

MR224xx

2U Military KVM Rack Drawer



20250123

Our Military Rack drawer monitor MR224xx Series was designed from the ground up to meet the rugged environmental requirements. It comes standard with an EMI Lens Enhancement. Its Options include but are not limited to: Optical Bonding, High Bright and/or NVIS Backlight system, and MIL Spec Touch. It was Design To Meet (DTM) many MIL Spec standards off the shelf but if you have a specific standard you need met, we can customize it to any level. It is Built from 5052H32 and 6061T6 Aluminum that is Laser Cut and Milled to a precise standard. The internal Components Can be Conformal Coated for and extra level of protection. Its Specifically Designed for Rack Mount or Transit Case Applications. Exacting Precision has gone into every design feature of this unit to make it one of the best monitors in the industry, and worthy of becoming a true Military Rack monitor (MR series).



MR224xx Shown



Rugged Commercial Connectors Shown

Features:

- MIL Spec Enhanced Monitor
- Mil Spec Keyboard
 - * Multiple to Choose From
- Integrated Cable Guide System
- Conformal Coated Electronics
- Multiple Controller Cards and KVM Switches Options to Chose From Giving Flexibility to your I/O Needs.
- Milled Aluminum Telescoping Rear Arms With Reverse L Quick Install Technology
 - * Easy Install into Rack and Transit Case
- Mil Spec C90 Power Inlet:
 - * Can Be Customized to your application,

Options:

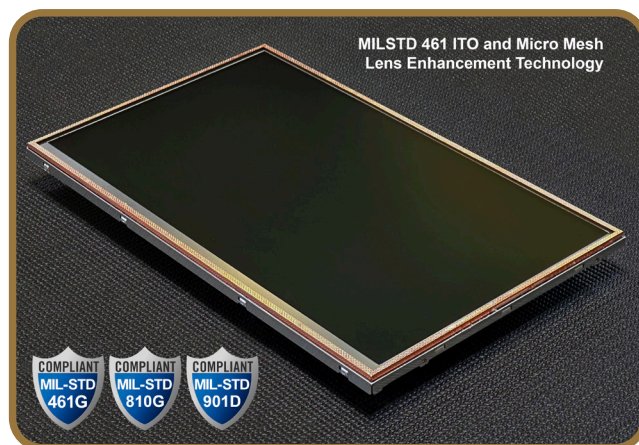
- Multiple Lens Enhancement available:
- High Bright, Daylight Viewable option
- 461G EMI, ITO Glass Enhancement
- Optional Optical Bonding for Grade A Shock
- MILSPEC PCAP and Resistive Touch Options

Comes Standard

- Rugged All Aluminum Construction
- MIL Standard C300 Friction Slides
- Anti Glair, Chem Strengthened Cover Glass
- Shock and Vibe Rugged Design 810G, 167
- Fits 19" Rack and Transit Cases
- MIL Standard C90 2 Pin Power Inlet



PCRS - Positive Connector Retention System Employed



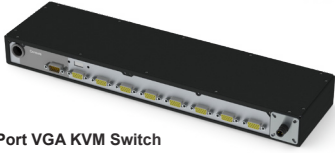
Popular KVM Switch Options



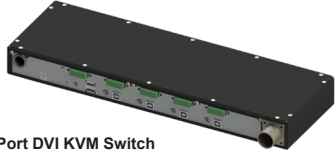
D1: 4Port Display Port KVM Switch



E2u: 8 Port VGA KVM Switch



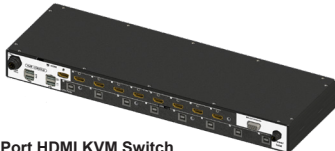
G2x: 4 Port DVI KVM Switch



O4.2: 4 Port HDMI KVM Switch



O8.2: 8 Port HDMI KVM Switch



IPx: 8, 16, 32 Port RJ45 KVM Switch
DVI, VGA, HDMI, and Display Port Supported



*Other Back Housing Configurations to Choose from or have us make a custom one for you.

