

COTS Rugged Military Grade 8RU LCD Monitor

MILITARY | INDUSTRIAL | COMMERCIAL



CPX Displays

Screen Sizes 17" and 19"

Assembled in the USA
ISO 9001:2008 Certified
ITAR Registered

The CPX family provides high performance, rack mount 8U TFT LCD displays with a choice of screen sizes of 17" and 19". There is the option of a touch screen for easier use.

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.

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
- Long-life LCDs
- Optional resistive touch screen

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

17": 70°C Operational, 80°C Storage
19": 50°C Operational, 60°C Storage
MIL-STD-810, Method 501.5

LOW TEMPERATURE

17": -20°C Operational, -30°C Storage
19": 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

COTS Rugged Military Grade 8RU LCD Monitor

MILITARY | INDUSTRIAL | COMMERCIAL

CPX Panel Specifications

DIMENSIONS

19" X 14" X 3.15" (482.6mm X 355.6mm X 80.01mm)

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 (<12.5Ω/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

	CPX-17	CPX-19
SCREEN DIAGONAL	17"	19"
WEIGHT (system)	19.5 lbs	20.5 lbs
CONTRAST RATIO (typical)	1000:1	1000:1
VIEWING ANGLE	80° (L/R/U/D)	80° (L/R/U/D)
RESPONSE TIME (typical)	30ms	5ms
NATIVE RESOLUTION	1280 x 1024	1280 x 1024
BRIGHTNESS	350 cd/m ²	350 cd/m ²
BACKLIGHT	LED	LED
COLORS	16.7M	16.7M

Power Details

POWER INPUT (native 12 VDC with options)	AC input 100 to 260VAC, 1275/704 28VCD	AC input 100 to 260VAC, 1275/704 28VCD
POWER DISSIPATION (typical)	42 Watts	41 Watts
EXTERIOR POWER JACK (optional)	Yes	Yes

Controller Specifications

	Standard	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)		•
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		•
3G HD-SDI 424M 4.4.4		•
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.

CPX Displays Photo



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

Chassis Plans

10123 Carroll Canyon Road · San Diego, CA 92131

©2013 Chassis Plans LLC. All Rights Reserved. No part of this document may be copied or reproduced without prior consent.

CPX-1013