

# Power Module, AC, 1000W (12HP, Double Width) – UTC018



## **KEY FEATURES**

- Double-module, 12HP height module per AMC.0
- Universal AC input (85 to 265V), 1000W
- Provides power up to 12 AMCs, 2 MCHs and Cooling Units
- Very low ripple voltage on +12 V
- Hot swappable with two banks of 256K flash for redundancy
- Dual IPMI bus
- 32-bit RISC processor
- Blue, red, amber and red LEDs
- IPMI 2.0 and HPM.1 compliant
- Menu driven software for ease of configuration
- Current sensor per slot



# **Benefits of Choosing VadaTech**

- Highest power AC PSU for MicroTCA in industry (1000W)
- Conveniently sized to fit double width vertical-mount chassis
- Very low ripple voltage
- Support for power module redundancy
- Efficient re-use of existing designs/components reduce costs
- Electrical, mechanical, software and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, speciality modules, and test/dev product from one source

The UTC018 is a 1000W (83 A @ 12 V) Power Module for use in a MicroTCA chassis. It is fully compliant with the MicroTCA.0 Revision 1.0 specification; including dual-redundant I2C buses (IPMB-0). The module is 12 HP, taking two full-size slots in a chassis. The UTC018 is hot-swappable and fully redundant when used in conjunction with a second module. Multiple temperature sensors are included on-board to monitor for over-temperature conditions within the unit. The current is continuously measured for each of the modules and reported to MCH for any faults. Once installed in the system, the firmware is upgradable via the Shelf Manager. The UTC018 can be configured to power and enable the modules without the presence of an MCH during development.

VadaTech can modify this product to meet special customer requirements. Contact us to discuss your application.

# **SPECIFICATIONS**

| Architecture              |  |  |
|---------------------------|--|--|
| Physical                  | Dimensions   | Width: 5.85" (148.5 mm)  |
|                           |  | Depth 7.11" (180.6 mm)   |
| Туре                      | AMC Power Module   | Intelligent power controller for µTCA chassis  |
| Standards                 |  |  |
| Module Management         | IPMI   | IPMI version 2.0   |
|                           | ATCA   | PICMG 3.0 Revision 2.0 (AdvancedTCA)   |
|                           | AMC  | PICMG AMC.0 Revision 1.0 (AdvancedMC)  |
|                           | μTCA   | PICMG MicroTCA.0 Revision 1.0  |
|                           | HPM  | HPM.1 Revision 1.0   |
|                           |  |  |
| Power                     | UTC0018  | 1000W supply (83A @ 12V)   |
|                           |  | Input 85 to 265V AC (Input current 6.8 A / 3.4 A) with frequency 47 to 63Hz                |
| Environmental             | Temperature  | Operating Temperature: 0° to 65°C with air flow greater than 400 LFM (available in µTCA.3) |
|                           |  | Storage Temperature: –40° to +90°C   |
|                           | Vibration  | 1G, 5 to 500Hz on each axis  |
|                           | Shock  | 30Gs on each axis  |
|                           | Relative Humidity  | 5 to 95 per cent, non-condensing   |
| Front Panel               | External Interface   | RS-232 front panel access  |
|                           | LEDs   | IPMI management control: blue, red, amber, green and fuse indicator for each input rail    |
|                           | Switch   | Hot swap switch input with ±15 KV ESD protection   |
|                           | Input Power  | Universal AC   |
|                           | Temperature Sensor   | Multiple temperature sensors on-board  |
| 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 ISO9001:2000 and AS9100B:2004 standards  |  |
| Compliance                | RoHS and NEBS  |  |
| Warranty                  | Two (2) years  |  |
| Trademarks and Disclaimer | The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice |  |

# **IPMI FUNCTIONALITY**

The UTC018 is IPMI 2.0 and HPM.1 compliant with optional IPMI commands including warm/cold reset, re-arm sensor events, get device GUID, and get/set the hysteresis, threshold, and/or sensor event enable. The PMs follow the ATCA specification in fail-over for redundant IPMB-0 and FRU LED control. The units also have power channel control, get power channel status, PM reset, get PM status, and PM heartbeat. Temperature and current sensors are also included.

## INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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.

#### **BLOCK DIAGRAM**

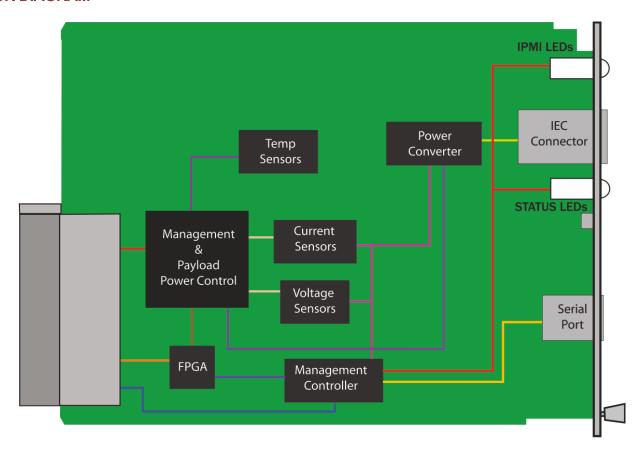




Figure 2: Front Panel





# **ORDERING OPTIONS**

UTC018 - 000 - 000 - 0HJ

### H = Temperature Range

- 1 = Commercial (0° to +65°C)
- 2 = Industrial (-20° to +70°C)
- $3 = Military (-40^{\circ} to +80^{\circ}C)$

# J = Conformal Coating

- 0 = None
- 1 = Humiseal 1A33 Polyurethane
- 2 = Humiseal 1B31 Acrylic

# **RELATED PRODUCTS**







UTC003 MCH

UTC020 Power Module 1000W DC UTC011 Power Module Conduction Cooled

## **CONTACT US**

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