

UTC013

DC Power Module, 900W
(Double Width)



UTC013

Key Features

- Double module, full-size per AMC.0
- Dual DC input -36 V DC to -75 V DC
900 W (available in 450 W)
- Available in UTCA.3 conduction cooled
- Two banks of 256K Flash for redundancy
- Hot swappable
- Dual IPMI bus
- 32-bit RISC processor
- Modules can be turned on without an MCH

Benefits

- Very low ripple voltage
- 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 POWER OF VISION



UTC013

The VadaTech UTC013 is a 900 W power module (available in 450 W) for use in a MTCA chassis. The power module runs at 95% efficiency when running at maximum load. This results in over 900 W available to the system. It is fully compliant with the MicroTCA.0 revision 1.0 specification; including dual-redundant I2C buses (IPMB-0).

The UTC013 is hot-swappable and fully redundant when used in conjunction with a second instance of the module. It provides power to the twelve slots, two MicroTCA Carrier Hubs (MCHs) as well as the Cooling Units (CUs).

Multiple temperature sensors are included on-board to monitor for over-temp conditions within the module. The current is continuously measured for each of the modules and reported to MCH for any fault.

Once installed in the system the firmware is upgradable via the shelf manager. The UTC013 can be configured to power and enable the modules without the presence of an MCH.

The UTC013 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.



