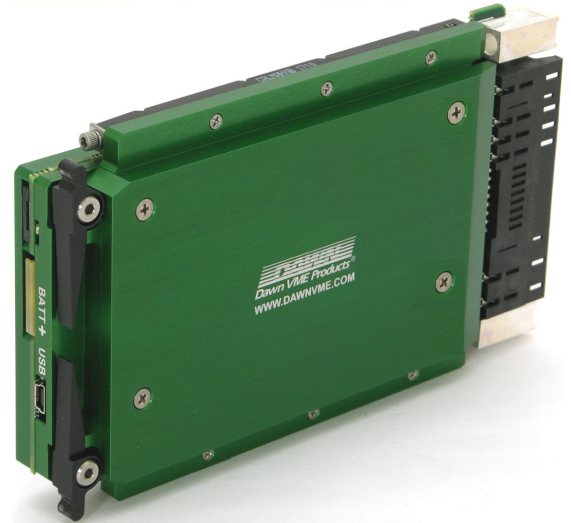


# Universal AC Input VITA 62 400W 3U Power Supply for OpenVPX Systems



## Features

- ◆ True 6 Channel supply provides full Open VPX support
- ◆ Optional configuration provides up to 400W on single Rail
- ◆ Available in air cooled, bulkhead conduction cooled, and Reverse Side wedge lock conduction cooled models
- ◆ Up to 400 Watts power output with 1 inch pitch form factor
- ◆ Onboard embedded **RuSH™** technology actively monitors voltage, current, temperature and provides protective control
- ◆ Factory programmable power sequencing of all voltage rails
- ◆ Shutdown control for each power rail
- ◆ Over Voltage, Over Current, and Over Temp protection
- ◆ Current/Load share compatible with up to 4 PSC-6236 units
- ◆ I<sup>2</sup>C interface for Status & Control
- ◆ Standard INH# and EN# power control signals
- ◆ VBAT for support of VPX memory backup power bus
- ◆ Front I/O panel includes LED status indicator, USB port for firmware upgrade and VBAT battery access



## Overview

Dawn's VITA 62 Compliant PSC-6236 is designed to operate in a military environment over a wide range of temperatures at high power levels. Can be special ordered to produce a single voltage (3.3V, 5V, 12V, or Custom V) output up to 400W.

Dawn's embedded RuSH™ (Rugged System Health Monitor) technology provides the "smarts" for monitoring and control of critical system performance parameters including Voltage, Current, Temperature, control of power sequencing and shutdown of all voltage rails.

Custom firmware enables additional features such as monitoring shock /vibration events or customer specified monitoring windows, power sequencing, alerts, alarms, status and control, etc.

The RuSH™ monitor is interfaced into the OpenVPX (I<sup>2</sup>C) management plane, providing an I<sup>2</sup>C communication link with system cards. FAL# and DEG# status output for direct system alert. Optional LED / Status / Power Good output.

Custom power capacity and voltage input range configurations available. Contact factory for additional information.

## Specifications

### Mechanical

**Extended Shock and Vibration Per MIL-STD-810F**

**Card Guide style and Mounting:** PCB or Reverse Side Wedge Locks

**Connector:** VITA 62 Compliant (Tyco 6450849-7) power connector

**Dimensions:** Standard 1" Conduction cooled form factor

**Weight:** 1.67 Lbs/ 0.7582 Kg. (measured)

**Inject & Eject:** VITA 48.2 compliant

**Covers:** ESD covers on both sides of the board, accommodate military two-level maintenance

### Electrical

**MIL-STD-461: TBD (Inprocess)**

**MIL-STD-704F:** 50 mSec holdup provided on separate module

**Input Voltage:** Single Phase, 85-264VAC, 47-400Hz

**Voltage Rails:** +12V (VS1), +3.3V (VS2), +5V (VS3), Aux\_+12V, Aux\_-12V, Aux\_+3.3V, VBAT (+3.0V typical)

**Power Factor Load:** .98 at 60Hz.

**Output Current for Each Voltage Rail:**

Input Voltage	Max Output Current (Amps) for each channel					
	12V(VS1)	3.3V(VS2)	5V(VS3)	AUX_3.3	AUX_+12	AUX_-12
90-264VAC	16.7	30	40	4	4	3

