

MicroTCA (μ TCA)

Environmental Specifications for μ TCA Modules

- μ TCA Specification has six different Specifications
 - μ TCA.0
 - μ TCA.1
 - μ TCA.2
 - μ TCA.3
 - μ TCA.4
 - μ TCA.4.1 (Follows the μ TCA.4)
- Each of the standard has its own environmental specification
 - This paper at the glance shows each specification



vadatech
THE POWER OF VISION



Environmental Specifications for MicroTCA Modules

Environmental Category and Range	μTCA.0 (Air Cooled)	μTCA.1 (Air Cooled)	μTCA.2 (Hybrid Air / Conduction Cooled)	μTCA.3 (Conduction Cooled)	μTCA.4 (Air Cooled with Rear Transition Module)
Retention Mechanism	Hot-swap handle	Retention screws	Open flow wedge locks	Wedge locks	Hot-swap handle
Max Operating Shock	15g	25g	40g	40g	15g
Max Operating Vibration	1g sinusoidal	8g random	12g random	12g random	1g sinusoidal
Operating Temperature	-5°C to +55°C	-5°C to +55°C	-40°C to +85°C*	-40°C to +85°C*	-5°C to +55°C
Operating Temperature (Industrial-grade)	-20°C to +70°C	-20°C to +70°C	N/A	N/A	-20°C to +70°C
Non-operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Non-operating Temperature (extreme)**	N/A	N/A	-55°C to +105°C	-55°C to +105°C	N/A

Notes:

* Edge of modules for conduction cooled

** Contact VadaTech for more details

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.

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 | www.vadatech.com

Choose VadaTech

We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited



vadatech
THE POWER OF VISION

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.

© 2020 VadaTech Incorporated. All rights reserved.
DOC NO. 4FM737-12 REV 01 | VERSION 1.0 – SEP/25