.59 [10.65]
48.13 [1.89]
29.00 [1.14]
382.95 [15.08]
15.00 [0.59]
307.00 [12.09]
215.10 [8.47]
296.60 [11.68]
100.00 [3.94]
75.00 [2.95]
75.00 [2.95]
100.00 [3.94]

Advantech

Made in Taiwan

Cut-out dimension: : 373.5 x 297.5 mm (14.7" x 11.71")

Rear View

KB/MS
PS2 connector
RS-232 port
(Touch screen)
Power
ON/OFF
VGA Port

Feature Details

Commercial Price but Industrial-Grade

When users want a stable system, they always search for industrial grade PCs to guarantee reliability. Many times they also want to buy an industrial-grade monitor to make the system more stable. However, the traditional high cost of these monitors has always been a concern. The FPM-2150G is specially designed to answer these needs. Although attractively priced, the FPM-2150G still provides many industrial-grade features expected by this market.
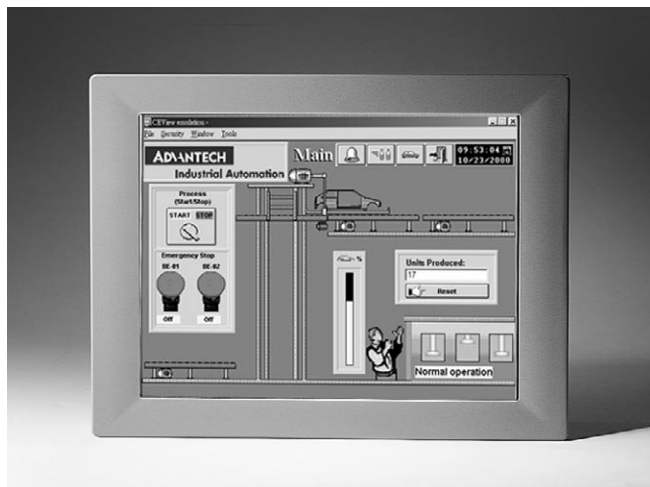
Thin and Light Design

Compared to other industrial LCD monitors, the FPM-2150G focuses on reducing overall size, thickness and weight. This gives the FPM-2150G a more attractive and functional appearance while increasing ease of integration and installation. The thickness of FPM-2150G is only 48 mm and the weight is 3.7 kg.

Industrial-Grade Functions

The chassis of the FPM-2150G is made of steel, and the front panel is of Al-Mg that is NEMA4/IP65 compliant and offers an attractive silver finish by request. The FPM-2150G offers an optional resistive touchscreen and features Direct-VGA signal transmission to allow data viewing up to 5 m away. In addition, the FPM-2150G also provides a PS/2 port to let customers operate a keyboard/mouse from the front panel. The convenient front On-Screen-Display function let users adjust the image easily.

All product specifications are subject to change without notice

Last updated : January 2005

FPM-3120

Features

- 12.1" SVGA TFT LCD with resolution up to 800 x 600
- Multi-scan function supports SVGA, VGA, text mode
- Auto-recognition of input signal
- Panel or wallmount
- Supports VESA arm, desktop stand
- NEMA4/IP65 compliant Al-Mg front panel

Introduction

The FPM-3120G is a 12-inch color TFT LCD flat panel monitor specially designed for industrial or public applications with limited installation space. The backside cut-out dimensions are the same as a traditional 10" display. With a new magnesium panel, mounting is extremely easy and fits most environments perfectly. The FPM-3120G features Direct-VGA signal transmission to allow data viewing up to 5 meters away. Its on-screen-display function let users adjust the image easily. The whole chassis is in stainless steel and the front offers NEMA4/IP65 compliant protection.

Specifications

- **Display Interface**   RGB (VGA)
- **Control**   OSD (on screen display) control pads on the rear cover
- **Front Panel**   Al-Mg, NEMA4/IP65 compliant
- **Mounting**   Panel, wallmount, desktop or VESA arm
- **Dimensions (WxHxD)**   311 x 237 x 40 mm (12.24" x 9.33" x 1.57")
- **Net Weight**   3.7 kgs (8.2 lbs)
- **Power**   External 48 W power adapter, AC 100 V ~ 230 V input, +12 V @ 4 A output
- **Operating Temperature**   0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature**   -20 ~ 60° C (-4 ~ 140° F)
- **Storage Humidity**   5 ~ 95 % non-condensing
- **Vibration (operating)**   5 ~ 17 Hz, double-amplitude displacement 17 ~ 500 Hz, 1.0 G peak to peak