Figure 1: UTC013



Figure 2: UTC013 Top View

Block Diagram

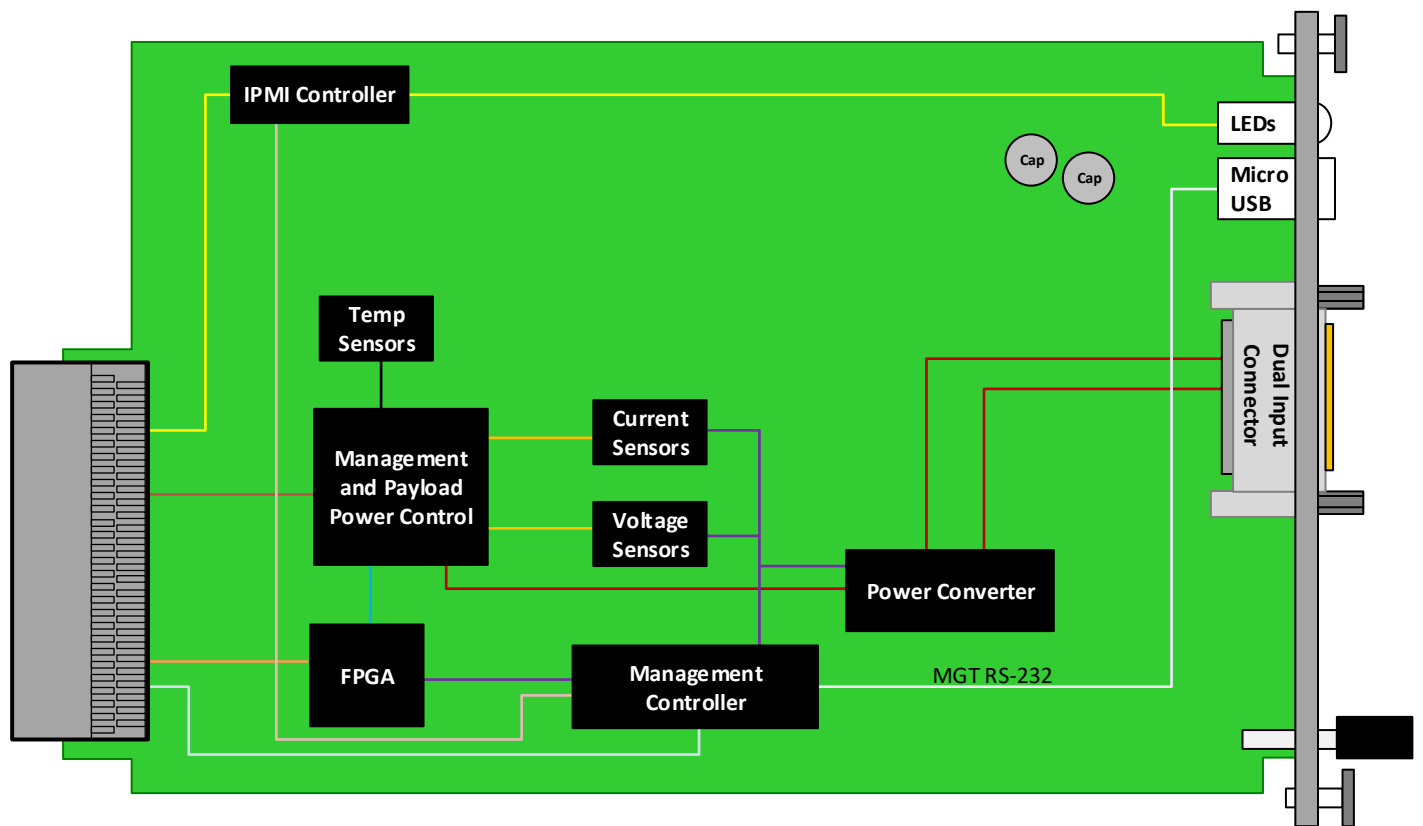


Figure 3: UTC013 Functional Block Diagram

Front panel

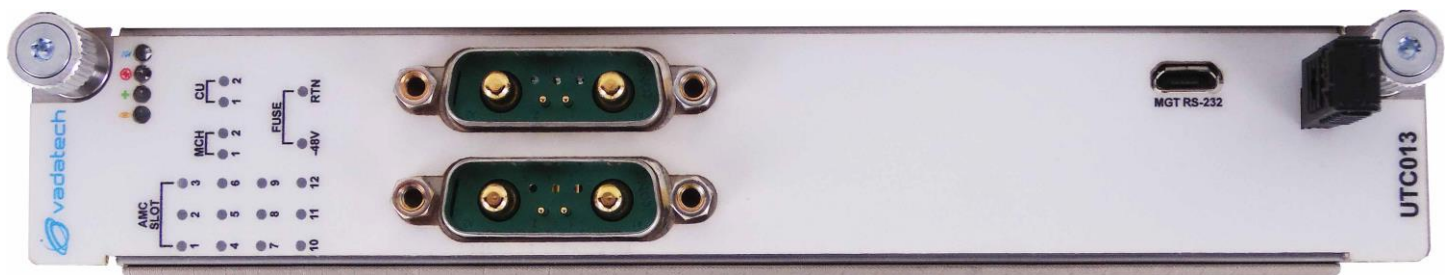


Figure 4: UTC013 Front Panel

Specifications

Architecture		
Physical	Dimensions	Width 5.85" (148.5 mm)
		Depth 7.11" (180.6 mm)
Type	AMC Power Module	Intelligent power controller for MTCA chassis
Standards		
MTCA	Type	PICMG MTCA.0 Revision 1.0
AMC	Type	AMC.0 Revision 1.0
ATCA	Type	PICMG 3.0 Revision 2.0
Module Management	HPM	HPM.1 Revision 1.0
	IPMI	IPMI v2.0
Configuration		
Power	UTC013	900 W supply with 95% efficiency; providing over 900 W to the system
Environmental	Temperature	See ordering options and environmental spec sheet
		Storage Temperature: -40° to +90°C
	Vibration	1 G, 5 to 500 Hz each axis
	Shock	30 Gs each axis
Features	External Interface	RS-232 front panel access
	LEDs	IPMI management control
		Activity/Status LEDs
		Fuse indicator for each input rail
	Switch	Hot-swap switch input with ±15 kV ESD protection
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	
Warranty	Two (2) years	

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

UTC013– ABC-000-0HJ

A = Power

1 = 450 W
2 = 900 W

B = Specification

0 = MTCA.0*
1 = MTCA.1
2 = MTCA.3

H = Temperature Range

1 = Commercial (0° to +65°C)
2 = Industrial (–20° to +70°C)
3 = Extended (–40° to +80°C)

C = Module Size

0 = 6 HP, Standard
1 = 8 HP, Extended*

J = Conformal Coating

0 = No coating
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

Notes: *For use with Vadatech 2U Chassis such as VT812 and VT814.

Related Products

UTC003



- 400 MHz RISC CPU with 64 MB DDR for MTCA Carrier Management Controller (MCMC) and Shelf Manager
- Single width, full height module per AMC.0
- Fail-over with dual UTC003 in system

UTC011



- Single-width, full-height module per AMC.0
- Dual 10 to 36 VDC input for 241 W option and 18 to 36 V DC input for 460 W option
- Two banks of 256K flash for redundancy

UTC020



- Single module, full-size per AMC.0
- Dual -36 V DC to -75 V DC input, 936 W (available in 468 W)
- Hot swappable with support for power module redundancy

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