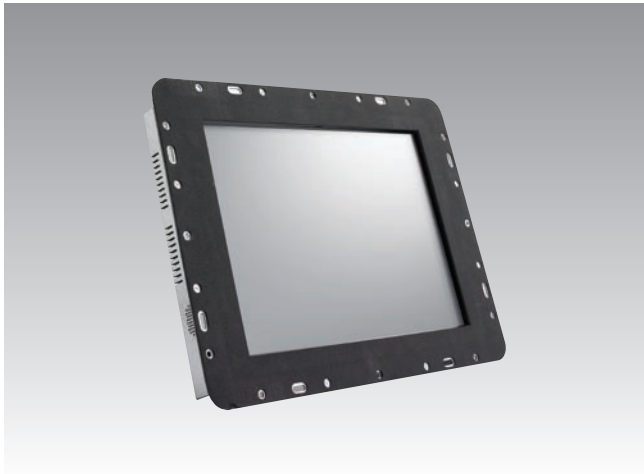


# ES-3112

## 12.1" Industrial LCD Monitor



### Features

- 12.1" LCD supports 800 x 600 or 1024 x 768 pixels and wide operating temperature (-20 ~ 70° C)
- Multiple touchscreen options for different applications
- Versatile mounting brackets
- Open-frame architecture with Embedded LCD touch panel
- Supports full-function OSD control keys to optimize the display
- Sunlight readable (optional)
- Ultra-high brightness up to 1000 cd/m2 (optional)

### Introduction

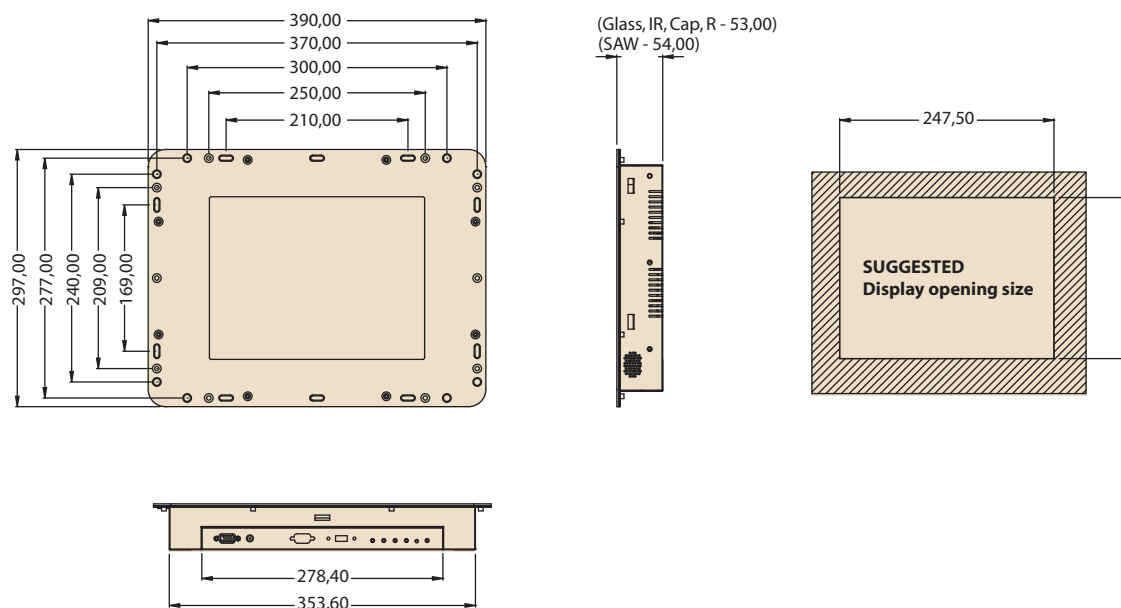
The Advantech Industrial Open Frame Monitor series is equipped with a touchscreen input device, mainly for use in self-service Kiosk applications. The ES-3112 is a 12.1" LCD monitor, adaptable to different touchscreens: Resistive, Capacitive, SAW and Infrared or tempered glass and vandal proof glass. Its mechanical enclosure is made of strengthened steel to withstand harsh environments.

