

ES-3112

12" Embedded LCD Touch Panel



CE FCC 

Features

- Open-frame architecture for embedded LCD touch panel
- 12" SVGA TFT LCD display supports 800 x 600 pixels
- Supports full function OSD control keys to optimize the display
- Multiple touchscreen options for different application
- Special design for ES-200/300 series to attach
- Supports rear and panel mount
- Available for resistive / capacitive / SAW and infrared touchscreens
- Available for direct sunlight readable LCD monitor with vandal proof IR T/S
- Option for aluminum front bezel

Introduction

This embedded LCD monitor is equipped with a touchscreen input device that is mainly used for kiosk applications; it is designed without a faceplate for convenient embedding in customers' housing. Advantech's ES-3112 series is a 12" LCD touch panel, adaptable with different touchscreens, such as capacitive, resistive, SAW (Surface Acoustic Wave) infrared or strengthened glass. Its mechanical enclosure is made of strengthened steel to withstand harsh environments.

Specifications

- **I/O Ports** 15-pin D-Sub, DC power input, RS-232 port, Power switch
- **Display Input Signal** Analog RGB, 0.7 VP-P/75 Ohm
- **Multi-Scan Mode** Supports VGA/SVGA
- **Refresh Rates** FH : 30 ~ 60 KHz, FV : 56 ~ 75 Hz
- **OSD Control** Keys: Provide auto-tune/menu/decrease/increase
Function: Supports Brightness/Contrast/Clock/Phase/
Horizontal Position/Vertical Position/Sharpness
- **Power** External 45 W power adaptor, with AC 100 V~ 240 V @
1.2 A input and DC +12 V @ 3.75 A output
- **Dimensions (W x H x D)** 390 x 297 x 49 mm
- **Weight** 3.4 kg

Environment

- **Operating Temperature** 0 ~ 45° C
- **Storage Temperature** -20 ~ 60° C
- **Humidity** 5 ~ 95% @ 40° C, non-condensing
- **Shock** 10 G peak acceleration (11 msec Duration)
- **EMC Approved** CE FCC
- **Safety Approved** UL

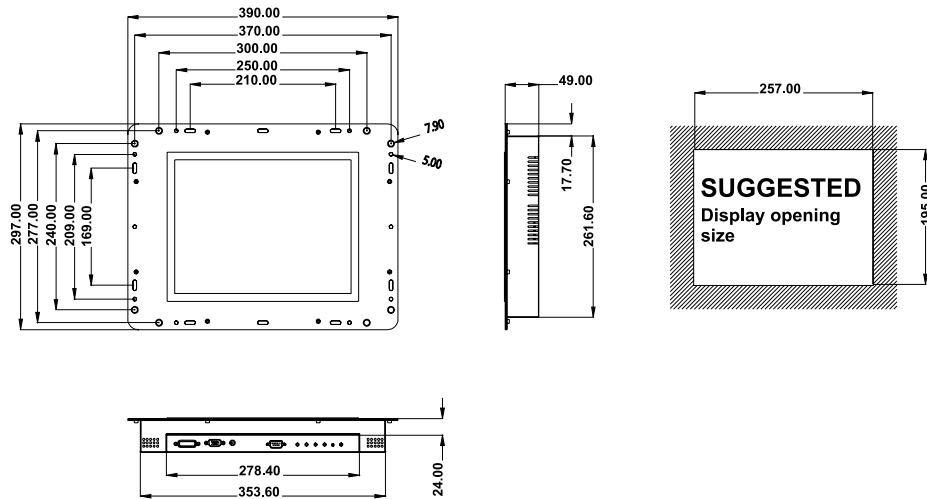
Display

- **LCD Type** TFT LCD
- **Display Size** 12"
- **Panel Resolution** SVGA 800 x 600
- **Display Color** 262144 colors
- **Pixel pitch (mm)** 0.3075 x 0.3075
- **Brightness** 350 cd/m²
- **Response Time** 40 ms (typ)
- **Contrast Rate** 500:1 (typ)
- **Viewing Angle (L/R/U/D)** 60°/60°/40°/60°
- **Backlight Lifetime** 25,000 hrs

Touchscreen

Type	Analog Resistive	Capacitive	Surface Acoustic Wave	Infrared
Thickness	3 mm	3 mm	3 mm	8 mm (3 mm for temper glass)
Resolution	Continuous	1024 x 1024	4096 x 4096	4096 x 4096
Light Transmission	75%	85%	91%	91%
Controller Interface	RS-232	RS-232	RS-232	RS-232
Power Consumption	+5 V @ 200 mA	+5 V @ 100 mA	+5 V @ 60 mA	+5 V @ 150 mA
Touch Lifetime	35 million	225 million	50 million	MTBF 100,000 hours
Driver OS Support	DOS, Windows 95/98/NT/ME/2000/XP			

Board Diagram



Ordering Information

- **ES-3112G-XA** 12" embedded LCD touchscreen with 3 mm anti-glare reinforced glass
- **ES-3112R-XA** 12" embedded LCD with 3 mm resistive touchscreen
- **ES-3112C-XA** 12" embedded LCD with 3 mm capacitive touchscreen
- **ES-3112S-XA** 12" embedded LCD with 3 mm SAW touchscreen
- **ES-3112V-XA** 12.1" embedded LCD monitor with vandal proof infrared T/S (meets UL 60950 /UL-1950)
- **ES-3112V-SR** 12.1" embedded sunlight readable LCD monitor with infrared vandal resistance T/S