



HE-I400

Harsh Environment LCD Controller

Digital View is the leading supplier of LCD interface solutions for application specific OEM display products. The HE range of COTS controllers are designed to aid in compliance of the strict standards required for Harsh Environment applications. Featuring wide-tolerance power supplies ($\pm 25\%$), low mass tantalum capacitors for maximum vibration and shock tolerance, conformal coating, laboratory certified** operating temperature range from -40°C to $+80^{\circ}\text{C}$, plus calculated MTBF in excess of 200K hours.

The HE-I400 is a small footprint, highly integrated controller with both DVI and ARGB inputs. Capable of supporting 4:3 format panels at up to SXGA and 16:9 panels up to WXGA, the HE-I400 provides support for both LVDS and TTL panels.

Panel Connectivity

TFT:

- 1366x768
- 1280x768
- 800x600
- 1280x1024
- 1024x768
- 640x480

Input

Analog RGB: • 60Hz at SXGA, WXGA, XGA, SVGA, VGA

DVI: • 60Hz at SXGA, WXGA, XGA, SVGA, VGA

With auto detect of Digital Separate Sync, Sync-On-Green & Composite Sync. Auto detects VGA-SXGA, interlaced & non-interlaced.

Reliability

Calculated Mean Time Between Failures - In excess of 200,000 hours. Warranty - 3 years.

Features

Colors: Up to 8 bit per color, ie 16.7 million colors.

Functions: On Screen Display (OSD) menu.

Function Controls: External buttons, Serial Port control.

Image Scaling: Up scaling to fit input to panel resolution.

Image Control: Brightness, Contrast, RGB adjust, Color temperature.

Other Features: OSD position, timeout, factory reset, input source select.

Dimensions: 107mm x 92mm (4.2" x 3.6")

Form Factor: DV standard & mounting holes.

Power Requirements: +12VDC $\pm 25\%$, 10W (controller only)

Panel Power: Supports 3.3V, 5V & 12V panels.

Panel Signal: TTL & LVDS.

Inverter Support: DPMS, Analog or PWM brightness control, serial port controller brightness.

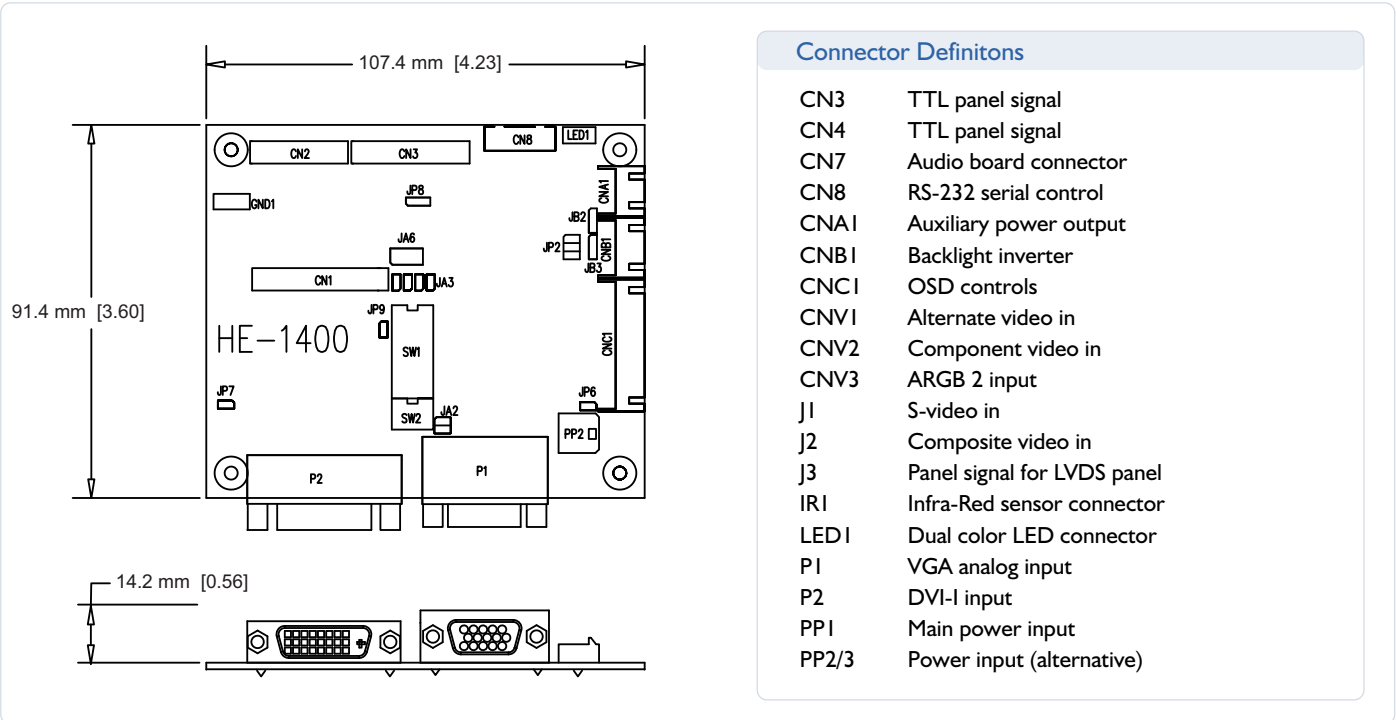
Plug & Play: DDC 1,2/b compatible

Status Indicator: Dual color LED support.

Operating Temperature: -40°C to $+80^{\circ}\text{C}$ **

Storage Temperature: -40°C to 85°C

Coating: Silicone resin conformal coating. (MOD) DEF-STAN 59/47 Issue 4 & UL QMJU2 compliant



Connector Definitions

CN3	TTL panel signal
CN4	TTL panel signal
CN7	Audio board connector
CN8	RS-232 serial control
CNA1	Auxiliary power output
CNB1	Backlight inverter
CNC1	OSD controls
CNV1	Alternate video in
CNV2	Component video in
CNV3	ARGB 2 input
J1	S-video in
J2	Composite video in
J3	Panel signal for LVDS panel
IR1	Infra-Red sensor connector
LED1	Dual color LED connector
P1	VGA analog input
P2	DVI-I input
PP1	Main power input
PP2/3	Power input (alternative)

Accessories

416940020-3	Audio Amplifier
416040010-3	Inverter Interface board
Kit 60109	OSD Button Board
Kit 60120	OSD Membrane Kit
Kit 60124	OSD Membrane Kit
5590001-00	IR remote control

*See accessories page on website for details.

** Laboratory certification report available at http://www.digitalview.com/support/downloads/HE-I400_report.pdf. Overall suitability for usage in critical applications must be independently tested and verified by the user.

Available Documentation

Instruction Manual	Certified Laboratory test results
Serial Port Programming Manual	EMI profile
Firmware Upgrade Manual	Revision control documentation
MTBF Analysis	Schematic diagrams (Subject to NDA)
Serial Port Programming Manual	.DWG Drawings
EDID tables	

OEM Programs

Digital View offers a wide range of customization for OEM customers. Services range from unique part number and configuration control, through custom layouts and features.

Digital View offers managed product lifecycles with extended product lifetime options and EOL planning. US manufacturing is available on all Digital View products.

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