

ES-2106/2206

6.5" Open Frame and Rugged Panel Mount Monitor



Features

- 6.5" LCD supports 640 x 480 pixels and wide operating temperature (-20 ~ 70° C)
- Resistive or Capacitive touchscreen and 3 mm tempered glass options
- Versatile mounting brackets
- Modular architecture for efficient integration
- Special back cover designed for 3.5" SBCs and ARK-1000 series box computers
- Sunlight readable option
- Ultra-high brightness up to 1000 nit with LED backlight technology option
- Rugged aluminum front bezel design (ES-2206)
- VGA or LVDS interface (S-Video optional)

Introduction

The Advantech ES-2106/2206 Embedded Open Frame and Rugged Panel Mount Monitor series offer flexible options for LCD, touchscreen, signal interface and chassis mounting. The back cover has mounting holes for industry standard 3.5" SBCs and ARK-1000 series Embedded Box Computers. The series supports panel and VESA mounting, and is supplied with four versatile mounting brackets for different integration applications. The Advantech Display Solutions Selection Wizard (<http://www.advantech.com.tw/ePlatform/DS/dsw.aspx>) enables easy selection of model numbers by choosing the required options.

Specifications

- I/O Ports** 15-pin D-sub, DC power input, RS-232 port, Power Switch and OSD keys (Auto-tune, menu, decrease, increase)
- Display Input Signal** Analog RGB, 0.7 VP-P / 75 Ohm, optional LVDS
- Multi-Scan Mode** Multi-Scan Mode supports VGA, SVGA
- OSD Control** Keys: Auto-tune, menu, decrease and increase
Functions: Brightness, Contrast, Clock, Phase, Horizontal Position, Vertical Position and Sharpness
- Power** External 48 W power adapter, with AC 100 ~ 230 V input and DC +12 V @ 4 A output
- Dimensions (W x H x D)** Please refer to the product dimension diagram on next page
- Weight** ES-2106: 1.5 kg
ES-2206: 1.8 kg

Environment

- Operating Temperature** -20 ~ 70° C (-4 ~ 158° F)
- Storage Temperature** -20 ~ 80° C (-4 ~ 176° F) for standard LCDs
- Humidity** 5 ~ 95% @ 40° C, non-condensing
- Shock** 10 G peak acceleration (11 ms duration)
- EMC Approved** CE FCC

Display

Feature	Standard	NEW	NEW
		Sunlight Readable	Ultra-high Brightness
Size	6.5"	6.5"	6.5"
Resolution (pixels)	640 x 480 VGA	640 x 480 VGA	640 x 480 VGA
Number of Colors	16.2M	16.2M	16.2M
Viewing Angle (L/R/U/D)	70°/70°/60°/60°	70°/70°/60°/60°	70°/70°/60°/60°
Brightness (nit)	500	600	1000
Contrast Ratio	600:1	600:1	600:1
Response Time (ms)	25	25	25
Lamp Life (hrs)	50,000	50,000	50,000
Long-term Support	Yes	Yes	Yes
Anti-reflection	N/A	Yes	Yes

