COTS Rugged Industrial-Grade 6RU Wide-Screen LCD Monitor

CHASSIS PLANS®
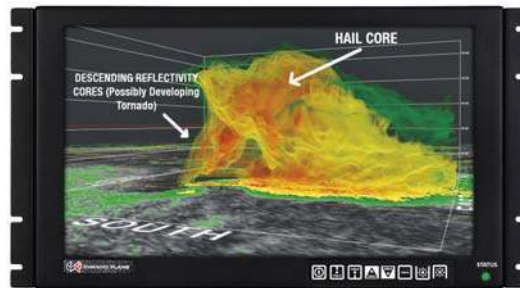*Systems Engineered to Perform®*

CPI2-173

17.3 Wide-Screen High Definition HD/SDI

*Assembled in the USA
ISO 9001:2008 Certified
ITAR Registered*

The CPI2-173 provides a high-performance, rack mount 6U TFT wide-screen LCD display with 1920 x 1080 resolution. Offered is a standard brightness or daylight viewable hi-bright LCD. Various LCD enhancements such as an oleophobic anti-reflective and/or ITO EMI bonded overlay and a RhinoTouch touch screen can be specified. Electrical components are selected for their inherent ruggedness and revision control, and there is locking stainless hardware throughout.

Specifications for our standard products can always be customized to fit your unique application requirements.

Applications

- Airborne Operations
- Land-based Operations
- Seaborne Operations
- Telemetry
- Diagnostics
- Simulation
- C4ISR
- Communications
- Imaging
- Persistent Surveillance
- UAVs
- Automation
- Severe Environment Operations

Features

- Lightweight aluminum construction
- Long-life LCDs
- Optional resistive touch screen

Harsh Environments

Designed to meet or exceed the below environmental specifications.

ALTITUDE
10,000 ft Operational, 30,000 ft Storage

HIGH TEMPERATURE
70°C Operational, 70°C Storage

LOW TEMPERATURE
0°C Operational, -20°C Storage

HUMIDITY
5-95%, Non-condensing

BLOWING SAND AND DUST
Dust: 6 hours at 1750 ft/min air velocity
Sand: 90 min at 40 miles/hr air velocity

TRANSPORT VIBRATION
(front surface, bonded glass only)
2G RMS 5-500Hz

BENCH HANDLING SHOCK
20G @ 11ms Duration

CPX Panel Specifications

DIMENSIONS

19" X 10.47" X 3.2"   (482.6mm X 265.9mm X 81.3mm)

ENCLOSURE DETAILS

Construction

High-strength 5052-H32 aircraft-grade aluminum

Powdercoating

Black per MIL-PRF-24712, Type IV, Class 3, Cardinal C214-BK110 polyester semi-gloss, fine texture

Plating

Chem-Film per MIL-C-5541F, Class 1A

Mounting Options

Rack mounting, panel mounting, VESA 100

OPTIONAL DISPLAY ENHANCEMENTS

Safety Glass

Using 3mm smudge-resistant AR coated soda lime float glass, bonded to the LCD panel with optical index matched adhesive

EMI Protection

Using a laminate of 1.1mm smudge-resistant AR coated soda lime float glass panel and a 1.1 mm ITO coated glass panel ($<12.5\Omega$/sq) grounded via a copper buss bar, bonded to the LCD panel with optical index-matched adhesive

RhinoTouch® Armored Glass

Resistive touch screen option, durable and resistant to scratches and blows from blunt objects. Activation by finger, glove and stylus with a minimum of 85 grams of pressure. Touch translates to a location within 0.098", or 2.5mm, on both X and Y axis of where the touch occurred. Over 60 million touches per point.

Safety: Should the glass substrate break, the shards are held internally by the optical bonding adhesive, protecting the user from harm

Panel Details

	Standard Brightness	Hi-Bright
SCREEN DIAGONAL	17.3"	17.3"
WEIGHT (system)	9.7 lbs	9.7 lbs
CONTRAST RATIO (typical)	600:1	600:1
VIEWING ANGLE	80° (L/R/U/D)	80° (L/R/U/D)
RESPONSE TIME (typical)	40ms	40ms
NATIVE RESOLUTION	1920 x 1080	1920 x 1080
BRIGHTNESS	400 cd/m²	1000 cd/m²
BACKLIGHT	LED	LED
COLORS	16.7M	16.7M

Power Details

	Standard Brightness	Hi-Bright
POWER INPUT (native 12 VDC with options)	AC input 85 to 264VAC, Mil-Std-1275/704 28VCD	AC input 85 to 264VAC, Mil-Std-1275/704 28VCD
POWER DISSIPATION (typical)	42 Watts	49 Watts
EXTERIOR POWER JACK (optional)	Yes	Yes

