DIGITAL**VIEW**®

HE-1400v2
LCD Controller for Industrial Monitors

Based on the ALR-1400v2 and as a successor to the HE-1400 the HE-1400v2 is a small footprint - designed for industrial LCD monitors and display applications in harsher environments.

Key Features:
- » Up to 1440 x 900 input / Up to 1440 x 900 LCD panels
- » DVI, VGA (ARGB)
- » LVDS and TTL panel connection @60Hz
- » Auto EDID setting (*new feature*)
- » Low latency (input to output)
- » Custom splash-screen option
- » RS-232 (USB*) for commands & control
- » HE specific: Conformal coating, extended temperature rating.

- » Part number: 4175801xx-3

Panel Connectivity

TTL (dual channel):	up to 1440 x 900 @60Hz
LVDS (dual channel):	up to 1440 x 900 @60Hz
Panel resolutions:	Supports common panel resolutions and timings from 640 x 480 up to 1440 x 900 selected by dip switch. Customization available for other resolutions.

Input / Sources

DVI: 60Hz VESA standard inputs VGA to SXGA
Widescreen modes: 1280/1360, 1366/1368
CVT modes - coming soon

VGA (ARGB):   60Hz VESA standard inputs VGA to SXGA
Widescreen modes: 1280/1360, 1366/1368
CVT modes - coming soon

EDID note: The EDID preferred timing data is automatically set by reference to the LCD panel resolution settings (VESA data). Custom EDID data programming is available as an OEM option.

Reliability

Calculated MTBF:	In excess of 100,000 hours
Warranty:	3 years

Features

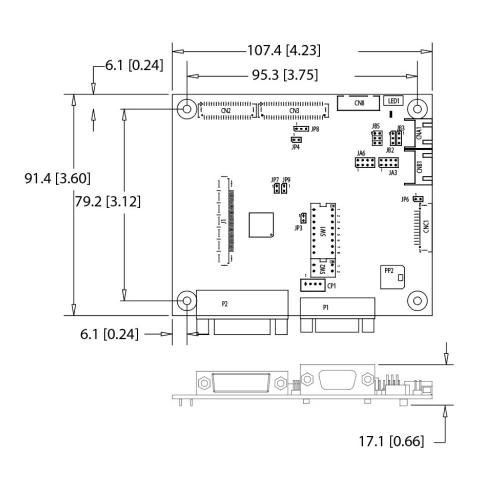|	
Colors:	Up to 8 bit per color, ie 16.7m colors
Function Display:	On Screen Display (OSD) menu
Function Controls:	External buttons, Serial Port (USB*) commands
Image Scaling:	Up scaling to fit input to panel resolution
Image Control:	Brightness, Contrast, Sharpness, Clock, Phase, Color temperature, Image position, Gamma
Other Features:	Auto Image Adjust, Color Auto Adjust, Auto source seek, OSD timeout, OSD menu position, OSD menu transparency, Input select source, Aspect ratio, Backlight brightness adjustment, Language select
Power:	+12VDC / +24VDC ±5%, 2.5W (controller only)
Panel Power:	Supports 3.3V, 5V, 12V & 18V panels
Inverter Support:	PWM, D/A DPMS Enable pin (3.3V or 5V)
Conformal Coating:	HumiSeal IB73, acrylic, spray application
Plug & Play:	DDC 1,2/b compatible
Status Indicator:	Dual color LED support
Dimensions:	107mm x 92mm (4.2" x 3.6")
Operating Temp:	-40ºC to +80ºC**

Custom Splash-screen: The HE-1400v2 supports a custom splash-screen when powering on. This requires custom firmware.

Firmware Update: The firmware version of the HE-1400v2 can be updated using a dedicated USB programming interface available from Digital View, this connects to the DVI input on the HE-1400v2 therefore enabling firmware upgrade on assembled monitors.

*requires a converter for USB to RS-232, not included
**Project & environment suitability must be verified by the user.

HE-1400v2 LCD Controller for Industrial Monitors

Mechanical Drawing

107.4 [4.23]
95.3 [3.75]
6.1 [0.24]
91.4 [3.60]
79.2 [3.12]
6.1 [0.24]
17.1 [0.66]

Connector Definitions

J1	LVDS Panel Signal
CN2	TTL Panel Signal
CN3	TTL Panel Signal
CN8	Serial control
CNA1	Auxiliary Power Output
CNB1	Backlight Control connector
CNC1	OSD Function Controls
LED1	Dual color status LED connector
P1	VGA input
P2	DVI-D input
PP2	Main Input Power

Ordering Options

HE-1400v2   **P/N: 4175801xx-3**

OSD digital button board	Kit 67110-3
OSD membrane kit - Vertical	Kit 67135-3
OSD membrane kit - Horizontal	Kit 67134-3
Inverter interface	P/N 416040010-3

Drawings

» 2D (dwg)
» 3D (SLDPRT and IGS)

Download at:

http://www.digitalview.com/products/
he-1400v2-lcd-controller

Available Resources

» Instruction manual
» Revision control documentation
» Firmware upgrade manual**
» Mechanical drawings
» Custom engineering: Splash screen,
   OSD menu, coatings, & more...

** Available on request

Controller Solution Generator
http://www.digitalview.com/csg

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