- **CE, FCC, BSMI, CCC compliant**

Touchscreen (Optional)

- **Type**   8 wire, analog resistive or capacitive sensor
- **Resolution**   Continuous
- **Light Transmission**   75% (resistive) 88% (capacitive)
- **Controller**   RS-232 interface
- **Power Consumption**   +5 V @ 200 mA
- **OS Support**   Windows® 2000/XP
- **Lifespan**   1 million touches at a single point (resistive) 220 million touches (capacitive)
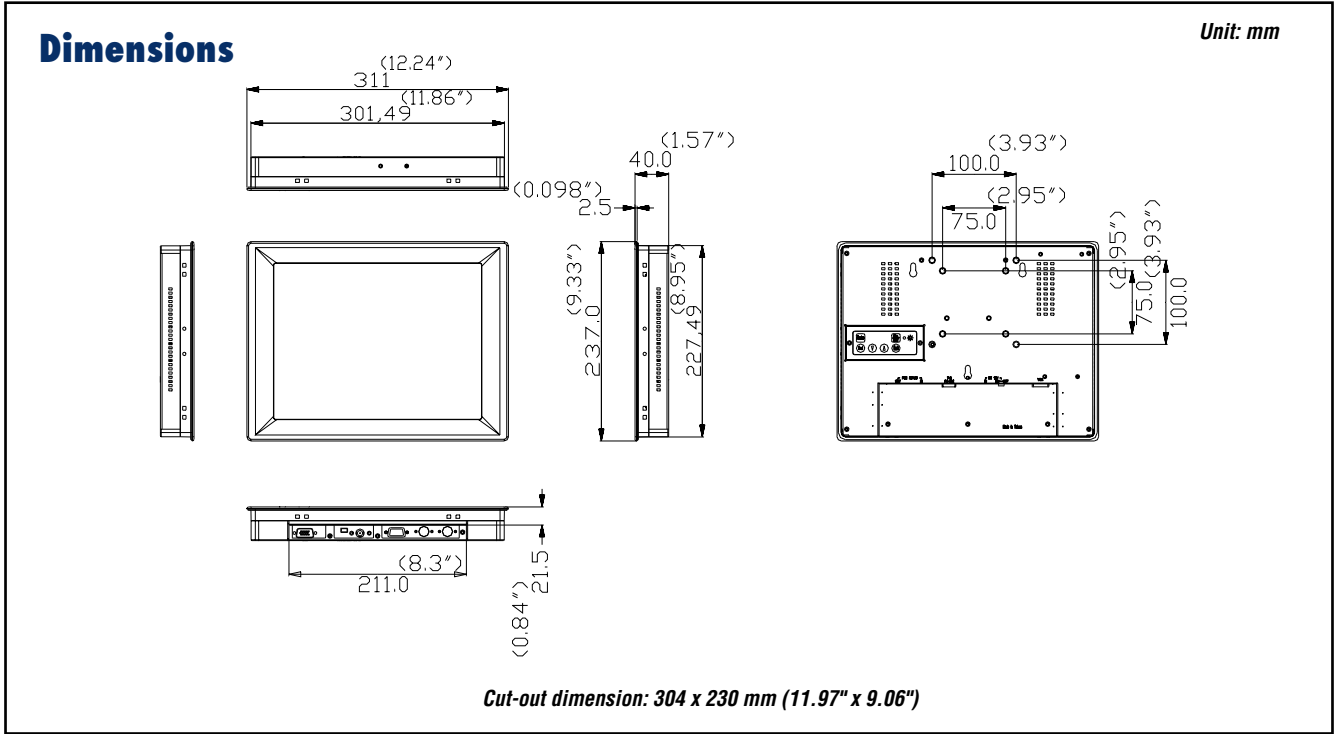
LCD Display

- **Display Type**   SVGA TFT LCD
- **Display Size**   12.1"
- **Max. Colors**   262 K
- **Max. Resolution**   800 x 600
- **View Angle**   90° (H), 40° (V)
- **Luminance**   100 cd/m² (TV) or 300 cd/m² (TH)
- **Storage Temperature**   -20 ~ 60° C (-4 ~ 140° F)
- **Operating Temperature**   0 ~ 50° C (32 ~ 122° F)
- **Backlight Lifetime**   10000 (TV) or 50000 (TH) hrs
- **Contrast Ratio**   150 :1

