

Robust, 7U 19" Rack Mount Enclosure for 3U VPX

Featuring 2-16 VPX Slots at 1" Pitch Backplane with Extreme Power and Cooling

Features

- ◆ 2" Flush mounted 3Ux160MM, front card cage with 2 cable passages front to rear
- ◆ Optional 3Ux80MM, rear TM card cage
- ◆ Power options up to 2400 watts (See rear)
- ◆ Front panel power switch, and RuSH display
- ◆ Removable fan tray with optional air filter
- ◆ 6ea, 190+CFM, 12VDC ball bearing fans
- ◆ Dawn **RuSH™** system health monitor reads voltage, current & temperature and controls critical system operational parameters (See rear)
- ◆ Multifunction hinged rear panel supports I/O
- ◆ Chassis handles and optional slides
- ◆ Air flow in lower front and out upper rear
- ◆ Fully assembled, wired and tested

Overview

Dawn's RME-6430 was designed specifically to meet the stringent power and cooling needs of high slot count VPX systems. Designed for lab or deployed use, the RME-6430 offers a wide variety of features to suit most program needs.

Boards are flush mounted. A recessed rear TM cage is provided for applications requiring rear TM's. All cable routing is outside of critical cooling paths. A hinged rear door provides for multifunction mounting of rear fans, auxiliary power supplies, and provides I/O space.

Dawn's flagship **RuSH™** system health monitoring technology is used to protect your valuable investment in boards by monitoring critical voltage, current and temperature thresholds, and controlling fans to meet cooling requirements. Upon a catastrophic situation, **RuSH™** takes the necessary action to shut down system or overcome faults. **RuSH™** provides internet enabled remote control and error/status reporting.

The chassis may be ordered with only the features required to minimize cost.



Technical Specification

Backplane Compliance

Dawn's VPX Backplanes are designed to be compliant with the following released standards and VITA 46.0, VITA 46.1, VITA 46.3, VITA 46.4, VITA 46.6, VITA 46.7, VITA 46.9, VITA 46.10, , VITA 48.0 (REDI), VITA 48.1(REDI Air Cooling), 48.2(REDI Conduction Cooling), VITA65(OpenVPX)

Mechanical

Compatibility: Rails and card guides, IEEE 1101-10/11 VITA46.0, / VITA48(REDI), VITA65(OpenVPX)

Material: Aluminum 5052-H32/6061-T6

Finish: Brushed 220 Grit

Plating: Clear Alodine 1500

Dimensions: About 7U (12.25")H x 19.0"W x 20.0" D

Weight: 20 LBS, less power supplies

Electrical

Compliance: VPX electrically compliant with VITA46.0

Maximum Power Draw Per Slot: <= 800 Watts/Slot

Input Power: 85-264VAC, 47-440 Hz

Power Supply Output: See rear for options

Environmental

Storage Temperature: -20°C to +85°C

Operating Temperature: 0°C to +50°C

Humidity: <95% non-condensing

Cooling: (6) Dawn **RuSH™** controlled, Hi-Capacity, 12VDC ball bearing fans in push/pull configuration

Flammability Rating: UL94-V0

MTBF: >100K Hours including fans

P/N 11-1016430

Dawn 6430 includes	VS1=+12V @ 10A	VS2=+3.3V @ 30A	VS3=+5V @ 40A	3.3V_AUX @ 10A	-12V_AUX @ 20A	+12V_AUX @ 4A
Select the Number of additional modules ---->	+12V @ 20A	+3.3V @ 40A	+5V @ 40A			
VPX Power supply	VS1=+12V	VS2=+3.3V	VS3=+5V			
Note 1: Total module count can not exceed 8				Total Watts		
Note 2: Total wattage can not exceed 2400W						

Dawn 6430 includes	RuSH 426 with LCD display, Ethernet & RS-232, Voltage monitoring, 4 analog temp sensors, Reset switch, Digital on/off switch, and Circuit breaker
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RuSH Options		426	063	632	526	839
Pick one of the RuSH Modules for Chassis Monitoring, if different from above		Ethernet Telnet & RS-232 or USB (DC Fans 12V @ 10A)	Ethernet Telnet & RS-232 or USB (DC fans rated from 12-48V @ 20A)	Ethernet - (Secure shell) & RS-232 or USB (DC fans rated from 12-48V @ 20A)	Dual Ethernet - & RS-232 or USB (PWM fans only)	Ethernet - (Secure shell) & RS-232 or USB + Dual Pressure sensor (0.15 PSI) (DC Fans 12V @ 10A)
	Ethernet Y / N					
	RS-232 Y / N					
	USB Y / N					

RuSH Accessories		831	Qty	
Current monitor 4ch	Current monitoring Y / N			Custom code charge may apply
Per slot current monitor / For use with Dawn Single slot Backplanes	Per slot Current monitoring Y / N	713	Qty	Custom code charge may apply

RuSH Temp sensor Accessories		516	Qty	
Note: Total I2C Temp module count can not exceed 8	I2C Temperature sensors Y/N			Custom code charge may apply
	I2C Temp sensor with Pressure monitor Y/N	634	Qty	Custom code charge may apply
	I2C Temp sensor with Humidity Y/N	633	Qty	Custom code charge may apply

Qty	
3u VPX Backplane Slot count	
Slot cooling	Air cooled
	Conduction cooled (VITA 48.2)
Number of Slots with RF (VITA 67) connectors	
Number of Slots with Fiber (VITA 66) connectors	
QTY	
VITA 67.1	
VITA 67.2	
VITA 67.3	

VITA 62 Power supply slots Y / N	Qty	AC (1 phase) or DC (28V)	Air cooled or Conduction

Other Products from Dawn:
 Card cages for commercial, aerospace and military applications Enclosure 3D solid model design and production from commercial to full rugged military Custom and Standard product PCB design, layout, production RuSHTM Rugged system health monitor Backplanes for cPCI 2.1, cPCI 2.16, VME, VME64x, VXS, VPX, CUSTOM, Build to Print Powered Enclosures for Development, Prototype, Production, Deployment Prototype Boards, Extender Boards, Form Factor Extenders Front Panels, Filler Panels, Custom Panels, Build to Print Panels Build to print machining, fabrication and assembly