

# VPX025

## 6U VPX 28V DC Input Power Module 1100W

VPX025

### Key Features

- Power Module for Open VPX VITA 62
- 6U VPX Systems
- 1100W Output Power
- 2KVdc input to output functional isolation)
- Input voltage +16V to +45V (nominal +28V)
- Available in Conduction Cooled
- Meets Mil-STD-704F, MIL-STD-461G, MIL-STD-810G MIL-STD-1275E
- 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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# VPX025

The VPX025 is a power module per VITA 62. The VPX025 is designed for 6U VPX systems and provides +12V, +5V, -12V\_AUX, +12V\_AUX and +3.3V\_AUX to the backplane. Up to four VPX025 could be utilized for parallel operation and/or redundancy.

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-461G
- MIL-STD-810G
- MIL-STD-1275E

Figure 1: VPX025

Figure 2: VPX025 Top View

Figure 3: VPX025 Front Panel View



## Block Diagram

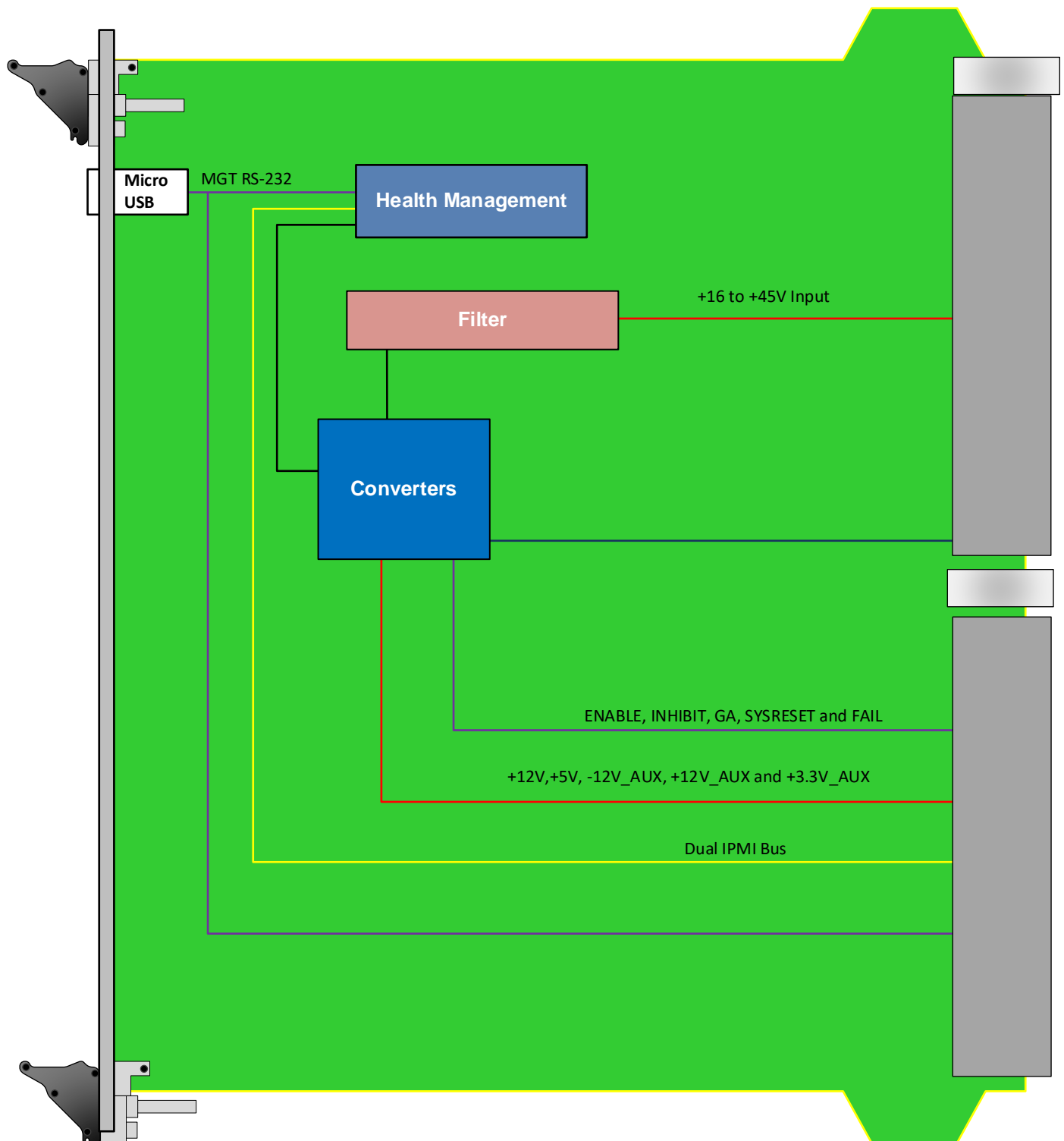


Figure 4: VPX025 Functional Block Diagram

# Specifications

| Architecture              |  |   |
|---------------------------|--|---|
| <b>Physical</b>           | <b>Dimensions</b>  | 6U, 1" pitch (5 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>VPX025</b>  | Power Entry Module with +16V to +45V input 1100W<br>2KVdc Isolation |
| <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

## VPX025\*– 000-000-GHJ

|  |  |  |
|--|--|--|
|  |  | <b>G = Applicable Slot Profile</b>                             |
|  |  | 0 = 5 HP, VITA 48.1<br>1 = Reserved                            |
|  |  | <b>H = Environmental</b>                                       |
|  |  | See <a href="#">Environmental Specification</a>                |
|  |  | <b>J = Conformal Coating</b>                                   |
|  |  | 0 = No coating<br>1 = Reserved<br>2 = Reserved<br>3 = Parylene |

### Notes:

\*Per VITA specification +5V, +12V\_AUX and -12V\_AUX is required. The VPX025 provides only +12V and +3.3V+\_AUX to the backplane.

## Environmental Specification

| Option H              | Air Cooled           |                       | Conduction Cooled    |                       |                       |
|-----------------------|----------------------|-----------------------|----------------------|-----------------------|-----------------------|
|                       | 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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