VPX027

6U VPX Universal AC or DC Input Power Module 900W

VPX027

Key Features

- Power Module for Open VPX VITA 62 in 6U VPX 10HP
- Universal AC input 85V_{RMS} to 264V_{RMS} (nominal 100V_{RMS} to 240V_{RMS}) with 3 Phase (3P) option
    - DC Input 120V to 370V
- AC Input Frequency 47 to 63Hz (typical 50/60)
    - 400Hz operational
- 900W Output Power
- +12V and +3.3V_AUX
- Available in Conduction Cooled
- Meets Mil-STD-704F, MIL-STD-461F, MIL-STD-810G
- Health Management through dedicated Processor
- Up to four modules for parallel operation and/or redundancy

Benefits

- Most comprehensive VPX products in the market
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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The VPX027 is a power module per VITA 62. The VPX027 is designed for 6U VPX systems and provides +12V and +3.3V_AUX to the backplane. Up to four VPX027 could be utilized for parallel operation and/or redundancy. The total output power of 900W per module.

The module has dedicated health management per VITA46.11 and interfaces to the backplane using dual IPMI buses. The module has ENABLE, INHBIT, FAIL, Geographic address, and SYSRESET connections to the backplane.

The module is designed to meet the following MIL-STDs:

- MIL-STD-704F
- MIL-STD-461F
- MIL-STD-810G

Figure 1: VPX027

Figure 2: VPX027 Top View

Figure 3: VPX027 Front Panel View

Block Diagram

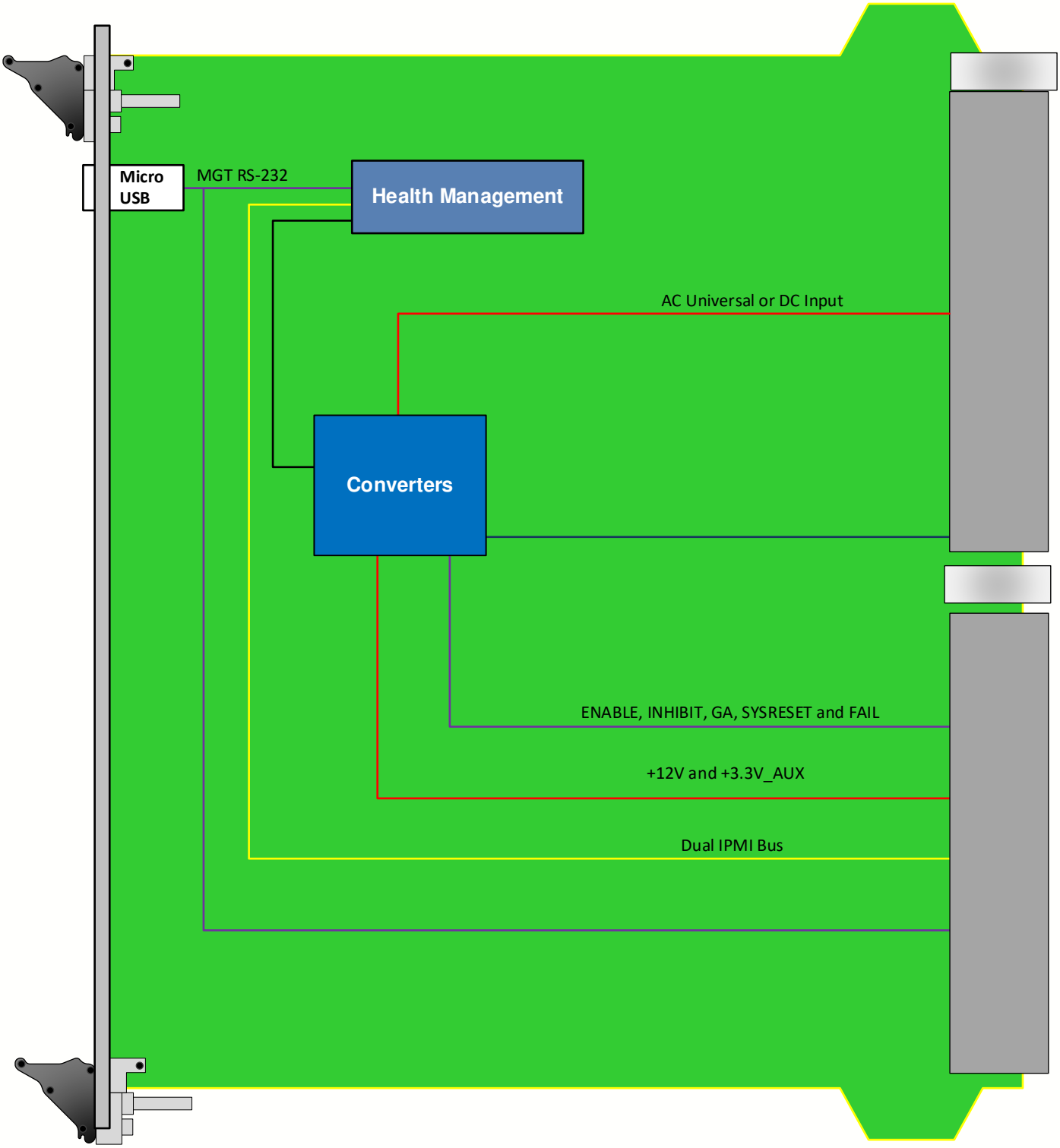

Figure 4: VPX027 Functional Block Diagram

Specifications

Architecture		
Physical	**Dimensions**	6U, 2” pitch (10 HP panel)
Standards		
VPX	**Type**	VITA 46.0
VPX	**Type**	VITA 65 OpenVPX
Module Management	**IPMI**	IPMI v2.0
Configuration		
Power	**VPX027**	Power Entry Module with universal AC or DC input 900W
		Input to output 4000V_{AC}; 2KV_{AC} Isolation input to Chassis; 1500V_{AC} Output to Chassis
Front Panel	**Micro USB**	RS-232 for Health Management
	LEDs	User defined by Health Management
Onboard Interfaces		Dual IPMI Buses
VPX Interfaces	**Slot Profiles**	See Ordering Options