Ordering Information

- **FPM-3120TV**   12.1" SVGA 100 nits TFT LCD with VGA interface, AC 100 ~ 230 V 48 W power adapter
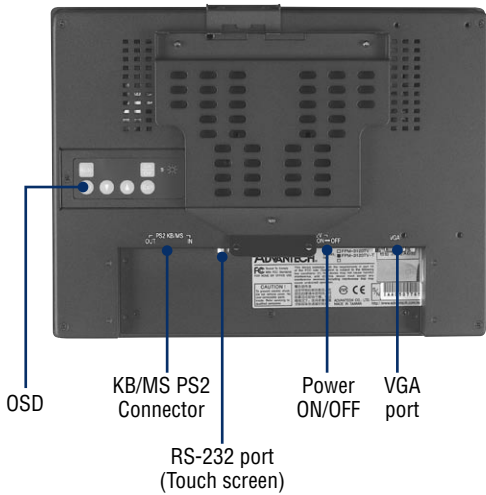- **FPM-3120TV-T**   FPM-3120TV with resistive touchscreen (RS-232 interface)
- **FPM-3120TH**   12.1" SVGA 300 nits TFT LCD with VGA interface, AC 100 ~ 230 V 48 W power adapter
- **FPM-3120TH-T**   FPM-3120TH with resistive touchscreen (RS-232 interface)
- **FPM-3120TH-TC**   FPM-3120TH with capacitive touchscreen (RS-232 interface)

Dimensions

Unit: mm

(12.24″)
311
(11.86″)
301,49

(1.57″)
40.0

(0.098″)
2.5

(9.33″)
237.0

(8.95″)
227,49

(3.93″)
100.0

(2.95″)
75.0

(2.95″)
75.0

(3.93″)
100.0

(8.3″)
211.0

(0.84″)
21.5

Cut-out dimension: 304 x 230 mm (11.97" x 9.06")

Rear View

OSD

KB/MS PS2
Connector

RS-232 port
(Touch screen)

Power
ON/OFF

VGA
port

FPM-3220

Industrial 12.1" Flat Panel Monitor with Function Membrane Key and Direct-VGA Port

Features

- 12.1" SVGA TFT LCD with resolution up to 800 X 600
- Standard RGB (VGA) interface for the display
- Display with multi-scan function supports SVGA, VGA, VGA-Text
- Front accessible display on/off switch
- OSD key on back cover
- 60 data-entry keys, one with 10 function keys and 10 programmable macro function keys
- Optional FDD and CD-ROM installation housing
- Stainless steel chassis
- NEMA4/IP65-compliant aluminum front panel
- Rack, panel or wall mount
- Supports VESA arm

Introduction

The FPM-3220 control panel series from Advantech incorporates a LCD control panel with 64 data-entry keys, 10 function keys, 10 unique programmable macro keys and a 12.1" SVGA 800 x 600 TFT LCD screen. The strong membrane key function gives the FPM-3220 powerful panel programming benefits like standard workstations, but no deep space problems. Equipped with a direct VGA interface, the FPM-3220 can connect to any PC Box over long distances without the wiring and cabling limits faced by traditional bulky workstations. Optional front FDD access design gives users the ability to easily retrieve and install data. The FPM-3220 is a perfect and cost effective control panel selection with PCs for machine builders like packaging, cutting, CNC, and production line control.

Specifications

- **Display Type** — 12.1" color TFT LCD
- **Display Resolution** — SVGA (800 x 600)
- **Display Control** — Front accessable display on/off switch and OSD (on screen display) key on back cover
- **Display Interface** — Standard analog RGB (VGA) 15 pin connector
- **Membrane Keypads** — One with 60 data-entry keys, one with 10 function keys and 10 programmable macro function keys
- **Keyboard/mouse Connector** — Two 6-pin PS/2 keyboard/mouse connectors available, One on front panel and the other on back chassis
- **Front Panel** — Aluminum, NEMA4/IP65 compliant
- **Mounting** — Rack, panel, wall mount, VESA arm
- **Power** — External 48 W power adapter, with AC 100 V ~ 230 V input and DC +12 V @ 4 A output
- **Disk Drive Housing Kit (Optional)** — Supports one slim 3.5" FDD and one slim CD-ROM
- **Operating Temperature** — 0 ~ 50° C (32 ~ 122° F)
- **Relative Humidity** — 5 ~ 85 % @ 40° C, non-condensing
- **Storage Temperature** — -20 ~ 60° C (-4 ~ 140° F)
- **Storage Humidity** — 5 ~ 95 % non-condensing
- **Dimensions (WxHxD)** — 482 x 266 x 63 mm (19.0" x 10.5" x 2.5")
- **Net Weight** — 4.2 kg (9.3 lbs)
- **CE, CCC, FCC, and BSMI compliant**

