



VITA 62 3U Power Supply: Model PSC-6238

# VITA 62 Compliant 800 Watt 3U Power Supply for Conduction Cooled Systems

## Features

- ◆ True 6 Channel supply provides full Open VPX support
- ◆ Wedge lock conduction cooled module
- ◆ Up to 800 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-6238 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 3-color LED status indicator, VBAT battery access
- ◆ USB port for status display, access menu control and firmware upgrade.
- ◆ VITA48.2 Compliant Inject / Eject levers for easy installation

## Overview

Dawn's VITA 62 Compliant PSC-6238 is designed to operate in a military environment over a wide range of temperatures at high power levels.

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 and control of power sequencing and shutdown of all voltage rails. Onboard real-time clock and switchable Battleshort and NED (Nuclear Event Detect) functions.

Embedded product serial number, power-on hours and number of power cycles.

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

Optional LED / Status / Power Good output.

## Specifications

### Mechanical

**Extended Shock and Vibration Per MIL-STD-810F**  
**Card Guide style and Mounting:** VITA 48.2 Wedge Locks  
**Connector:** VITA 62 Compliant power connector TE 6450849-7  
**Dimensions:** Standard 1" Conduction cooled form factor  
**Weight:** 2.181 Lbs/ 0.9892 Kg.  
**Inject & Eject:** VITA 48.2 compliant inject and eject features  
**Covers:** ESD protected inputs and robust covers on both sides of the board, accommodate military two-level maintenance

### Electrical

**Input Voltage:** 18-36VDC  
**Voltage Rails:** +12V (PO1), +3.3V (PO2), +5V (PO3), +12V\_AUX, -12V\_AUX, 3.3V\_AUX, VBAT (+3.0V typical)  
**Output Current for Each Voltage Rail:**

Input	Max Output Current (Amps) for each channel					
Voltage	12V(PO1)	3.3V(PO2)	5V(PO3)	3.3V_AUX	+12V_AUX	-12V_AUX
28V	42	30	50	4	4	4

**Wattage Max +5V rail:** 400W@28V (All 3.3V & 5V not to exceed 400W)  
**Wattage Max +12V rail:** 504W@28V (All 12V & -12V not to exceed 504W)  
**Total Maximum Power:** 800W@28V  
**Ripple:** <50mVp-p on +3.3V and +5V, <2mVp-p on +12V and -12V  
**Isolation Voltage:** Input to Output (2250V)

**EMI** Tested to MIL-STD-461G - CE102

### Environmental

**Storage Temperature:** -40°C to +100°C (optional -55C to 125C)  
**Operating Temperature:** -40°C to +85°C (at the Wedge lock edge)

Power supply output dependant on chassis cooling capability

# Ordering Information

## P/N 06-1016238-WXYZ

**W = Power Input**  
2 = 28VDC Nominal

**X = Cooling/Coating Option**  
W = Conduction to Wedge Lock, No C. Coat  
3 = Conduction to Wedge Lock, Conformal Coated

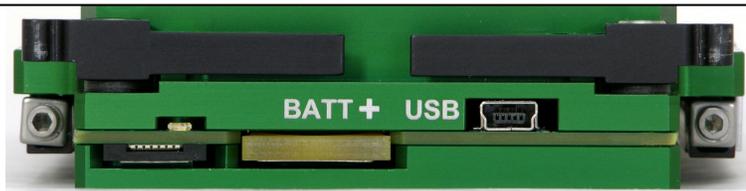
**Y = Firmware Options**  
1 = Standard Firmware

**Z = Special Options**  
0 = None

Note: AC input option is available with Dawn P/N 06-1016236.



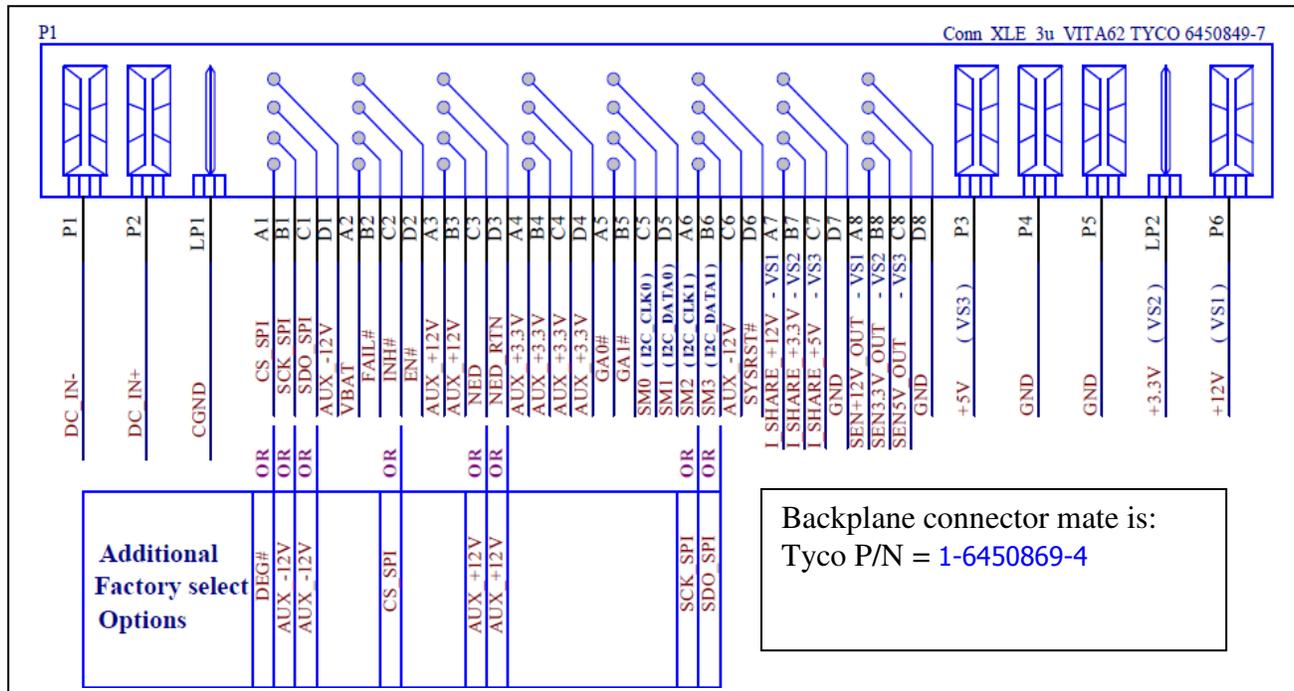
**Side View**



**Front Panel View** shows battery, USB connector and ejectors

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)



### 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