

FEATURES AND BENEFITS

- 10U Modified COTS rugged rackmount 20-slot forced air CompactPCI chassis solution
- (2) Redundant 10-slot subsystems in one chassis
- (2) Dedicated air paths payload and power supplies
- (2) SNMP BIT monitoring and control system with application-specific features:
 - Ability to independently RESET (9) cPCI slots via SNMP
 - Monitor (10) cPCI board HEALTHY* pins
 - Plus standard features including fan speed control, monitoring of backplane voltages, temperatures, and fans, and ability to shutdown payload power
- (2) Application-specific 990W MIL-STD-704A 115VAC, 3 Phase, 400Hz power supplies
- (2) Application-specific 10slot cPCI backplanes
- +5 to +35°C Operating temperature
- 0 to 8 kft altitude





MARKET

Military

APPLICATION

Airborne SIGINT Application

CHALLENGE

Design and manufacture a 10U airborne high power air-cooled rackmount chassis with (2) Redundant 10-slot subsystems in one chassis, and Ethernet SNMP Built-in test (BIT) monitoring with application-specific features.

CONCERNS

Program required high performance application-specific blind mate power supply along with application-specific SNMP monitor hardware/firmware 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.

The 10U Rugged Airborne Redundant SIGINT Chassis (Solution 772-73) is a modified COTS design based on a rugged rackmount 20-slot forced air CompactPCI® (cPCI) chassis solution. This chassis includes two redundant 10-slot sAtrubsystems. Each subsystem has a 10-slot cPCI backplane with rear transition modules, dedicated air paths, SNMP BIT monitoring and control, and MIL-STD-704A 3-phase 400 Hz power supplies. Designed to operate at +5 to +35°C, this chassis provides application-specific connectivity to RESET cPCI slots via SNMP and monitor the HEALTHY* pins.



CHASSIS SOLUTION 772-73

RUGGED AIRBORNE REDUNDANT SIGINT CHASSIS SOLUTION WITH APPLICATION-SPECIFIC SNMP BUILT-IN TEST

SPECIFICATIONS

PHYSICAL	
Width	17.38"
Height	17.47"
Depth	28.00" (excluding handles)
Weight	90 lbs
ENVIRONMENTAL	
Operating Temperature	+5 to +35°C
Altitude	0 to 8,000 ft
Humidity	3 to 85% non-condensing
Cooling	Cooling for 75W per slot with < 20°C temperature rise
Shock	6 Gs, 11ms
Vibration	Aircraft profile, 0.346 Grms
Settling Dust	MIL-STD-810F, Method 510.4, Procedure III
Explosive Atmosphere	From sea level to 40,000 ft, per MIL-STD810F, Change Notice 3, Method 511.4
EMC	FCC Part 15 Class B
POWER/ELECTRICAL	
AC Input	MIL-STD-704A 115 VAC, 3 Phase, 400Hz
Backplane Connectors	2MM HM cPCI connectors
Monitoring Solution	Application-specific Monitor with Ethernet/SNMP and application-specific features for independent slot RESET and HEALTHY
Connector Pitch	0.8"
CONSTRUCTION	
Extrusions	6063-T6 Aluminum
Top & Bottom	0.090" Thick aluminum, 5052-H32.
Card Cage	0.090" Thick aluminum sheet 5052-H32
Card Guides	Molded plastic, Noryl N190X black , UL94-V0
Tapped Strips	Carbon steel bar stock with zinc plating and supplementary chromate treatment
ESD Ground Clips	Beryllium copper, alloy C17400, 1/2 HT, with bright tin plating/MIL-T-10727
Fan Tray	 (2) Fan Units – one for each 10-slot backplane segment Each Fan Unit has four (4) fans, 80MM X38MM high performance
Power Supply	(2) Application-specific MIL-STD-704A power supplies, 990W

WARRANTY

This product has a one year warranty.

CONTACT INFORMATION

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