

FEATURES

- Rugged 8U front load extreme cooling 20-slot rackmount chassis
- (3) Different chassis configurations with different custom backplanes and I/O
- Hybrid 20-slot custom VME64x/VXS backplanes
- N+1 Redundant Cooling: >20 CFM per slot cooling with failed fan
- Ethernet/SNMP System Monitoring Built-in test (BIT)
- Atrenne rugged Power and Control Module (PCM)
- Atrenne rugged Fan Controller
- N+1 Redundant 2050W power supply
- Field replaceable sub-assemblies maintained in <30 minutes
- Removable air filter
- Environmentally compatible for shipboard below deck application

CHASSIS SOLUTION 02-135

8U SHIPBORNE RUGGED RACKMOUNT VXS SOLUTION FOR EW APPLICATIONS



MARKET

Military

APPLICATION

Shipborne EW Application

CHALLENGE

Design and manufacture (3) different 8U shipborne high power air-cooled rackmount chassis with different custom hybrid 20-slot VME64x/VXS backplanes and custom redundant 2050W power supply as well as N+1 redundant cooling.

CONCERNS

Program required high-performance custom power supply along with challenging thermal requirements.

HOW CAN WE HELP REDUCE YOUR RISK?

Atrenne can help you with all of your application-specific backplane and chassis requirements.

The solutions that you see on our website are just a small sample of what we have done. Please browse our solutions and contact us for a consultation.

This 19" rackmount enclosure supports up to 20 VME64x/VXS cards. It includes an Ethernet/SNMP System Monitoring feature as well as redundant 2050W power supplies. The rugged chassis was designed for extreme cooling with extreme 20 CFM per slot N+1 redundant cooling.

CHASSIS SOLUTION 02-135

8U SHIPBORNE RUGGED RACKMOUNT
VXS SOLUTION FOR EW APPLICATIONS

SPECIFICATIONS

PHYSICAL	
Width	16.97"
Height	13.94"
Depth	24.21" (excluding handles)
Weight	75 lbs.
ENVIRONMENTAL	
Operating Temperature	0 to +50°C
Storage Temperature	-40 to +70°C
Altitude	Atmospheric pressures from 870 to 1084 mbr
Thermal Shock	Temperature changes at a rate of +/- 20°C per minute
Humidity	5 to 95% non-condensing
Cooling	Extreme cooling of 29 CFM per slot with all fans running at full speed, 21 CFM per slot with failed fan – with 16 slots populated N+1 redundant cooling
Fungal Control	MIL-STD-810, Method 508
Shock	Grade A shock tests for combat shock performance under tailored MIL-S-901 guidelines, shock level of 15 Gs, 40ms
Vibration	Per MIL-STD-167-1 for Type I Vibration
EMC	MIL-STD-461F: CE101, CE102, RE101, RE102, CS101, CS106, CS114, CS116, RS101 and RS103
POWER/ELECTRICAL	
AC Input	115 VAC +/-10%, Single Phase, 60 Hz +/-5%
Backplane Connectors	VXS connectors VME64x connectors
Monitoring Solution	Hybricon rugged Power and Control Module (PCM) with Ethernet/SNMP Hybricon rugged Fan Controller
Connector Pitch	0.8"
Transmission Rate	3.125 Gbaud
CONSTRUCTION	
Extrusions	6063-T6 Aluminum
Top & Bottom	0.080" thick aluminum 5052-H32 per SAE-AMS-QQ-A-250/8. All aluminum parts plated per MIL-DTL-5541F, Class 3, Type II.
Card Cage	0.125" thick aluminum
Power Supply	Custom N+1 redundant power supply, 2050W
Tapped Strips	Carbon steel bar stock with zinc plating and supplementary chromate treatment
ESD Ground Clips	Beryllium copper, alloy C17400, ½ HT, with bright tin plating/MIL-T-10727
Air Filters	Removable air filter
Fan Tray	(4) fans, 12V 92MM X38MM high performance

WARRANTY

This product has a one year warranty.

CONTACT INFORMATION

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