Video Controllers

V43x Rugged FHD Controller

- Max Resolution 1920x1200 60hz
- Input Options Available: HDMI x1, VGAx1, Display Port x1
- Designed to Meet Shock and Vibe Requirements
- Command and Controls: Consolidated OSD Buttons on Front

V35x Rugged Embedded Controller

- For Use with Integrated KVM Switch Options
- Max Resolution 1920x1200 60hz
- Input Options Available: VGAx1, Display Port x1 (HDMI, DVI-D, or 3G-SDI pick only 1)
- Designed to Meet Shock and Vibe Requirements
- Command and Controls: Consolidated OSD Buttons on Front
- Optional 3G-SDI Interface can be Integrated

*Other Controller Cards Available with Multiple Options

Popular LCD Options

19LH SXGA 1280x1024 (Max Res)

19" LED Backlit LCD w/ Anti-Glare

- Viewing Angles: 85/85/80/80
- Contrast Ratio: 1000:1
- Brightness: 350 NITS
- Response Time: 10ms
- Surface Finish: AG, 3H
- Color: 6-bit+HiFRC (16.7M), NTSC 70%
- Operating Temp: -30°C to 85°C
- Storage Temp: -30°C to 80°C



19HB SXGA 1280x1024 (Max Res)

19" LED Backlit LCD w/ Anti-Glare

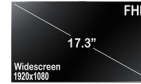
- Viewing Angles: 85/85/80/80
- Contrast Ratio: 1000:1
- Brightness: 1600 NITS
- Response Time: 10ms
- Surface Finish: AG, 3H
- Color: 8 Bit (16.7M), NTSC 70%
- Operating Temp: -30°C to 70°C
- Storage Temp: -30°C to 70°C



173W FHD 1920x1080 (Max Res)

17.3" Wide LED Backlit LCD w/ Anti-Glare

- Viewing Angles: 80/80/60/80
- Contrast Ratio: 600:1
- Brightness: 400 NITS
- Response Time: 40ms
- Surface Finish: AG, 3H
- Color: 6-bit+HiFRC (16.7M)
- Operating Temp: 0°C to 70°C
- Storage Temp: -20°C to 70°C



173HB FHD 1920x1080 (Max Res)

17.3" Wide LED Backlit LCD w/ Anti-Glare

- Viewing Angles: 80/80/60/80
- Contrast Ratio: 600:1
- Brightness: 1000 NITS
- Response Time: 40ms
- Surface Finish: AG, 3H
- Color: 6-bit+HiFRC (16.7M)
- Operating Temp: 0°C to 70°C
- Storage Temp: -20°C to 70°C



New and Hot

173U1 UHD 3840 x 2160 (Max Res)

17.3 Wide LED Backlit LCD w/ Anti-Glare

- Viewing Angles: 85/85/85/85
- Contrast Ratio: 12000:1
- Brightness: 1300 NITS
- Response Time: 35ms
- Surface Finish: AG
- Color: 8bit (16.7M), 100% ADOBE RGB
- Operating Temp: -20°C to 70°C
- Storage Temp: -30°C to 80°C



Popular Keyboard Options



- **M: Series Military - Industrial Grade Keyboard**
- 119 key US or UK layout and a high quality touch pad
- Optional CAC Card Reader on MR Series
- Continuous Use, 50 million cycles
- Storage: -20°C to +65°C, Operating: 0°C to +50°C



- **M1 Series: Thin, rugged military-grade keyboard with touchpad and FSR**
- Designed to meet MIL-461G standards, MIL-STD-810F
- Adjustable green LED backlighting
- Storage: -40°C to +85°C, Operating: -32°C to +60°C
- Optional NVIS Green B.



- **M2 Series: Thin Military OEM Keyboard**
- Integrated FSR pointing device
- Industrial silicone rubber Continuous Use: 10 million cycles
- Storage: -40°C to +90°C, Operating: -40°C to +60°C
- Optional NVIS Compliant – Green B backlighting



- **M3 Series: Mobile Keyboard w/ Force Sensing Resistor**
- Integrated FSR pointing device
- Resistant to sand, debris and the elements
- Continuous Use, 10 million cycles
- Storage: -40°C to +65°C, Operating: -40°C to +70°C
- 12 Function Keys, MS Windows Function Keys



- **Q Series: NEMA 4 Sealed Keyboard Series with Glidepad**
- Rugged Keyboard - No EMI protection
- Integrated 2 button glidepad with option for backlit keys
- Resistant to sand, debris and the elements
- Continuous Use, 10 million cycles
- Storage: -40°C to +90°C, Operating: -40°C to +70°C

*Other Keyboards Available

SPECIFICATIONS

- **Dimensions:** 19"W x 3.5"H x 24"D
- **Weight:** ~ 28-32 LBs (MR224xx)
- **Power Consumption:** 30W to 50W

Values are approximate and vary based on configuration



Base Series	Chassis	Display Size & Enhancement	Project Number	Revision
MR2	24	173U1	XXXXX	XX
2U MILSPEC	24" Deep	19M1, 173M1...	AB0001	00

► Custom Options Available On All DITHD Models



1357 Rocky Point Dr., Oceanside CA 92056
760.599.9225 | www.DITHD.com | Cage Code 787R6 | sales@DITHD

MILITARY SPECIFICATIONS



MIL SPECIFICATIONS

Panel Can be DTM (DESIGNED TO MEET) the following MIL Standards. Full Mil Spec requirements must be disclosed during the quoting process to pick the correct components and Enhancement Process to meet your MIL Spec Requirements.

