

COTS Rugged Military Grade 2U Rackmount **Bi-fold** LCD

MILITARY | INDUSTRIAL | COMMERCIAL



BFX Displays

Dual 24" (HD) LCD panels mounted into a 2U form factor

Assembled in the USA
ISO 9001:2008 Certified
ITAR Registered

Our BFX Displays are rugged, military grade, high performance, 2U rackmount LCD panel displays offering two 24-inch TFT LCD displays with per panel resolution of 1920x1200. With exceptional strength, the displays provide expansive working space. The BFX1-24 model is optimal for extreme outdoor environments due to its brightness and ability to operate in widely varied temperatures.

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

- Two 24" (HD) monitors in a 2U form factor
- Audio capability standard

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°/70°C Operational, 60°/80°C Storage*
MIL-STD-810, Method 501.5

LOW TEMPERATURE

 0°/-20°C Operational, -20°/-30°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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BFX Panel Specifications

DIMENSIONS

19" X 3.5" X 30" (482.6mm X 88.9mm X 762mm)

Deployed Dimensions

45.80" wide x 21.2" high (from bottom of front panel)

DISPLAY ENHANCEMENTS

Safety Glass (STANDARD)

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

EMI Protection (OPTIONAL)

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

KVM SWITCH BOX

This option is available as a separate product.

ENCLOSURE DETAILS

Construction

High-strength 5052-H32 aircraft-grade aluminum. 0.38" solid milled front panel. Stainless self-locking hardware throughout

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

Slides

Solid Bearing Slides (Friction Slides), Lock-out button.

Stainless self-locking hardware throughout Includes

Extension Bracket (0 to 6.5" extension)

Includes Extension Bracket (3 to 11" extension)

Support and Stabilization

Gas strut assisted opening and lock down. Right monitor positions adjustable.

Panel Details

BFX1-24

SCREEN DIAGONAL

24"

WEIGHT (system)

37 lbs

OPERATING/STORAGE TEMPERATURE*

0°C to 50°C / -25°C to 60°C

CONTRAST RATIO (typical)

1000:1

VIEWING ANGLE

R/L: 178° U/D:178°

RESPONSE TIME (typical)

14ms

NATIVE RESOLUTION

1920 x 1200

BRIGHTNESS

300 cd/m²

BACKLIGHT

LED, edge-lit

COLORS

16.7M

Power Details

POWER INPUT (native 12 VDC with options)

AC input 85 to 264VAC,
1275/704 28VDC

POWER DISSIPATION (typical)

100 Watts

EXTERIOR POWER JACK (optional)

Yes

AUDIO

Yes, includes (2x) water-resistant speakers

Controller Specifications

	H1 Controller Option
SUPPORTED VIDEO RESOLUTION	•
640 x 480, 800 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1280 x 800, 1280 x 1024, 1366 x 768, 1440 x 900, 1600 x 900, 1600 x 1200, 1680 x 1050, 1920 x 1080, 1920 x 1200	
VIDEO INPUT	
VGA: 60Hz at WUXGA, UXGA 75/60Hz at SXGA, WXGA, XGA, SVGA, VGA. With auto detect of Digital Separate Sync, Sync-On-Green & composite Sync. Auto detects VGA-WUXGA, interlaced & non-interlaced DVI Dual Link: 60Hz at WUXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA HDMI 1.4 : 60Hz at WUXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA	
FEATURES	
Up to 10bit per color (1.06 billion), On Screen Display (OSD) menu, Image scaling Up/Down scaling to fit input to panel format. Auto configuration, Brightness, Contrast, Clock Phase, Color Temperature, Image Position, Hue, Saturation Sharpness. Picture in Picture, Picture by Picture variable positions. RS-232 or Ethernet command and control.	
SUPPORTED VIDEO RESOLUTION	J1 Controller Option
640 x 480, 800 x 600, 800 x 480, 1024 x 768, 1280 x 768, 1366 x 768, 1440 x 900, 1600 x 1200, 1680 x 1050, 1920 x 1080, 1920 x 1200	
VIDEO INPUT	
VGA: 60Hz at WUXGA, UXGA 75/60Hz at SXGA, WXGA, XGA, SVGA, VGA. With auto detect of Digital Separate Sync, Sync-On-Green & composite Sync. Auto detects VGA-WUXGA, interlaced & non-interlaced DVI-D: 60Hz at WUXGA, 60Hz at UXGA, 75Hz at SXGA, WXGA, XGA, SVGA, VGA. VIDEO: NTSC / PAL / SECAM (Interlaced) Composite Video, S-Video, RGB Video SD Component (YCrCb)	
FEATURES	
Up to 8 bit per color, 16.7 million colors. Functions: On Screen Display (OSD) menu, Image Scaling: Up scaling to fit input to panel resolution. Image Control: Auto configuration, Brightness, Contrast, Clock, Phase, Color temperature, Image position, Saturation, Hue, Gamma. Other Features: System Information, OSD position, scaling to fill screen and fill to aspect ratio, OSD timeout, factory reset, OSD menu transparency, Horizontal & Vertical image inversion, Picture in Picture	

Power Alternative

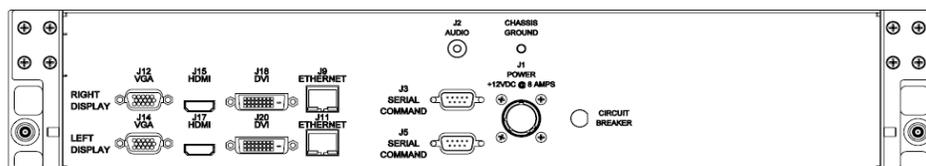
Chassis Plans' 2U-5U rackmount computer systems are designed with a removable back plate that allows a 12V power cord to run from the computer's power supply to a display or keyboard video monitor. This optional feature, the Exterior Power Jack, is available for this monitor.

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.

BFX Rear Panel Inputs



I/O connections 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
- 3-year warranty LCD display products
- Assembled in the USA



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

Chassis Plans

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