	Rear IO	Per VITA62 (Fail, Inhibit, Geographic address, etc.)
	Backplane	Connector per VITA 62
Other		
MTBF	MIL Hand book 217-F@ TBD hrs	
Certifications	Designed to meet FCC, CE and UL certifications, where applicable	
Standards	VadaTech is certified to both the ISO9001:2015 and AS9100D standards	
Warranty	Two (2) years, see VadaTech Terms and Conditions	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

VPX027*– AB0-000-GHJ

A = Number of Input Phase		G = Applicable Slot Profile
0 = One Phase 1 = Three Phase (3P)**		0 = 10 HP, VITA 48.1 1 = Reserved
B = VS3 (PO3)		**H = Environmental**
0 = No Connect 1 = +12V		See Environmental Specification
		J = Conformal Coating
		0 = No coating 1 = Reserved 2 = Reserved 3 = Parylene

Notes:

*Per VITA specification +5V, +12V_AUX and -12V_AUX is required. The VPX027 provides only +12V and +3.3V+_AUX to the backplane. Please consider VPX026 if other voltages are needed. **When module is ordered as 3P please make sure not to run as a single phase

Environmental Specification

	Air Cooled		Conduction Cooled		
Option H	**H = 0**	**H = 1**	**H = 2**	**H = 3**	**H = 4**
Operating Temperature	AC1* (0°C to +55°C)	AC3* (-40°C to +70°C)	CC1* (0°C to +55°C)	CC3* (-40°C to +70°C)	CC4* (-40°C to +85°C)
Storage Temperature	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C3* (-50°C to +100°C)
Operating Vibration	V2* (0.04 g2/Hz max)	V2* (0.04 g2/Hz max)	V3* (0.1 g2/Hz max)	V3* (0.1 g2/Hz max)	V3 (0.1 g2/Hz max)
Storage Vibration	OS1* (20g)	OS1* (20g)	OS2* (40g)	OS2* (40g)	OS2* (40g)
Humidity	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing

Notes:

*Nomenclature per ANSI/VITA 47. Contact local sales office for conduction cooled (H = 2, 3, 4).

Related Products

VPX021

- Power Module for Open VPX VITA 62
- 3U VPX Systems
- 600W Output Power

VPX029

- Power Module for Open VPX VITA 62
- 3U VPX Systems
- 600W Output Power

VPX028

- Power Module for Open VPX VITA 62
- 6U VPX Systems
- 500W Output Power

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