AVAILABLE MIL STANDARD DTM OPTIONS

Operational Temperature Range: MIL-STD-810F/G, -10C to +50C
(*Method and Procedures TBD)

Storage Temperature: MIL-STD-810F/G, -30C to +60C
(*Method and Procedures TBD)

Humidity: MIL-STD-810F/G, (*Method and Procedures TBD)

Altitude: MIL-STD-810F/G, (*Method and Procedures TBD)

Vibration: MIL-STD-810F/G, -167, or -516.2
(*Method and Procedures TBD)

Shock: MIL-STD-810F/G, -901E Grade B, or -901E Grade A
(*Method and Procedures TBD)

EMI: MIL-STD-461F/G CE102, RE101, RE102,
CS101, CS114, CS116, RS101, and/or RS103

TERMS & CONDITIONS

DITHD only Guarantees our Units Will pass Mil-Spec Testing when Mil-Spec Testing is purchased through DITHD and its partnering 3rd party independent Labs.

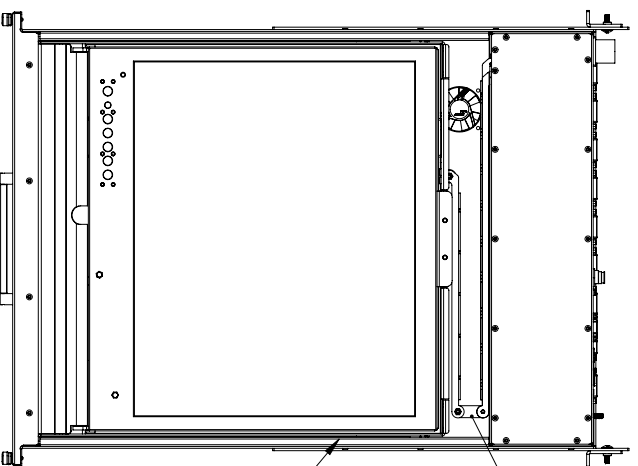
*MIL-STD, Methods, and Procedures are based on your required needs, contact one of our knowledgeable Sales Engineers to help to Spec in a unit to meet your required needs.



Mechanical Drawings

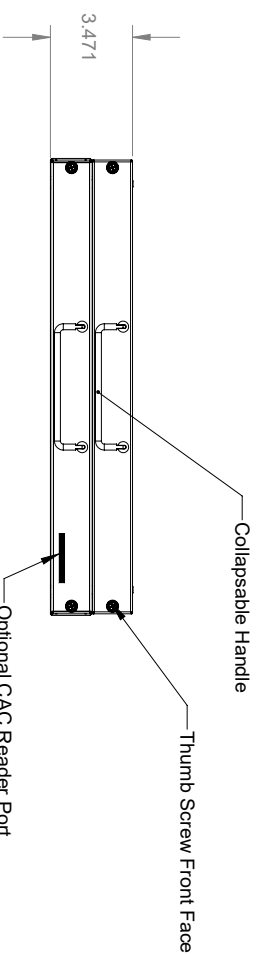
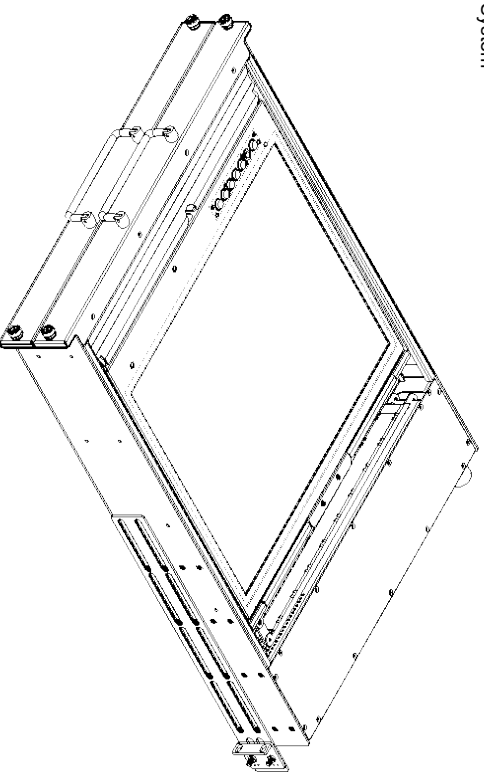
Samples of some of the Custom Projects
we have done for our customers

Mechanical drawings and 3D Solid Models
are available upon request. Contact your
sales representative for details.



