

MaXum500 Data Sheet

14-Slot 14U DC / 15U-16U AC AdvancedTCA™ Shelf

Key Features

- PICMG 3.1 R2.0 and IPMI v1.5/2.0 compliant shelf
- Up to 450W per slot
- Redundant fan trays for optimal high-velocity pressurized Push-Pull cooling
- Shelf manager based on Pigeon Point ShMM Sentry700 or Sentry500
- 40 Gbps backplane
- Ethernet signaling environment
- Fabric interface with Dual-Dual star or full mesh interconnect

AC versions:

- Redundant, hot swappable and IPMI-controlled power supplies
- Support for N+1 and N+N redundancy
- Up to eight 2500W PSUs or ten 1600W PSUs in up to two 1U units



Specifications

Backplane	
Bus Architecture	Supports up to 14 third-party ATCA-compliant front boards
Base Interface	Dual Star with support for 10/100/1000 BASE-T Ethernet
Fabric Interface	Full Mesh and Dual-Dual Star fabric connectivity optimized for performance at 40Gbps per channel
IPMB Support	Dual redundant bussed IPMB support
DC Power	
DC Input	-48 / -60 VDC; five feeds per PEM; up to 50Amp per feed
Redundancy	Two redundant PEM modules, each capable of supplying 100% of shelf's power
Over-current Protection	Five 50Amp circuit breakers on each PEM, one per segment
EMC Filtering	PEMs provide common-mode filtering for conducted and emitted interruptions
AC Power	
Power supplies	Redundant, hot swappable and IPMI-controlled power supplies
Power configuration	Up to 2x 1U drawers, each with: Up to 4 units of 2500W @208-220VAC / 1500W @110VAC or Up to 5 units of 1600W @208-220VAC / 1200W @110VAC
Redundancy	N+1: loss of one PSU doesn't interrupt the shelf operation N+N: loss of one PSU or AC supply blackout don't interrupt the shelf operation
Cooling	
Cooling topology	Push-pull, front bottom to back top cooling
Fans	Twelve fans for optimal pressurized cooling
Redundancy	N+1: any one fan can fail with no service degradation
Fan Speed	Variable speed under shelf management; soft rotation start
Shelf Management	
Shelf Manager	Two front accessible, redundant, hot-swappable IPMI Shelf Managers based on Pigeon Point ShMM Sentry 700
IPMI Peripherals	Shelf EEPROM, Fan Tray, PEM, Front panel
Protocol Support	Multiple management interfaces supported: RMCP, SNMP, CLI and OpenHPI
Interface	10/100 Base-T Ethernet
Software Upgrades	Software version is remotely upgradable
Display	LEDs to indicate chassis status, fans status, Telco alarm and user-defined status
Accessibility	
Front	Shelf managers, fan trays, air filter, cable holder, Front panel, blades
Rear	PEMs, RTMs, cable management
Telco Alarm	
Electrical/Mechanical	Dual redundant Alarm Modules, front accessible via micro D- type connector
Alarm I/O Interfaces	Supports 4 outputs (Major, Minor, Critical, Power), 2 inputs (Major & Minor) and alarm Cutoff switch. Alarm relays with a maximum rating of 60VDC/1A or 30VAC

Regulatory	
Safety	UL/EN/IEC60950-1 Certified with all country deviations
EMC	FCC part 15 Class A compliant
Environment	Designed to be compatible with NEBS level-3
Acoustics	According to NEBS GR63 issue 3
Physical	
Number of slots	14 8Ux280mm front blades & 14 8Ux70mm RTMs
Dimensions	24" (14U) H x 17.67" (19" rack mount) W x 15.18" D – including handles & cable holders
Weight	37Kg (81 lbs) – DC version
Environmental	
Temperature:	
▪ Operating	5°C to 40°C (41°F to 104°F)
▪ Short-term	-5°C to 55°C (23°F to 122°F)
▪ Short-term with fan failure	-5°C to 40°C (23°F to 104°F)
Storage Temperature	-40° to +70°C
Humidity	5% to 95%, non-condensed