

FEATURES

- Ultra high cooling capacity for 145 W per slot at MSL
- Designed to meet military shock, vibration, and EMI standards
- Designed to cool extremely dense CPU and DSP boards
- Easy migration from commercial version to deployable military version
- 21-slot CompactPCI® (cPCI), VME64x, VME or VXS backplane available; 12-slot VPX REDI backplane also available
- IEEE 1101.10/11 compliant card cage
- Pac-2000® modular design
- Up to 2400 W embedded power at 220 VAC
- Advanced cooling design:
- Patented CoolSlot® air deflecting card guides optimize air flow
- Front air inlet/rear air outlet cooling
- Thermal simulation of enclosure
- Delivers 17.9 CFM per slot, sufficient cooling for 145 W per slot at MSL
- Designed to meet MIL-STD-461 EMI (radiated and conducted emissions and susceptibility standards)
- Front and rear cover panels, honeycomb inlet and exhaust
- Provisions for shielded connectors for I/O on rear panels
- Mounting for two internal hard drives behind front panel

RME1021M 10U HIGH-POWER ENCLOSURE

DATASHEET



TABLE 1: TECHNOLOGY OVERVIEW

PHYSICAL	
Width	17.25" (438.1 mm)
Height	17.47" (443.7 mm)
Depth	23" (584.2 mm), excluding handles
Weight	70 lbs. (31.8 kg)
CONSTRUCTION	
Extrusions	6063-T6 aluminum, precision grade with clear iridite plating
Card Guides	Molded plastic, Noryl N190X black (red for cPCI system slot), UL94-V0
Sideplates	.125" thick aluminum, 5052-H32, clear iridite plating
Tapped Strips	Carbon steel bar stock with zinc plating and supplementary chromate treatment
ESD Ground Clip	Beryllium copper, alloy C17400, 1/2 HT, with bright tin plating/MIL-T-10727 Front and rear
ENVIRONMENTAL	
Shock/Vibration	<ul style="list-style-type: none"> • MIL-S-901 • 15 g @ 40 ms • 30 g @ 20 ms • 100 g @ 5 ms • MIL-STD-167-1
Safety Agencies	Designed to meet UL60950; CSA 22.2 #234; TÜV EN60950
Flammability Rating	UL94-V0
EMC	Designed to meet MIL-STD-461
Earthing	ESD ground clip designed to comply with the earthing requirements of IEEE 1101.11 Section 15, IEC 60950 Section 2, and PICMG 2.5 R1.0
Acoustic	Fan noise varies with fan speed, controlled by temperature sensors. 15% (PWM speed, 55dB-A (Measured at ambient 25°C, no payload) At 50% (PWM) speed, 67 dB-A At 100% (PWM) speed, 81 dB-A

RME1021 10U HIGH-POWER ENCLOSURE

DATASHEET

TABLE 1: TECHNOLOGY OVERVIEW (continued from previous page)

AC INPUT	
15 A AC Line Input	15 A line cord (U.S. 220 V style) provided Rear line voltage inlet connector, RFI line filter, rear circuit breaker AC Input: 220-240 VAC
20 A AC Line Input	<ul style="list-style-type: none"> 20 A line cord (U.S. 220 V style) provided Rear line voltage inlet connector, RFI line filter, rear circuit breaker AC Input: 220-240 VAC

TABLE 2: ORDERING INFORMATION

PART NUMBER: RME1021M-		X-	XXXX
POWER SUPPLY AND POWER INLET			
(1) = 1600 W internal embedded power supply mounted in rear, with 15 A rear AC inlet (2) = 2400 W internal embedded power supply mounted in rear, with 20 A rear AC inlet (3) = 2000 W power supply with 15 A rear AC inlet (for VPX)		X-	
BACKPLANE			
(V721) = RACEway certified high power VITA 1.7 compliant VME64x 21-slot backplane with J0 connectors (VX21) = RACEway certified VME64x 21-slot backplane with J0 connectors (V021) = VME 21-slot backplane (VP21) = VITA 31.1 Gigabit Ethernet VME64x backplane; VITA 38 IPMB to all slots, 2 fabric slots, 19 node slots (XN21) = VITA 41.1 VXS InfiniBand™ Switch Fabric backplane; 21 slots, VITA 38 IPMB to all slots, 2 switch slots, 18 payload/VME64x slots, 1 standard VME64x slot (XR21) = VITA 41.2 VXS RapidIO® Switch Fabric backplane; 21 slots, VITA 38 IPMB to all slots, 2 switch slots, 18 payload/VME64x slots, 1 standard VME64x slot (XG21) = VITA 41.3 VXS Gigabit Ethernet Switch Fabric backplane, 21 slots, VITA 38 IPMB to all slots, 2 switch slots, 18 payload/VME64x slots, 1 standard VME64x slot (XP21) = VITA 41.4 VXS PCI Express Switch Fabric backplane, 21 slots, VITA 38 IPMB to all slots, 2 switch slots, 18 payload/VME64x slots, 1 standard VME64x slot (CP21) = PICMG 2.16 cPCI Packet Switching Backplane 5 V, 21 slots, PICMG 2.9 IPMB to all slots, no PCI bus, power on P1 and rear I/O on P2, 2 fabric slots, 19 node slots (see Note 1) (HP21) = PICMG 2.16 cPCI Packet Switching backplane 5 V, 21 slots, 17 slots H.110, PICMG 2.9 IPMB to all slots, no PCI bus, power on P1 and rear I/O on P2, 2 fabric slots, 19 node slots (see Note 1) (VPX12) = VITA 46/48 VPX REDI 1" pitch 12-slot backplane with VITA 46.1 VME bus and VITA 46.10 RTM			XXXX

Notes:

For 3.3 V add -3 to the end of the part number

Consult your Atrenne representative for VME or VME64x rear transition area card guides

WARRANTY

This product has a one year warranty.

CONTACT INFORMATION

www.atrenne.com

sales@atrenne.com

508.588.6110 or 800.926.8722

The information in this document is subject to change without notice and should not be construed as a commitment by Atrenne, a Celestica company.

While reasonable precautions have been taken, Atrenne assumes no responsibility for any errors that may appear in this document.

All products shown or mentioned are trademarks or registered trademarks of their respective owners.