### Specifications

|                  |                         |                                                                                                                                                      |                 |                   |                  |
|------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|------------------|
| Processor System | 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<br>Function: Supports Brightness/Contrast/Clock/Phase/Horizontal Position/Vertical Position/Sharpness |                 |                   |                  |
|                  | Power                   | External 45 W power adaptor, with AC 100 ~ 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 (15.35" x 11.69" x 1.93")                                                                                                          |                 |                   |                  |
| Environment      | Weight                  | 3.4 kg / 7.5 lb                                                                                                                                      |                 |                   |                  |
|                  | Operating Temperature   | -10 ~ 65° C (14 ~ 149° F)                                                                                                                            |                 |                   |                  |
|                  | Storage Temperature     | -30 ~ 70° C (-22 ~ 158° F) for standard LCDs                                                                                                         |                 |                   |                  |
|                  | Humidity                | 5 ~ 95% @ 40° C, non-condensing                                                                                                                      |                 |                   |                  |
|                  | Shock                   | 10 G peak acceleration (11 ms duration)                                                                                                              |                 |                   |                  |
|                  | EMC Approved            | CE, FCC                                                                                                                                              |                 |                   |                  |
|                  | Safety Approved         | UL                                                                                                                                                   |                 |                   |                  |
| Display          | Feature                 | Standard                                                                                                                                             |                 | Sunlight Readable |                  |
|                  | Size                    | 12.1"                                                                                                                                                |                 | 12.1"             |                  |
|                  | Resolution (pixels)     | 800 x 600 SVGA/ 1024 x 768 XGA                                                                                                                       |                 | 800 x 600 SVGA    |                  |
|                  | Number of Colors        | 262 K                                                                                                                                                |                 | 262 K             |                  |
|                  | Viewing Angle (L/R/U/D) | 70°/70°/50°/60°; 65°/65°/75°/45°                                                                                                                     |                 | 70°/70°/50°/60°   |                  |
|                  | Brightness (cd/m2)      | 400 / 320                                                                                                                                            |                 | 400               |                  |
|                  | Contrast Ratio          | 500:1 / 550:1                                                                                                                                        |                 | 500:1             |                  |
|                  | Response Time (ms)      | 35 / 6                                                                                                                                               |                 | 35                |                  |
|                  | Lamp Life (hrs)         | 50,000                                                                                                                                               |                 | 50,000            |                  |
|                  | Long-term Support       | Yes                                                                                                                                                  |                 | Yes               |                  |
|                  | Transflective           | N/A                                                                                                                                                  |                 | Yes               |                  |
| Touchscreen      | Type                    | Analog Resistive                                                                                                                                     | Capacitive      | SAW               | Infrared         |
|                  | Thickness               | 2.67 mm                                                                                                                                              | 3.18 mm         | 2.6 mm            | 3.0 mm           |
|                  | Resolution              | 4096 x 4096                                                                                                                                          | 1024 x 1024     | 4096 x 4096       | 4096 x 4096      |
|                  | Light Transmission      | 80%                                                                                                                                                  | 85%             | 92%               | 92%              |
|                  | Controller Interface    | RS-232/USB                                                                                                                                           | RS-232          | RS-232/USB        | RS-232/USB       |
|                  | Power Consumption       | +5 V @ 200 mA                                                                                                                                        | +5 V @ 100 mA   | +5 V @ 75 mA      | +5 V @ 150 mA    |
|                  | Durability (Touches)    | 35 million hrs                                                                                                                                       | 225 million hrs | 50 million hrs    | MTBF 100,000 hrs |
|                  | Driver OS Support       | DOS, Linux, Mac, Windows 95/98/NT/ME/CE/2000/XP                                                                                                      |                 |                   |                  |

## Dimensions

Unit: mm



## Ordering Information

| P/N              | Type       | Brightness (cd/m2) | Interface | Touchscreen      | Touch Interface | Transflective |
|------------------|------------|--------------------|-----------|------------------|-----------------|---------------|
| ES-3112G-VSAE    | Open Frame | 400                | VGA       | Tempered Glass   | N/A             | N/A           |
| ES-3112R-VSAE    | Open Frame | 400                | VGA       | 5-Wire Resistive | RS-232/USB      | N/A           |
| ES-3112C-VSAE    | Open Frame | 400                | VGA       | Capacitive       | RS-232          | N/A           |
| ES-3112S-VSAE    | Open Frame | 400                | VGA       | SAW              | RS-232/USB      | N/A           |
| ES-3112V-VSAE    | Open Frame | 400                | VGA       | Infrared         | RS-232/USB      | N/A           |
| ES-3112R-VXME    | Open Frame | 350                | VGA       | 5-Wire Resistive | RS-232/USB      | N/A           |
| ES-3112C-VSS-SRE | Open Frame | 400                | VGA       | Capacitive       | RS-232          | Yes           |

### Notes

- 1.) Capacitive, SAW and Infrared touch panels are recommended for applications requiring sunlight readable outdoor solutions.
- 2.) The list above is of major part numbers for your reference. Other combinations of LCD, touchscreen and signal interface features can be found in the Advantech Display Solutions. The Selection Wizard (<http://www.advantech.com.tw/ePlatform/DS/DisplaySolution.asp>) or CTOS services can be used to get your demand configuration and part numbers to us for ordering.
- 3.) For special requests, we welcome you to use the Display Solution DTOS service.

## Power Code Options

| Part Name  | Description                                          |
|------------|------------------------------------------------------|
| 1702002600 | Power Cable UL/GSA (USA) 180 cm                      |
| 1702031801 | Power Cable (UK) 5A-Fuse 180 cm                      |
| 1702002605 | Power Cable 220 V EUROPEAN 250 V/6 A (FRANCE) 180 cm |