

COTS Rugged Military Grade 9RU LCD Monitor

MILITARY | INDUSTRIAL | COMMERCIAL



Screen Size 24"

Assembled in the USA
ISO 9001:2008 Certified
ITAR Registered

The CPX1-241 Display can be used for many rugged military applications, particularly ones that require extensive screen space, e.g., HD video plus a dashboard with gauges. The display has InfraRed Touch Screen technology and supports Multi Touch Gesture technology (Windows 7). There is a bonded anti-reflective glass overlay, and optional micromesh EMI Filter on the monitor.

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

In-house Engineering
Department

Rapid Prototyping



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
- InfraRed Touch Screen with Multi Touch
- AR and optional EMI filter overlays

Harsh Environments

Designed to meet or exceed MIL-STD-810G to the below specifications.

ALTITUDE

10,000 ft Operational, 30,000 ft Storage
MIL-STD-810, Method 500.5

HIGH TEMPERATURE

50°C Operational, 60°C Storage
MIL-STD-810, Method 501.5

LOW TEMPERATURE

0°C Operational, -20°C Storage
MIL-STD-810, Method 502.5

HUMIDITY

5-95%, Non-condensing
MIL-STD-810, Method 507.5

BLOWING SAND AND DUST

Procedures I and II
MIL-STD-810, Method 510.5 (front surface, bonded glass only)

TRANSPORT VIBRATION

US Highway Truck and Air Transport
MIL-STD-810, Method 514.6

BENCH HANDLING SHOCK

Procedure VI, 20G @ 11ms
MIL-STD-810, Method 516.6

Contact us today!
858.571.4330 or saleseng@chassisplans.com
www.chassis-plans.com

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CPX1-241 Panel Specifications

DIMENSIONS

23" X 15.47" X 3.2" (584.2mm X 392.9mm 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 smudge-resistant AR coated soda lime float glass, bonded to the LCD panel with optical index matched adhesive

EMI Protection

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

Touch Screen

- Infra Red touch screen technology
- Resolution of 4096 x 4096 points
- Supports Multi Touch gesture technology (Windows 7)
- Touch activation force: none
- Minimum touch object: 8mm dia
- Sealability: IP65 from the front
- Can be used in conjunction with AR glass overlay
- Use with finger, gloved hand, stylus, or other pointer

Panel Details

	CPX1-241
SCREEN DIAGONAL	24"
WEIGHT (varies by configuration)	26 lbs
CONTRAST RATIO (typical)	1000:1
VIEWING ANGLE	89° (L/R/U/D)
RESPONSE TIME (typical)	14ms
NATIVE RESOLUTION	1920 x 1200
BRIGHTNESS	300 cd/m ²
BACKLIGHT	LED
COLORS	16.7M
POWER INPUT (native 12 VDC with options)	AC input 100 to 260VAC, 1275/704 28VCD
POWER DISSIPATION (typical)	50W
EXTERIOR POWER JACK (optional)	Yes
AUDIO	Yes, includes (2x) water-resistant speakers



Controller Specifications

	Advanced
SUPPORTED VIDEO RESOLUTION	
VGA (640 x 480)	•
WVGA (800 x 480)	•
SVGA (800 x 600)	•
XGA (1024 x 768)	•
SXGA (1280 x 1024)	•
WXGA (1366 x 768)	•
SXGA+ (1400 x 1050)	•
WXGA (1280 x 800, 1440 x 900)	•
UXGA (1600 x 1200)	•
WUXGA (1920 x 1200)	•
INPUTS	
Standard	
ARGB (15 Pin VGA)	•
DVI-D Input	•
HDMI 1.3	•
Optional	
PAL / NTSC / SECAM	•
Composite Video Input	•
HD Component YPbPr	•
SD Component YCbCr	•
HD-SDI - SMPTE259M, 4.2.2	•
3G HD-SDI 424M 4.4.4	•
FEATURES	
Image Up-Scaling	•
Image Down-Scaling	•
Infra-Red Remote Control	•
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

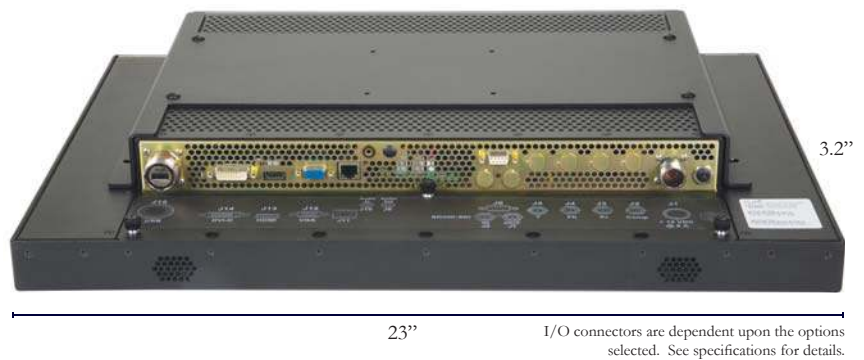
Chassis Plans' 2U-5U rackmount computer systems are designed with a removable back plate that allows a 12V power cord to run from the computer's power supply to a display or keyboard video monitor. This optional feature, the Exterior Power Jack, is available for this monitor.

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.

CPX1-241 Display Photo



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



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Chassis Plans

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CPX1-241-1013