

Robust, 9U 19" Rack Mount Enclosure for 6U VPX Featuring 16-Slot VPX Backplane with Extreme Power and Cooling

Features

- ◆ 2 to 16 6U VPX Backplane Slots on 1" pitch
- ◆ 2" Recessed 6Ux160MM, front card cage with 2 cable passages front to rear
- ◆ Optional 6Ux80MM, rear TM card cage
- ◆ Power options to over 4000 watts (See rear)
- ◆ Front panel power switch, and RuSH display
- ◆ Removable fan tray with optional air filter
- ◆ 6ea, 120+CFM, 12VDC ball bearing fans
- ◆ Dawn **RuSH™** system health monitor reads voltage, current & temperature and controls critical system operational parameters
- ◆ Front removable hinged door finishes chassis and conceals front panel cables
- ◆ 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-6460 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-6460 offers a wide variety of features to suit most program needs.

The chassis supports front panel cabling with a recessed front card cage and a cable passage to the rear I/O panel for applications where TM's are not desired or available. A recessed rear TM cage is provided for applications requiring rear TM's. All cable routing is outside of critical cooling paths. A front removable door conceals front panel cabling and helps insure cooling integrity. 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 May 2011 state of draft specifications: 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 46.11, 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,.3,.4,.7,.9 / VITA48(REDI), VITA65(OpenVPX)

Material: Aluminum 5052-H32/6061-T6

Finish: Brushed 220 Grit

Plating: Clear Alodine 1500

Dimensions: About 9U (15.72")H x 19.0"W x 20.0" D

Weight: 21.5 LBS, less power supplies

Electrical

Compliance: VPX electrically compliant with VITA46.1

Maximum Power Draw Per Slot: ≤ 650 Watts/Slot

Input Power: 85-264VAC, 47-63 Hz

Power up to 2KW, Standard IEC connector and 15A power cord, power above 2KW, 20A or 30A Hubble Twist-Lok

Power Supply Output: See rear for options

Environmental

Storage Temperature: -20°C to +85°C

Operating Temperature: 0°C to +50°C

Humidity: <math>< 95\%</math> 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

Ordering Information

(Please select from choices below to complete last 4 digits (-WXYZ) of part number)

P/N 11-1016460-WXYZ

W = 5V and X = 12V Power Options

Y = Chassis Options

Z = Backplane Options

Chassis can support any mix of W or X up to 16 modules

5 Volts			12 Volts		
W Option	# of Modules	Total Current	X Option	# of Modules	Total Current
0	0	0	0	0	0
1	1	40	1	1	20
2	2	80	2	2	40
3	3	120	3	3	60
4	4	160	4	4	80
5	5	200	5	5	100
6	6	240	6	6	120
7	7	280	7	7	140
8	8	320	8	8	160
9	9	360	9	9	180
A	10	400	A	10	200
B	11	440	B	11	220
C	12	480	C	12	240
D	13	520	D	13	260
E	14	560	E	14	280
F	15	600	F	15	300
G	16	640	G	16	320

Order Code	RuSH	TM	Air Filter	Slides
0	-	-	-	-
1	-	-	-	X
2	-	-	X	-
3	-	-	X	X
4	-	X	-	-
5	-	X	-	X
6	-	X	X	-
7	-	X	X	X
8	X	-	-	-
9	X	-	-	X
A	X	-	X	-
B	X	-	X	X
C	X	X	-	-
D	X	X	-	X
E	X	X	X	-
F	X	X	X	X

- 0 = No connectors installed
- 1 = 16 Slots populated front only
- 2 = 16 Slots populated front and rear
- 3 and above = Custom Options

Backplane may have between 2 and 16 slots. Front and rear card cages have card guides provided in same positions as backplane connectors. Cage slots with no backplane connectors are blocked with air baffles and unused slots are covered with filler panels' at front and rear of chassis.

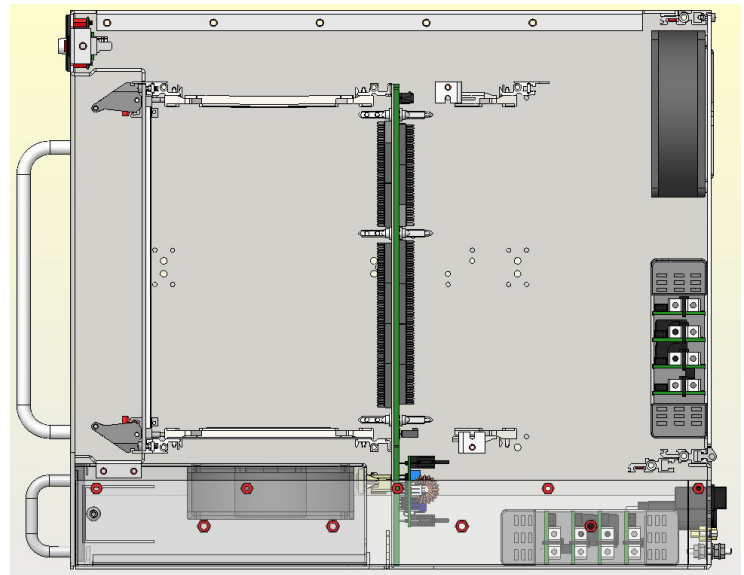
This chassis can be converted to support conduction cooled boards. Optional conduction cooled card guides may be substituted for plastic guides at any slot.

Select Order Code based on options desired.

Instructions: Find your current required for 5V and 12V rails. Go to option columns and find W and X values for part number suffix.



Rear View



Side View

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
 RuSH™ 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