



RD2119 Rugged, 2U Drawer Mounted LCD



Key Features

- Rugged 19" display in a EIA 2U Drawer
- Weight, 35 lbs
- SXGA Resolution, 500nit, low reflectance, high ambient contrast, full color TFT LCD
- Extended Temperature Range, 0C to +55C, heater option available
- Kits Available for Low temperature, EMI, and Humidity (MIL-STD-810F and MIL-STD-461E)
- Configuration Management Option Available, Designed for Long-Life
- OSD
- Sealed iKey keyboard
- Compact and rugged package, locking screen position and stowed position

Rugged Structural Features

- **All Aluminum Construction**
 - 6061T-651 Strain Hardened Structural Aircraft Aluminum
 - 0.187 to 0.375" thk. Al Cross-sections, machined
 - MIL-C-5541E Class 3 Chem Film and Powder Coat Protection
- **Built to Survive Shock and Vibe**
 - Multiple attachment points on LCD and electronics
 - All fasteners and connectors retained with locking mechanisms
 - Cabling dressed and secured to prevent chaffing
 - LCD shock isolated and strengthened with 2mm protective cover glass

Superior Optical/EMI Performance

- **Optics**
 - 1280HX1024V SXGA TN LCD
 - High brightness backlight (500nit) and low reflectance cover glass (.8%) yield sunlight readability
- **EMI/EMC**
 - Internal Compartments Segregated to isolate EMI emissions
 - Finish applied maintains superior EMI/EMC characteristics throughout life of the unit.
 - Superior Grounding paths
 - EMI Cover Glass Available as an Option



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Military Standards (*designed to or tested to)

Operational Temperature, MIL-STD-810F, Method 501.5, Procedure I/II	10°C to +55°C -30°C (with heater kit)
Storage, MIL-STD-810F, Method 501.5, Procedure I/II	-40°C to 85°C
Humidity, MIL-STD-810F, Method 507.4	48 Hour, 95% RH 40-65C— with humidity kit
Altitude, MIL-STD-810F, Method 500.4	12,500ft operation, 40,000ft transport
Vibration, MIL-STD-810F, Method 514.5, Procedure I MIL-S-901D, Grade A, Class 2, Type B	3GRMS, 5-500Hz, 75 min/axis w/isolators

Mechanical

Height	3.75" (95.25mm)
Width	19" (482.6mm)
Depth	21.7" (551.2mm)
Weight	35 lbs (16kg)

LCD

Manufacturer and Type	AUO 19" Diagonal , TFT TN, Normally Black AMVA
Resolution	SXGA 5:4, 1280HX1024V
Active Area	376.3mm(H) x 301.1mm(V)
Pixel pitch	294 (per one triad) x 0.294
Pixel Configuration	R.G.B Vertical Stripe
Color Palette	16.7M colors (RGB 8-bit)

Interface

Option 1	2 Channel LVDS interface compatible
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Keyboard

Option 1 (std)	Sealed iKey Keyboard with touchpad - optional non-sealed trackball version available 10-Key Numeric Pad 24 Function Keys
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Mounting Options

Option 1 (std)	2U drawer mount on Accuride slides
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Power Supply Options

Option 1	120/240VAC w/PFC
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Optics

Viewing Angle	+/- 80V, +/-80H minimum
Luminance	500nits normal to display surface (excludes kit mods)
Contrast Ratio	CR 1300:1 normal, typ
Rise and fall times (10/90 and 90/10)	8ms at 25C, GTG
NTSC Color Saturation	72%

* Crystal Group designs all LCDs to meet or exceed the specifications listed herein. Due to the sheer number of models and combinations of components (backlight options, kits, etc), it is not practical to test every combination of display offered. Please ask your Crystal Business Development Manager for data on qualification testing for configurations similar to the desired configuration for your application.