

12.1" LCD Flat Panel Module as a 14" Color CRT Replacement Industrial Monitor



Model FP12B4G0-00

This Omni Vision 12.1" industrial LCD module drops into sturdy industrial 14" color CRT monitor open frame, metal chassis applications. It is designed to replace the 14" color CRT and its associated electronics while maintaining high-resolution image requirements of wide-angle viewing and bright light output. This module operates as a standard plug-n-play monitor in an industrial equipment environment.

If your system requires a monitor with the following parameters

- AC power between 100 and 264 VAC at 50 or 60 Hertz
- AC power interface is standard IEC 320 connector
- Signal inputs of -
 - VGA - horizontal frequency 31.468 kHz, vertical frequency 59.941 Hz
horizontal frequency 31.468 kHz, vertical frequency 70.087 Hz
 - VESA VGA - horizontal frequency 37.500 kHz, vertical frequency 75 Hz
 - SVGA - horizontal frequency 35.156 kHz, vertical frequency 56.25 Hz
 - VESA SVGA - horizontal frequency 37.879 kHz, vertical frequency 60.317 Hz
 - NEC VGA - horizontal frequency 24.823 kHz, vertical frequency 56.416 Hz
 - CGA - horizontal frequency 15.70 kHz, vertical frequency 59.924 Hz
 - EGA - horizontal frequency 21.851 kHz, vertical frequency 59.701 Hz
- Signal interface is standard analog 15-pin HD "D-sub" connector
- Existing monitor has standard 14" color CRT installed
- CRT needs to fit bezel to match contours
- Need something to match CRT mounting holes



If all these requirements are met, than it's easy to replace CRT and electronics with this module

- Power down
- Remove signal and power cables
- Remove 14" color CRT
- Remove drive (main board) electronics
- Mount the replacement module into existing CRT mounting holes
- Connect power and signal
- Turn on the power

Display Specifications:

	Original 14" color CRT	New 12.1" color LCD
Diagonal	335 mm	310 mm
Usable viewing area	252 x 190 mm	246 x 184.5 mm
Dot pitch	0.28 mm	0.3075 x 0.3075 mm
CRT curvature	575 mm	0 mm (flat)
Max resolution	1024 x 768 @ 60 Hz	800 x 600 @ 60 Hz
Horizontal frequency	31 to 48 kHz	15.7 to 54 kHz
Vertical frequency	50 to 90 Hz	56 to 85 Hz
Brightness (full white)	32 FL (109 nits)	300 nits (87 FL)
Contrast ratio	Not defined	500:1

General Specifications:

- Sturdy metal chassis with mounting holes equivalent to 14" color CRT mounting hole pattern
- Plastic bezel with equivalent 14" color CRT radius of curvature
- User service controls of brightness, contrast, auto set up, etc
- User service controls accessed in rear
- Temperature — Operating from 0 to +55 °C
— Storage from -20 to +65 °C
- Input Signal Connector - 15 pin mini D-sub
- AC Power Range - 90 VAC to 264 VAC (47 Hz to 63 Hz)
- Agency Compliance - UL (UR, cUR) and CB

For mechanical details see drawing 94-510