Touchscreen (Optional)

- **Type** — 8 wire, analog resistive
- **Resolution** — Continuous
- **Light Transmission** — 75%
- **Controller** — RS-232 interface
- **Power Consumption** — +5 V @ 200 mA
- **OS Support** — MS-DOS, Windows® 3.1/95/98/NT/2000
- **Lifespan** — 1 million touches at a single point

LCD Display

- **Display Type** — SVGA TFT LCD
- **Display Size** — 12.1"
- **Max. Colors** — 262 K
- **Max. Resolution** — 800 x 600
- **Viewing Angle** — 90° (H), 40° (V)
- **Luminance** — 100 cd/m²
- **Storage Temperature** — -20 ~ 60° C (-4 ~ 140° F)
- **Storage Temperature** — 0 ~ 50° C (32 ~ 122° F)
- **Backlight Lifetime** — 20,000 hrs
- **Contrast Ratio** — 150 : 1 (typ)
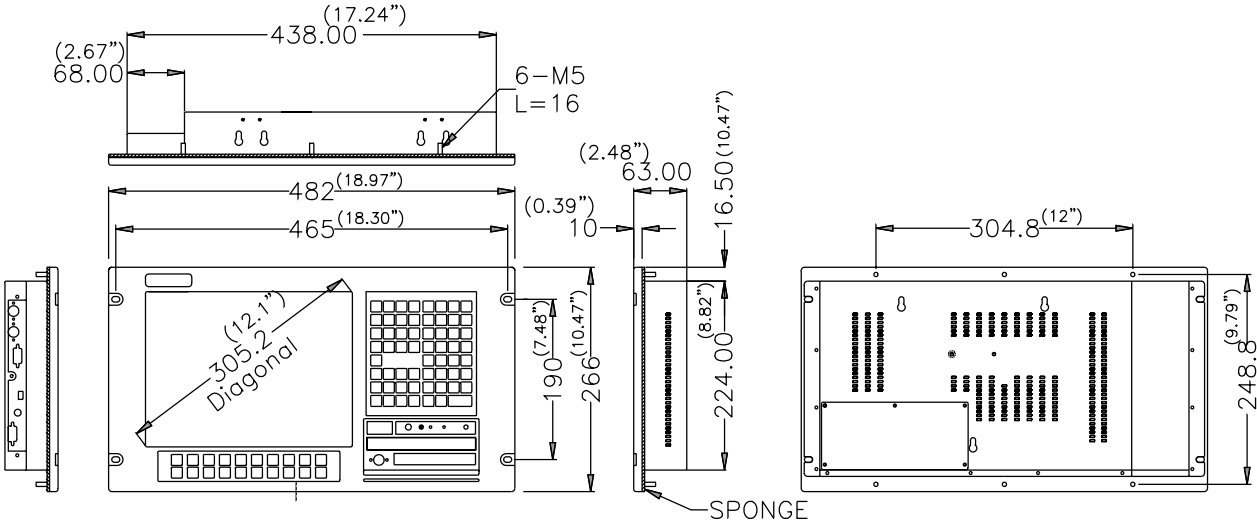
Ordering Information

- **FPM-3220T** — Industrial control panel with keypad, VGA interface 12.1" LCD display and AC 100~230 V input 48W power adapter
- **FPM-3220T-T** — FPM-3220T with analog resistive touchscreen (RS-232 interface)
- **FPM-3220 Storage** — FDD and CD-ROM housing kit for FPM-3220 (max. extended length 60 cm.)

ADVANTECH | Industrial Flat Panel Monitors

FPM-3220

1 Software
2 IPPC
3 TPC
4 FPM
5 ATM & AWS
6 DA&C
7 cPCI
8 ADAM-3000
9 Motion Control
10 ICOM
11 eConnectivity
12 UNO
13 ADAM-4000
14 ADAM-5000
15 ADAM-6000
16 ADAM-8000
17 BAS

Dimensions

Unit: mm

(17.24")
438.00

(2.67")
68.00

6-M5
L=16

(2.48")
63.00

16.50 (10.47")

482 (18.97")
465 (18.30")

(0.39")
10

304.8 (12")

(12.1")
305.2
Diagonal

(7.48")
190
266 (10.47")

(8.82")
224.00

248.8 (9.79")

SPONGE

Cut-out dimension: 444 x 230 mm (17.5" x 9.1")