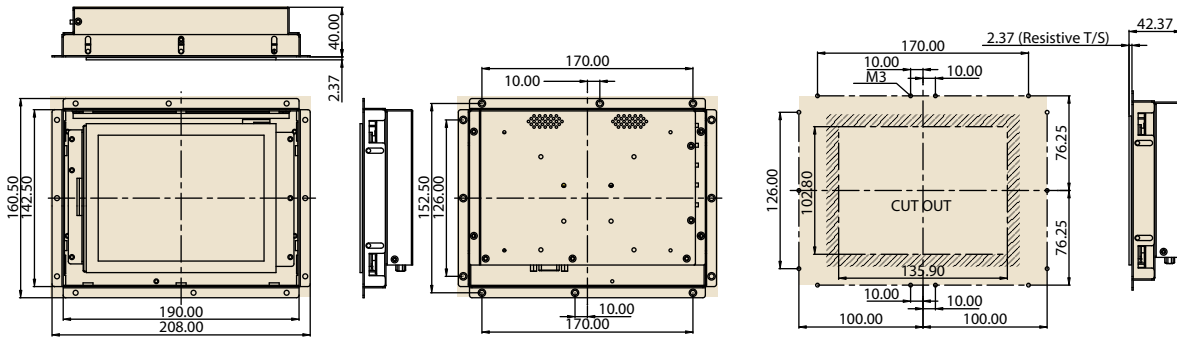
Touchscreen

Type	Analog Resistive	Capacitive	SAW	Infrared
Thickness	1.87 mm	3.18 mm	N/A	N/A
Resolution	continuous	1024 x 1024	N/A	N/A
Light Transmission	over 80%	85%	N/A	N/A
Controller Interface	RS232/USB	RS-232	N/A	N/A
Power Consumption	+5 V @ 20 mA	+5 V @ 100 mA	N/A	N/A
Touch Lifetime	36 million hrs	225 million hrs	N/A	N/A
Driver OS Support	DOS, Linux, Mac, Windows 95/98/NT/ME/CE/2000/XP			

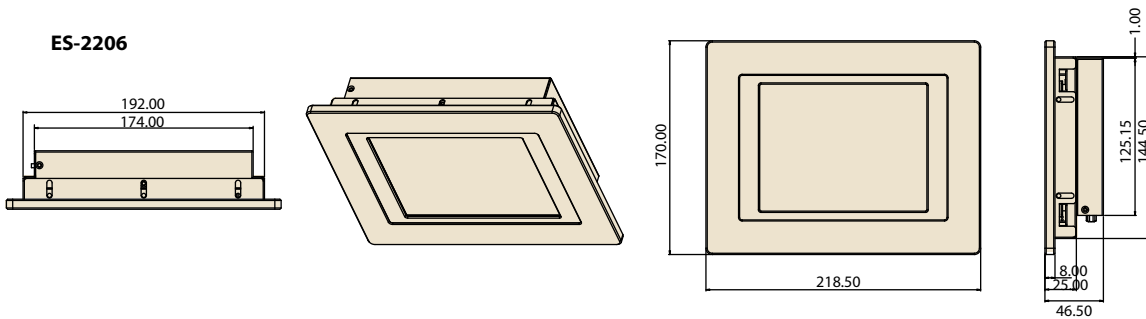
Dimensions

Unit: mm

ES-2106



ES-2206



Ordering Information

Part No.	Type	Brightness (nit)	Interface	Touchscreen	Touch Interface	Anti-reflection
ES-2106G-VVAE	Open Frame	500	VGA	Tempered Glass	N/A	N/A
ES-2106R-VVAE	Open Frame	500	VGA	4 wire Resistive	RS232	N/A
ES-2106C-VVAE	Open Frame	500	VGA	Capacitive	RS232	N/A
ES-2106R-LVAE-05	Open Frame	500	LVDS	4 wire Resistive	RS232	N/A
ES-2206R-VVAE	Rugged Panel Mount	500	VGA	4 wire Resistive	RS232	N/A
ES-2206C-VVA-SRE	Rugged Panel Mount	600	VGA	Capacitive	RS232	Yes
ES-2106C-VVA-HE	Open Frame	1000	VGA	Capacitive	RS232	Yes

Notes:

- (1) Capacitive, SAW and Infrared touch panels are recommended for use with sunlight readable outdoor solutions.
- (2) The above list shows major part numbers for your reference. Please refer to the Advantech Display Solutions Selection Wizard (<http://www.advantech.com.tw/ePlatform/DS/dsw.aspx>) or CTOS to find part numbers and order your desired combination of LCD, touchscreen and signal interface.
- (3) Please use Display Solutions DTOS for special requirements.