

# 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<sub>RMS</sub> to 264V<sub>RMS</sub> (nominal 100V<sub>RMS</sub> to 240V<sub>RMS</sub>) 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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# VPX027

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

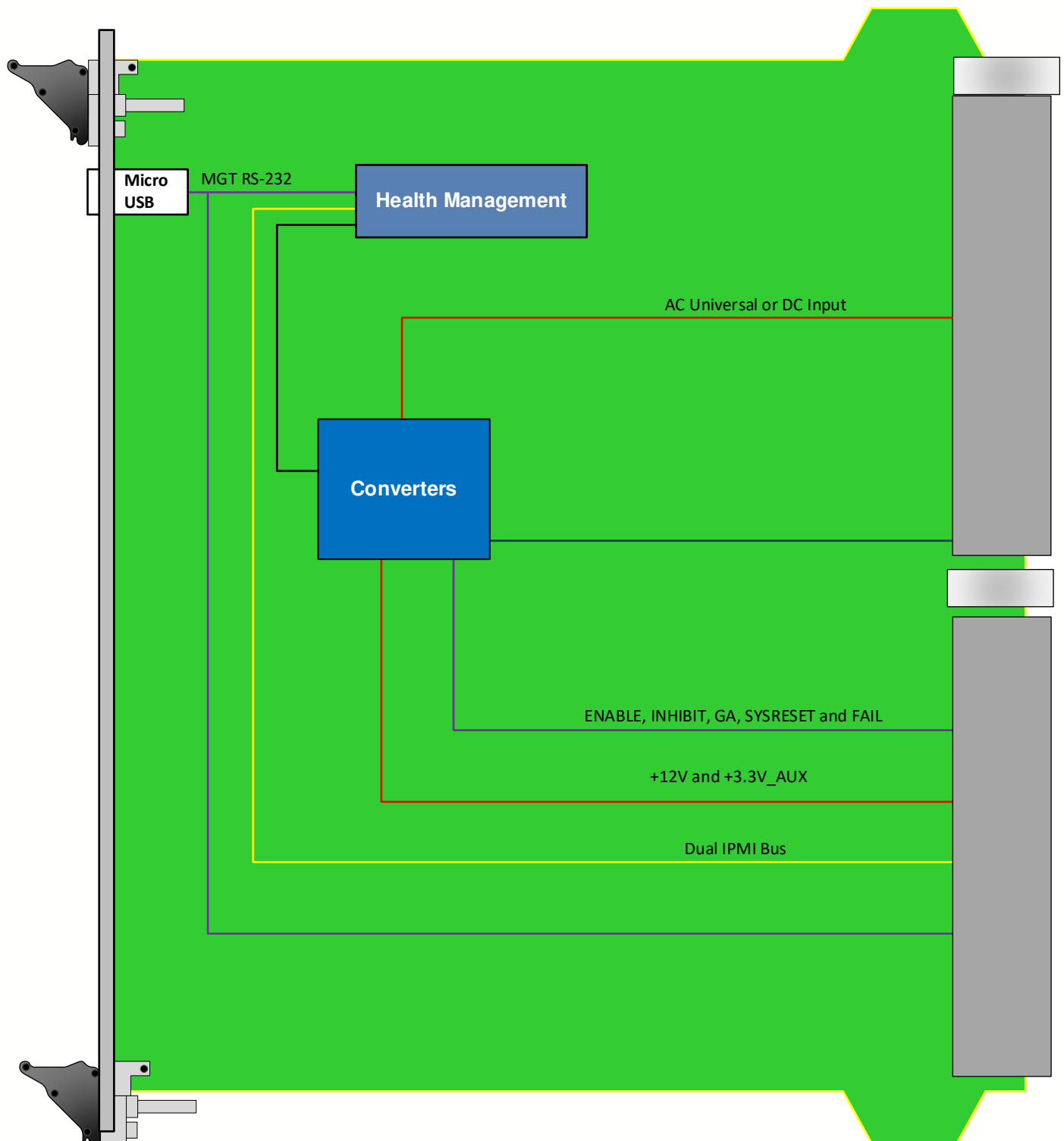


Figure 4: VPX027 Functional Block Diagram

# Specifications

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

## 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\*– A00-000-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
		H = Environmental
		See <a href="#">Environmental Specification</a>
		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

# Contact

## VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

## Asia Pacific Sales Office

7 Floor, No. 2, Wenhui Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

## VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

[info@vadatech.com](mailto:info@vadatech.com) | [www.vadatech.com](http://www.vadatech.com)

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