Side View
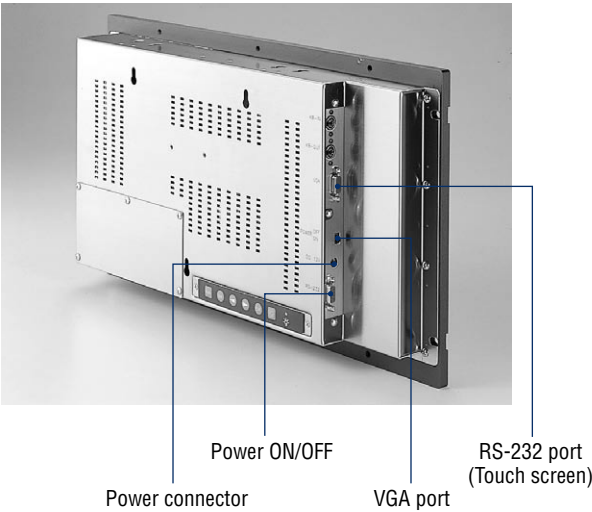
Power ON/OFF

RS-232 port
(Touch screen)

Power connector

VGA port

FPM Series Naming Rule

	Product Line					Display Size		Serial Number	LCD Type	Revision Number		Touch Type		Reserved	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Ex:

| F | P | M | - | 3 | 1 | 2 | 0 | G | | - | R | | | |

F: Flat

M: Monitor

P: Panel

3: FPM series

2: FPM series economic version

10: 10.4"
12: 12.1"
15: 15"
17: 17"
19: 19"
21: 21"

0 ~ 9

G: TFT LCD (General Brightness)

H: TFT LCD (High Brightness)

Blank: Original version

A~Z: Revision Number

Blank: No touch screen

R: Resistive touch screen

C: Capacitive touch screen
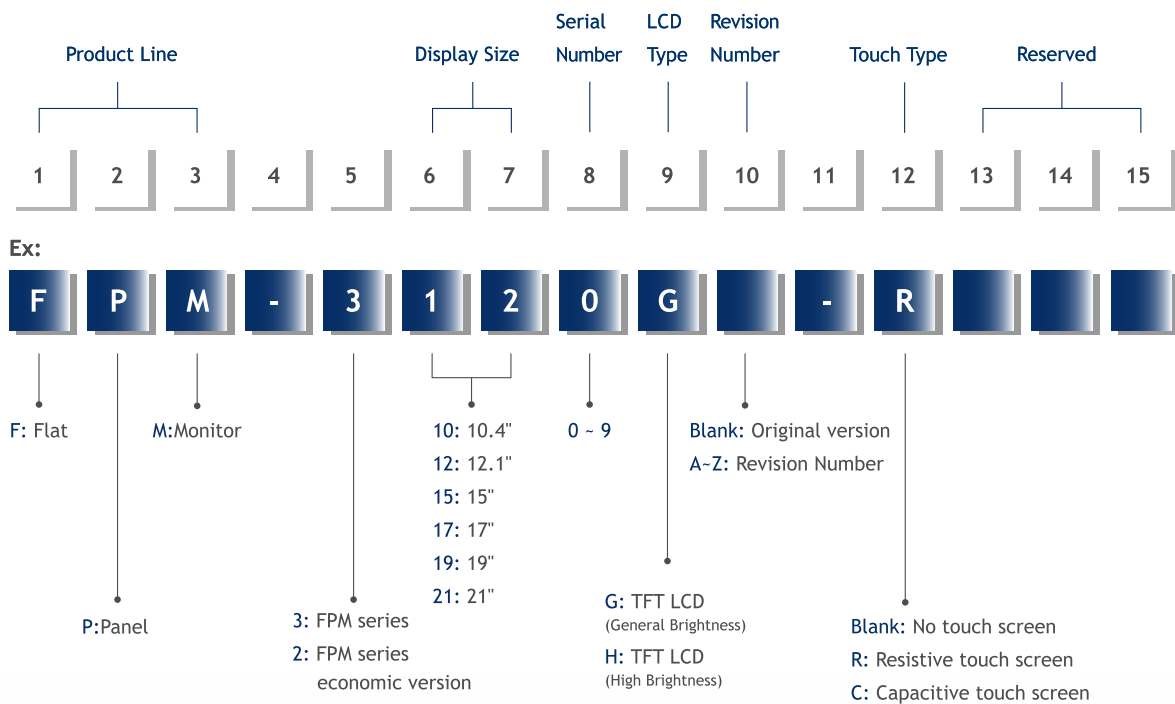
▶▶ **Example Description:** 12.1" Flat Panel Monitor with resistive touch screen

ADVANTECH **Industrial Flat Panel Monitors**