

BENEFITS

- Standard 16-slot, forced-air / conduction-cooled, 6U VPX chassis for lab development
- Fan speed control reduces acoustic noise at low temperature
- Power supply configurations for +12V-centric and +5V-centric VPX modules
- Wide variety of 16-slot 6U OpenVPX backplanes available, including new Gen-3 10 Gbaud rated backplanes



U.S. AIR FORCE

OVERVIEW

ENCLOSURE 13U OPENVPX FORCED AIR

CONDUCTION-COOLED DEVELOPMENT CHASSIS

The RME13CC rackmount enclosure is a 13U high OpenVPX forced air conduction-cooled development chassis meeting the latest ANSI/VITA specifications. The RME13CC provides cooling for up to 150W per slot. This enclosure supports up to 16-slots of 6U 1" pitch payload cards and rear transition modules. Chassis include OpenVPX backplanes with high-speed switch fabric support for Gen-2 up to 6.25 Gbaud or Gen-3 up to 10.3 Gbaud. Power supply configurations of 3000+ watts are available for both 12 V-centric and 5 V-centric applications.

FEATURES

- This extreme cooling rackmount chassis meets stringent ANSI/VITA 65 power and cooling requirements for conduction-cooled 6U OpenVPX modules
- Extreme cooling for 150W per slot per ANSI/VITA 65 OpenVPX
- Maintains card cage rails at 55°C or below with power dissipation of 150W per slot at an ambient of 30°C and mean sea level per ANSI/VITA 65 OpenVPX
- Airflow: front air intake, rear exhaust for forced air over heat sinks for upper and lower conduction-cooled chassis rails
- Fan speed control reduces acoustic noise at low temperature
- OpenVPX and VPX REDI[™] designed to the latest ANSI/VITA 46.0, ANSI/VITA 46.3, ANSI/VITA 46.4, ANSI/VITA 46.6, ANSI/VITA 46.7, VITA 46.8-VDSTU, ANSI/VITA 46.10, ANSI/VITA 48.0, ANSI/VITA 48.2, ANSI/VITA 65, and VITA 68 OpenVPX specifications
- Supports 6U 16-slot 1" pitch backplane with rear transition module support
- 16-slot 6U OpenVPX backplanes available
- Power supply configurations available for OpenVPX 12 V-centric and 5 V-centric module sets
- NEW! This chassis is now available with our new Gen-3 backplanes rated for 10.3 Gbaud!

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ENCLOSURE 13U OPENVPX FORCED AIR CONDUCTION-COOLED DEVELOPMENT CHASSIS

TABLE 1: TECHNOLOGY OVERVIEW

PHYSICAL					
Width	18.96" (rack flanges)				
Height	22.69" (13U)				
Depth	19.53"				
Weight	98 lbs.				
	CONSTRUCTION				
Top & Bottom	0.063" thick aluminum				
Side Panels	0.125" thick aluminum				
Card Cage	Conduction-cooled machined aluminium				
Rear Transition Card Guides	Molded plastic, Noryl N190X black				
Rear Transition Tapped Strips	Carbon steel bar stock with zinc plating and supplementary chromate treatment				
Power Supply	12 V-centric 3750W: 5 V-centric 3000W: +12V/VS1-VS2 @ 187.5A +12V/VS1-VS2 @ 62.5A +5V/VS3 @ 150A +5V/VS3 @ 300A +3.3VAUX @ 20A +3.3VAUX @ 20A +12VAUX @ 4A +12VAUX @ 4A -12VAUX @ 4A -12VAUX @ 4A 24V (fans) @ 25A 24V (fans) @ 25A				
Fan Trays	Upper and lower fan trays provide cooling of conduction-cooled card cage rails by forcing air flow across upper and lower heat sinks				
POWER/ELECTRICAL					
AC Input	110/220 VAC 30A inlet (220 VAC for full power)				
Backplane Connectors	MultiGig RT-2 per ANSI/VITA 46.0 (see note)				
Connector Pitch	1.0" per ANSI/VITA 48.2				
Transmission Rate	Gen-2 up to 6.25 Gbaud or Gen-3 up to 10.3 Gbaud				

