ORION 21 UDP
ULTRA-RUGGED MIL-TAILORED UNIVERSAL DISPLAY PLATFORM

Ultra-Rugged Next-Gen Display Platform

Z Microsystems's Orion 21 UDP is a 1600 x 1200 resolution (UXGA) flat panel display engineered for high-performance in extreme environments. The third generation of Orion displays incorporates the robust design of the veteran Orion "battle-shell" with today's industry-leading electronics. The Orion 21 UDP offers advanced customization and capabilities for improved viewing and delivers efficiency-boosting display performance in a tough low-profile footprint.

Advanced Customization and Control

The Orion 21 UDP is equipped with Z Microsystems's high-performance video controller that supports a wide variety of viewing options including: Picture-In-Picture (PIP), Dual-View, Quad-View, and more. It also offers the capability of hosting Real Time Enhanced Video (RTEV), a powerful algorithm enhancement tool that delivers optimal video quality and control without adding latency to incoming video streams.

MIL-Tailored Displays with Options

Since 1986, Z Microsystems has delivered MIL-tailored solutions to the military and DOD. The Orion 21 UDP is no exception to this, offering ruggedized features to meet MIL-STD-810G resilience to shock & vibe, MIL-STD-461F EMI protection, optional MIL-DTL locking connectors, and extended operating temperatures. The Orion UDP family also features an optional Anti-Reflective shield, durable touch panel options, and wide viewing angles for a next-generation operating experience.
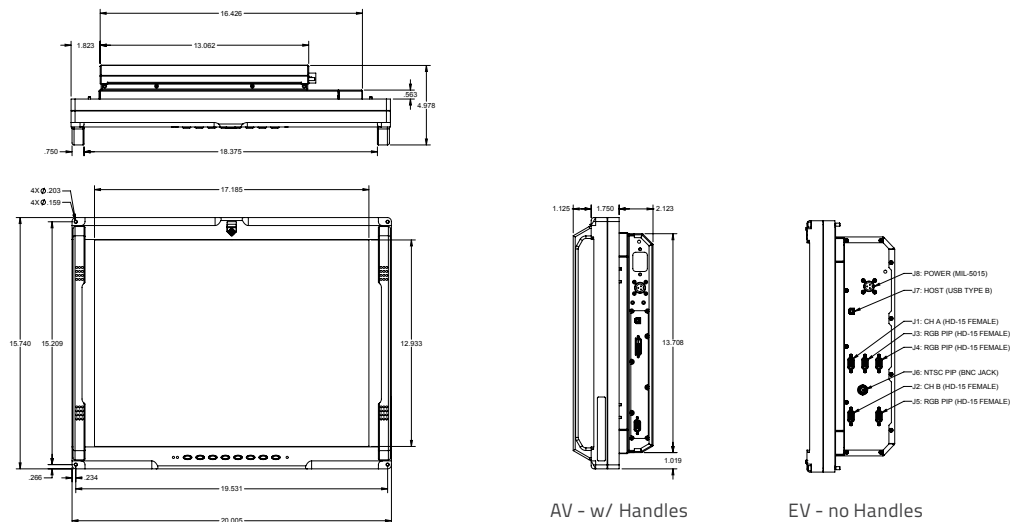
HIGHLIGHTS

- 21.3" ultra-rugged display platform
- 1600 x 1200 (UXGA) native resolution
- CCFL Backlight: brightness of 250 cd/m^2
- Supports Picture-In-Picture (PIP), Dual-View, Quad-View, User-friendly on-screen software GUI & more
- Ultra-rugged machined aluminum "battle-shell"
- Durable transportation handles
- Convenient front panel user control buttons
- Embedded Real-Time Enhanced Video (RTEV)
- Digital and analog video signal support
- Custom mounting options, RETMA rack compatible
- Resistive touch panel support
- Options: optically bonded AR shield, Micromesh

ORION 21 UDP

Technical Specifications

Panel Size	21.3" active display area
Native Resolution	1600 x 1200 (UXGA) (Scaled support up to 1920 x 1200)
Backlight	CCFL
Dimensions (AV - no PIPs)	15.74 x 20.00 x 4.98 inch	400 x 508 x 127 mm
Weight (AV - no PIPs)	24 lbs.	10.9 kg
Dimensions (EV - w/ PIPs)	15.74 x 20.00 x 5.44 inch	400 x 508 x 138 mm
Weights (EV - w/ PIPs)	26 lbs.	11.8 kg
Brightness	250 cd/m²
Color Pallete	16.7 Million
Viewing Angle	Full +/- 85°
Controls (customizable)	INPUT, MENU/SELECT, UP, DOWN, LEFT, RIGHT, EXIT, STANDBY, and USB Communications (Custom menu options available)
Display Options	Resistive touch panel (will reduce brightness up to 20%) AR shield, AG shield, or MicroMesh (MicroMesh will reduce brightness up to 5%) Embedded Real Time Enhanced Video (RTEV) Picture in Picture Support: AV - Up to 1	EV - Up to 4
Scaling Modes	No Scale, Fullscreen Scaled, SAR (Scaled w/ Aspect Ratio retained)
Connections (options)	DVI-I, HD-15, BNC, MIL-DTL-5015, C14 IEC 320 socket, USB Type-B
Mounting	Custom mounting pattern, 19" RETMA rack (with adapter plate)
AC Power Supply	100-240V AC, 2.0A input @ 50/60 Hz
DC Power Supply	18-36VDC , 8.5A inrush (EN 60601-1 Medical Certified Supply)
Power Consumption	101-170 W (depending on # of PIPs)
Operational Temperature	0° to 50° C
Storage Temperature	–40° to +70° C
Humidity*	Up to 5% to 95% Non-condensing @ 40° C for 48 hours
Operating Altitude	Up to 15,000 ft.
Non-operating Altitude	Up to 40,000 ft.
Vibration	MIL-STD-167, Shipboard Limits
Shock	MIL-STD-810G, 30g's
Fungus	Non-nutrients/contaminants
EMI / EMC	MIL-STD-461F, CE102, CS101, CS114, RS103, RE102
MTTR	< 30 mins.
Quality	IPC/ISO 9001:2008 and applicable sections of the MIL-HDBK-454
Part Numbers	UDP21TR-U2DDMC-XXX, UDP21AR-U2MC-XXX, UDP21EM-U2MC-XXX

*Test Results Pending or Qualified by Similarity

AV - w/ Handles

EV - no Handles

27-0062DS Rev D | July 2013