Integrated Cable Guide System

Integrated Mill Spec
Rails
2 Sets
One Set for Keyboard
One Set for Monitor

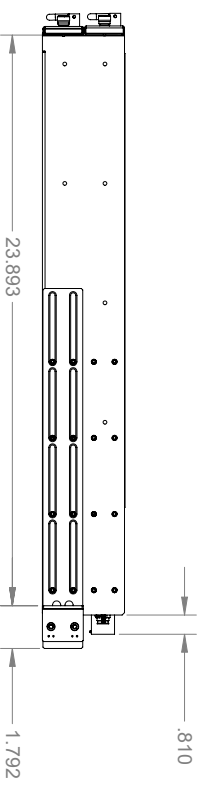


Collapsible Handle

Thumb Screw Front Face

Optional CAC Reader Port

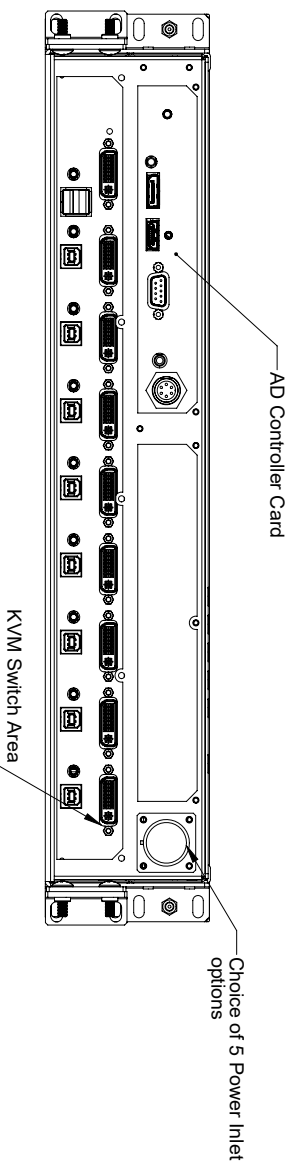
3.471



.810

1.792

23.893



AD Controller Card

Choice of 5 Power Inlet
options

KVM Switch Area



1357 Rocky Point Dr., Oceanside CA 92056
760.599.9225 | www.DITHD.com | Cage Code 787R6 | sales@DITHD

Specifications

Detailed Specifications are for the 19M1
Monitor We can supply Detailed Specs other
Monitors upon Request

LCD Characteristics:

Screen Spec:	19M1 , a-Si TFT LCD
Backlight Type:	LED
Resolution:	1280 x1024
Contrast Ratio:	1000:1
Brightness (cd/m2):	350
View Angles (H/V):	85/85/80/80
Pixel Size (HxV) mm:	0.294×0.294 mm
Max. Color:	16.7M
MTBF (hrs):	50,000
Response Time (ms):	8
Lens Treatment:	Antiglare, Hard Coating (3H)
Lens Enhancement:	Optical Bonding
Touch:	Optional (Resistive or PCAP)
Color Gamet (NTSC):	70%

Input Signals:

VGA:	DB15 Male
HDMI or DVI:	Standard HDMI or Stadard DVI-D
Display Port:	Stabdard DP Connector
USB:	USB 2.0 Type A

Power Specifications:

DC Power Input:	12VDC (Optional 9-36VDC)
Connector:	MIL lock connector (C90 Connector Standard)
AC Power Supply:	UL Listed AC/DC Brick (Optional MIL SPEC)

Mechanical and Environment:

Height:	3.5"		
IP Protect:	TBD, Based On Requirements		
Mounting:	19" Transit Case 24 to 32" Depth		
Construction:	Aluminum Housing with black powder coating		
Operating Temperature:	-30°C ~ 85°C	Method 501.4 and 502.4	
Storaging Temperature:	-30°C ~ 85°C	Method 501.4 and 502.4	
Operating Humidity:	5% - 95%, non -condensing		Method 507.4
Anti-Vibration:	5 - 500 Hz / 1 Grms PTP		Method 514.5
Anti-Shock:	15G / Peak (11 ms)		Method 516.5
Physical Dimension (WxHxD):	19" x 3.5" x 24" (in)		
Packing Dimension (WxHxD):	22"x8"x36" (in)		
Net Weight / Gross Weight:	(32Lbs/40Lbs)		
Certification and Approvals:	UL/CE/ FCC RoHs		
Altitude Test:	12,500/40,000 ft (Operational/No-Operational)		

User Controls Interface:

Power ON / OFF via Front Button
Power Mode Status LED Indicator
OSD (On Screen Display) Buttons