Note: Contact factory for alternate connectors such as RT2-R

TABLE 2: ENVIRONMENTAL SPECIFICATIONS

ENVIRONMENTAL						
Operating Temperature	0 to +40°C					
Storage Temperature	-20 to +70°C					
Altitude	0 to 5,000 ft per VITA 65					
Humidity	0-95% non-condensing; conformal coating is not included					
Cooling	Maintains card cage rails at 55°C or below with power dissipation of 150W per slot at an ambient of 30°C and mean sea level per ANSI/VITA 65 OpenVPX					
Safety	Safety Designed to meet UL60950; CSA 22.2 #234; TÜV EN60950					
EMC Designed to meet FCC Part 15, Subpart J, Class A; CISPR 22, Class A (conducted emissions only, as conduction-cooled card ca						



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ENCLOSURE 13U OPENVPX FORCED AIR NDUCTION-COOLED DEVELOPMENT CHASSIS

TABLE 3: ORDERING GUIDE (continued on next page)

	CHASSIS PART NUMBER	POWER SUPPLY	BACKPLANE	BACKPLANE DIAGRAM
	RME13CC-1BOVP16C1	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-2: 16-slot OpenVPX 6.25 Gbaud BKP6-CEN16-11.2.2.3 Central switch topology with 2x fat pipe data plane 2x ultra thin pipe control plane Dual fat pipe expansion plane	024-900-16-CEN1-01 Gen-2 6.25 Gbaud
	RME13CC-1COVP16C1	3000W, 5 V-centric, 30A/220 VAC: +12V/VS1-VS2 @ 62.5A +5V/VS3 @ 300A +3.3VAUX @ 20A +12VAUX @ 4A -12VAUX @ 4A 24V (fans) @ 25A		
NEW	RME13CC-1BOVP16C13	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-3: 16-slot OpenVPX 10.3 Gbaud BKP6-CEN16-11.2.2.4 Central switch topology with 2x fat pipe data plane 2x ultra thin pipe control plane Dual fat pipe expansion plane	024-900-16-C1G3-01 Gen-3 10.3 Gbaud
NEW	RME13CC-1BOVP16C23	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-3: 16-slot OpenVPX 10.3 Gbaud BKP6-CEN16-11.2.24-4 Central switch topology with 4x fat pipe data plane and 6 pass-thru slots 2x ultra thin pipe control plane No expansion plane	024-900-16-C2G3-01 Gen-3 10.3 Gbaud

Note: Contact factory for other configurations.

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ENCLOSURE 13U OPENVPX FORCED AIR CONDUCTION-COOLED DEVELOPMENT CHASSIS

TABLE 3: ORDERING GUIDE

	CHASSIS PART NUMBER	POWER SUPPLY	BACKPLANE	BACKPLANE DIAGRAM
NEW	RME13CC-1BOVP12D1	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-1: 12-slot OpenVPX 3.125 Gbaud partial mesh Distributed topology with 12-slot partial mesh data plane No control plane No expansion plane	024-900-12-DIS1-01 Gen-1 3.125 Gbaud
NEW	RME13CC-1BOVP16X13	12 V-centric 3300W, 30A/220 VAC: +12V/VS1-VS2 @ 250A +5V/VS3 @ 150A +3.3VAUX @ 35A +12VAUX @ 17A -12VAUX @ 17A 24V (fans) @ 25A	Gen-3 16-slot OpenVPX 10.3 Gbaud Pass-thru - all fabric signals are connected to RTM	024-900-16-X1G3-01 Gen-3 10.3 Gbaud

Note: Contact factory for other configurations.

WARRANTY

This product has a one year warranty.

CONTACT INFORMATION

www.atrenne.com sales@atrenne.com 508.588.6110 or 800.926.8722

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