



RD2217 Rugged Dual 17" Display in 2U EIA Form Factor



Rugged Series 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 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 chafing
- LCD shock isolated and strengthened with protective cover glass



Key Features

- Rugged 17" displays in a 19" rack or transit case, EIA 2U form factor, 23" depth
- Light Weight, 42 lbs
- SXGA resolution, 600nit, low reflectance, high ambient contrast, full color TFT LCD
- Extended temperature range, 0C to +55C
- Kits available for MIL-STD-810F Humidity, MIL-STD-461E EMC
- Configuration Management option available upon request; Designed for long-life
- Front mounted in 2U drawer for ease of use and stowability, sealed iKey keyboard option available
- Unique folding design provides dual 17" LCDs in a user centric attitude for ease of use in a compact and rugged package

Superior Optical/EMI Performance

Optics

- 1280x1024 SXGA TN LCD
- High brightness backlight (600nt) and low reflectance cover glass (.8%) yield sunlight readability
- Conduction cooling techniques optimized for design

EMI/EMC

- Internal compartments segregated to isolate EMI emissions
- Finish applied maintains superior EMI/EMC characteristics throughout life of the unit.
- Superior grounding paths



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Military Standards (*designed to or tested to)

Operational Temperature, MIL-STD-810F, Method 501.5, Procedure I/II	0°C to +55°C
Storage, MIL-STD-810F, Method 501.5, Procedure I/II	-20°C to 85°C
Humidity, MIL-STD-810F, Method 507.4	48 Hour, 95% RH 40-65°C— 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 B, Class 2, Type B	5G _{RMS} , 5-500Hz, 75 min/axis

Mechanical (2U)

Height	3.5" (8.89cm)
Width	17.75" (45.1cm)
Depth	23" (58.4cm), fits in 24" transit case, extends 22"
Weight	42 lbs (19.05 kg)

LCD

Manufacturer and Type	AUO 17" Diagonal , TFT TN, normally white
Resolution	SXGA, 1280x1024
Active Area	337.920 (H) x 270.336
Pixel pitch	264 (per one triad) x 0.264
Pixel Configuration	R.G.B. Vertical Stripe
Color Palette	16.2M colors (RGB 6-bits + FRC data)
Rise and fall times (10/90 and 90/10)	12ms at 25°C

Interface

Option 1	VGA DE15
Option 2	DVI-D

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	Accuride slides with locking rails
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Power Supply Options

Option 1	120/240VAC w/PFC
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Optics

Viewing Angle	+/- 60V, +/-60H minimum
Luminance	600nits normal to display surface (excludes kit mods)

* 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.