

FEATURES

- Card Cage
 - 10-slot card cage (6U x 160mm) with slides
 - Rugged slides allow card cage to slide out a minimum of 7.5" beyond front face of enclosure
 - Rear of card cage engages with enclosure to add rear support for operational vibration and shock
 - Integrated front panel with captive fasteners to secure card cage in place during operation
 - Recessed VME reset switch
 - EMI filtered fault LED
 - Integrated military grade fans
- 10-slot VME64x Backplane
 - 8 payload slots VME64x
 - 4 HP 0.8" pitch centers
 - Front and rear connectors
 - Rear shrouds customized to support Meritek mechanical tie down brackets
 - 2 power supply slots
 - Conformal coated type UR
- Monitoring solution
 - Voltage, temperature, fan speed, and other features
 - >12 CFM/slot air flow

CHASSIS SOLUTION 78-843

10U GROUND MOBILE RUGGED ENCLOSURE CUSTOM ENCLOSURE



MARKET:
Military

APPLICATION:
Ground based weapons system

CHALLENGE:
Develop a custom air-cooled chassis solution with extensive formal reviews, data deliverables, and qualification testing on an aggressive customer schedule. Initial unit delivered in 8 weeks.

OVERVIEW:

This Atrenne custom rugged rackmount chassis includes a slide-out card cage, extensive system monitoring and military grade fans.

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10U GROUND MOBILE RUGGED ENCLOSURE
CUSTOM ENCLOSURE

TABLE 1: SPECIFICATIONS

PHYSICAL	
Width	19.0"
Height	17.47"
Depth	15.41" (excluding handles)
Weight	68 lbs.
ENVIRONMENTAL	
Operating Temperature	-32° C to 52° C MSL
Storage Temperature	-46° C to 71° C MSL
Altitude	-1,312 feet MSL to 8,000 feet MSL
Humidity	Non-condensing at all temperatures equal or less than 27° C, decreasing to 75% at 35° C and 20% at 43° C, per MIL-STD-810, Method 507.3, Procedure I or II.
Cooling	>12 CFM/slot
Salt Fog	5% solution of sodium chloride for 48 hours (33.6 grams/m ² /yr [300 pounds/acre/year]), per MIL-STD-810, Method 509.3
Sand & Dust	Sand: Particles 0.01 to 1.0 mm diameter @ >55.2 kmh (34.3mph), Dust: 6x10 ⁻⁹ gm/cc3, 0.0001 to 0.01 mm diameter @ 64.4 kmh (40 mph), per MIL-STD-810, Method 510.3.
Fungal Control	Per MIL-STD-810, Method 508
Shock	Per MIL-STD-810, Method 516.6, Procedure I (non-operating)
Vibration	Per MIL-STD-810G, Method 514.6, Procedure I
EMC	MIL-STD-461E – CE 102, RE102, RE103, RS101, RS103, CS114, CS115, CS116
POWER/ELECTRICAL	
AC Input	208VAC, three-phase, 400 Hz
Power Supply	540W
Backplane Connectors	VME64x, 10 slots
Connector Pitch	0.8"
CONSTRUCTION	
Extrusions	6063-T6 and 6061-T6 Aluminum
Top & Bottom	0.125" thick Aluminum SH, 5052-H32 PER SAE-AMS-QQ-A-250/8
Card Cage	Front panel: 0.190" thick Aluminum SH, 5052-H32 PER SAE-AMS-QQ-A-250/8 Rear plate: 0.125" thick Aluminum SH, 5052-H32 PER SAE-AMS-QQ-A-250/8 Side Panels: 0.125" thick Aluminum SH, 5052-H32 PER SAE-AMS-QQ-A-250/8
Power Supply	540 watts, 5@40A, 3.3V@30A, 12V@13.5A
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 fans (total airflow 138CFM)

WARRANTY

This product has a one year warranty.

CONTACT INFORMATION

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