Controller Specifications

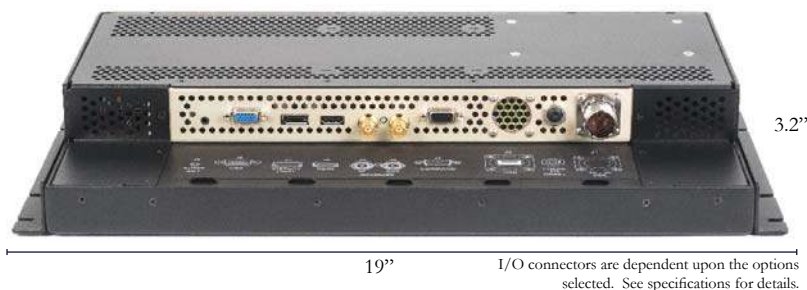| SUPPORTED VIDEO RESOLUTION	Standard	Advanced HD-SDI
VGA (640 x 480)	•	•
WVGA (800 x 480)	•	•
SVGA (800 x 600)	•	•
XGA (1024 x 768)	•	•
SXGA (1280 x 1024)	•	•
WXGA (1366 x 768)	•	•
WXGA (1280 x 768, 1280 x 800, 1440 x 900)	•	•
WSXGA+ (1680 x 1050)	•	•
HD-1080 (1920 x 1080)	•	•
WUXGA (1920 x 1200)	•	•
INPUTS		
Standard		
ARGB (15 Pin VGA)	•	•
DVI-D Input	•	
PAL / NTSC / SECAM	•	
HD-SDI - SMPTE259M, 4.2.2		•
HDMI 1.3	•	•
Disply Port		•
SDI Re-Clock Loop Output		•
Optional		
Composite Video Input	•	
HD Component YPbPr		
SD Component YCbCr		
FEATURES		
Image Up-Scaling	•	•
Image Down-Scaling	•	•
Picture In Picture	•	
Memory Buffer	•	
Sync On Green/Composite	•	•
DV RS-232 Serial Protocol	•	•
Ethernet Command Protocol	•	
Picture By Picture	•	
Text Overlay Function	•	
Variable Aspect	•	
Freeze & Zoom Function	•	
Programmable Hot Keys	•	•

Power Alternative

Chassis Plans' 2U-5U rackmount computer systems are designed with a removable back plate that allows a 12V power cord to run from the computer's power supply to a display or keyboard video monitor. This optional feature, the Exterior Power Jack, is available for this monitor.

By running the display with the computer systems' power supply, this Exterior Power Jack option can provide many benefits:

- Reduction in the number of required cables
- Elimination of additional equipment, i.e., a power brick
- Reduction in total system weight and cost

To enjoy these benefits, power up your new display with a Chassis Plans' server.

CPI2-173 Input Connectors

3.2"

19"   I/O connectors are dependent upon the options selected. See specifications for details.

Who We Are

CHASSIS PLANS

- Chassis Plans designs, fabricates and integrates standard and customized high-performance computing platforms and LCD monitors for military, industry, and commercial applications.
- Using COTS components, Chassis Plans provides solutions for customers who need reliable systems that will operate in a variety of harsh conditions and who require revision control and hardware consistency for multi-year programs.
- Chassis Plans is an ITAR Registered and SBA-certified small business that has been operating in Southern California for over a decade.

ENGINEERED TO YOUR SPECIFICATIONS

- In-house engineering department
- Design and build of rapid prototypes. Experience with solving difficult customer application problems through knowledge of the industry and custom system design and manufacturing capability
- Our Engineers use Solid Works 3D CAD modeling software for mechanical design and thermal simulation
- Design experience with MIL-STD-167, MIL-STD-461, MIL-STD-810, and MIL-S-901, in addition to FCC, UL, CE, and country specific agency requirements

YOUR CONFIGURATION. ONE PART NUMBER.

- It's our mission to make your life easier. Our Sales Engineers will help you select the right configuration for your project, making sure the details are analyzed and that the system meets your specifications.
- One part number means easier procurement and less paperwork for you.
- Dedicated Sales and Program Managers.
- Last time buy opportunities for end-of-life components.

FACILITY AND TEST

- All integration work is performed in a state-of-the-art, ESD-controlled facility
- Our facility has 23,000 sqft and has dedicated 12,000 sqft to manufacturing and 3,000 sqft to engineering
- Operate to anti-static standard ANSI/ESD S20.20-2007 and electronics assembly standard IPC-A-610, Revision E-2010

QUALITY COUNTS

- ISO 9001:2008 Certified
- 100% system inspection before shipment
- All integrated systems undergo a minimum 24-hour system test and burn-in before shipment to the customer
- Assistance with 3rd party verification of system specifications
- 2-year warranty on all integrated systems and LCD monitor products
- Assembled in the USA

Contact us today!
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