**Wattage Max +3.3V rail:** 200W

**Wattage Max +5V rail:** 200W

**Wattage Max +12V rail:** 200W

**Total Maximum Power All Rails:** 400W

**Ripple:** <50mVp-p on +3.3V and +5V, <120mVp-p on +12V and -12V

**Isolation Voltage:** Input to Output (1500V)

### Environmental

**Storage Temperature:** -40°C to +100°C

**Operating Temperature:** -40°C to +85°C (at the Wedge lock edge)

**Power supply output dependant on chassis cooling capability**

# Ordering Information

## P/N 06-1016236-WXYZ

**W = Power Input**

- 1 = N/A
- 2 = N/A
- 3 = N/A
- 4 = N/A
- 5 = N/A
- 6 = 90-264VAC, 47-400Hz

**X = Cooling/Coating Option**

- A = Air Cooled, No Conformal Coat
- B = Conduction to Bulkhead, No Conf. Coat
- W = Conduction to Wedge Lock, No C. Coat
- 1 = Air Cooled, Conformal Coated
- 2 = Conduction to Bulkhead, Conformal Coated
- 3 = Conduction to Wedge Lock, Conformal Coated

**Y = Firmware Options**

- 1 = Standard Firmware
- 2-Z = Custom Firmware

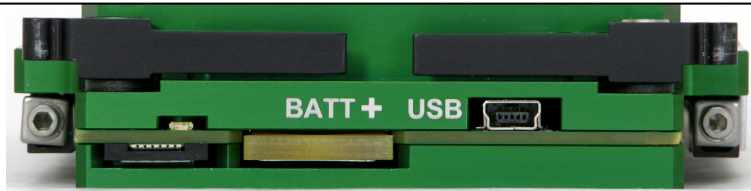
**Z = Special Options**

- 0 = None
- 1 = Single Output 3.3V/90A
- 2 = Single Output 5V/80A
- 3 = Single Output 12V/33.3A



**“W” Cooling/Coating Option Shown**

**Side View**

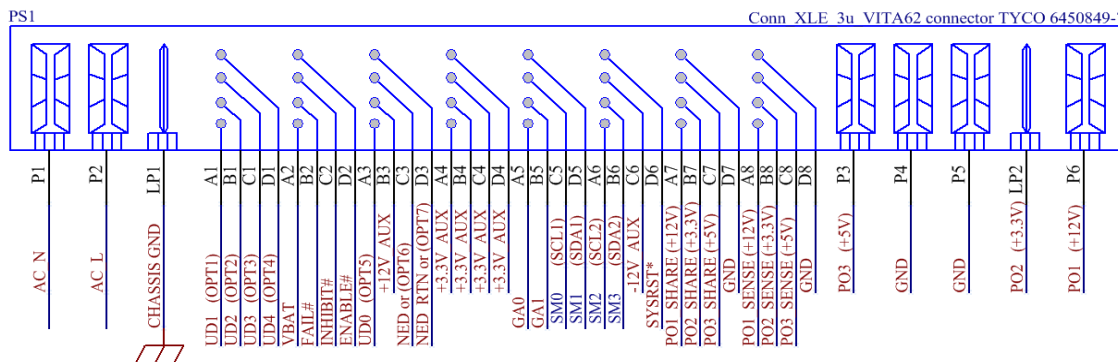


**“W” Cooling/Coating Option Shown Front Panel View**

Shows battery, USB connector, status indicator and ejectors

Additional Factory select Options below provide extended capability beyond the VITA 62 specification. Available on request.

**(Connector pin out – VITA 62 Compliant – Card Connector Face View)**



Backplane connector mate is:  
Tyco P/N = 1-6450869-4

**FACTORY SELECT OPTIONS:**

- (OPT1) = DEG# or Custom I/O (= +3.3V TTL) or SDI (SPI Data out) (See NOTE 2) or NC
- (OPT2) = +28V (Hold up Input) or +28V output (current monitored & FET controlled ON/OFF) or NC (See NOTE 1)
- (OPT3) = +28V (Hold up Input) or +28V output (current monitored & FET controlled ON/OFF) or NC (See NOTE 1)
- (OPT4) = LED1 (TTL) or Custom I/O or +28V (hold up Input) or +28V output (current monitored & FET controlled ON/OFF) or NC (See NOTE 1)
- (OPT5) = +12V\_AUX or SDO (SPI data out) or Custom I/O
- (OPT6) = NED or Custom I/O
- (OPT7) = GND or NC

**NOTE1:**

When NC (No connect) UD2, UD3, UD4 (OPT2 & OPT3 & OPT4) are Disconnected from +28V.

**NOTE2:**

SPI Data I/O and Chip select can be assigned to any Custom I/O pin.

**Other Products from Dawn:**

Card cages and enclosures for commercial, aerospace and military applications

Enclosure 3D solid model design, manufacturing and production from commercial to full-rugged conduction cooled military

Custom and Standard product PCB design, layout, production

**RuSH™** Rugged system health monitor,

Backplanes for **cPCI 2.1, cPCI 2.16, VME, VME64x, VXI, 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