RES-HD-TRM SYSTEM MANAGEMENT MODULE

DATA SHEET



HIGH DENSITY, INDUSTRY-LEADING PERFORMANCE, ENHANCED RELIABILITY WITH SUPERIOR RESILIENCE TO SHOCK, VIBRATION, AND TEMPERATURE EXTREMES

The RES-TRM module occupies one chassis slot in a 2RU or 3RU HD chassis provides remote independent initialization, administration, and monitoring of the health and environment of one or more modules or servers and related computing infrastructure equipment, including fault data history, analytics and prognostics. The Resource Manager provides a single user interface for easy access to managed systems' service processors, displaying information obtained from these processors in a converged dashboard view. Themis' i7 based Resource Manager leverages open standards such as Open Stack Dashboard (Horizon) and Zabbix, a highly efficient, enterprise-class open source distributed monitoring solution for networks and applications.

RES HD SYSTEMS

Themis RES HD systems can be used in a multitude of applications that require high-compute density and low latency access to large-data storage. Themis RES HD servers:

- ▶ Deliver high performance processing power
- Double compute density
- ▶ Enable a 50% rack space savings with per server weights as low as seven pounds
- ▶ Reduce total system weight by nearly 50%

Designed with leading edge components, RES-HD servers provide maximum system configuration flexibility and system expansion options with processor, storage, high-speed switch, and system management module options.

Designed with enhanced reliability features for military, industrial, or rugged commercial use, RES HD systems can be mounted in standard commercial racks or mobile rugged transit cases, and provide industry-leading performance and superior resilience to shock, vibration, and temperature extremes.

THEMIS VALUE

Themis provides systems integrators and end-users with the best-of-breed computing resources available, and works closely with them to optimize computing solutions that are easy to integrate, yet inexpensive to own and operate.



HD SYSTEM ENVIRONMENTAL SPECIFICATIONS*

- ▶ Operating temperature range: 0°C to 55°C
- ▶ Extended temperature range: -15°C 65°C **
- ▶ Operating shock: 3 axis, 35g, 25ms
- ▶ Operating vibration: 4.76 Grms, 5Hz to 2000Hz (SSD)
- ▶ Operating humidity: 8% to 95% non-condensing
- ▶ MIL-STD-810G, MIL-STD-901D, and MIL-STD-167-1*
- ▶ MIL-STD-461 options available

HD SYSTEM AND MODULE MECHANICAL SPECIFICATIONS

- Height
 - ▶ 4 chassis slot, 2RU or 3.5 inches (88.9 mm)
 - ▶ 6 chassis slot, 3RU or 5.25 inches (133.35 mm)
- ▶ Width: 17.06 inches (433.3 mm)
- ▶ Depth: 20 inches (508 mm)
- ▶ Typical System Weight*
 - ▶ 2RU chassis: 40 pounds
 - ▶ 3RU chassis: 55 pounds
- ▶ RES-XR5-HDC Module Weight: 6.88 lbs.

HD SYSTEM MODULAR MAINTAINABILITY

- ▶ Removable fans (3)
- ▶ Power supply options
 - ▶ Single or redundant 110/220 VAC (50/60Hz, 400Hz)
 - ▶ Single or redundant 18-36 VDC, 32 Amp
 - ▶ Single or redundant 36-72 VDC, 18 Amp
- ▶ Hot pluggable disk drives (8)
- * Themis HD modules are implemented in a 2RU or 3RU system chassis. The envionmental specifications provided herein reflect HD system temperatures. Themis designs all products to meet or exceed listed data sheet specifications. Some specifications are configuration dependent
- ** Extended temperature range is dependent on system configuration, components, and application thermal profile. Please contact Themis for information specific to your desired configuration requirements.







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RES-TRM SYSTEM MANAGEMENT MODULE SPECIFICATIONS

- Number of ports: fourteen ports
- ▶ Performance switching capacity: 48 Gbps
- Maximum forwarding rate: 35.71 Mpps
- MAC address table size: 8K entries
- Packet buffer: 3.5 Mbits
- Forwarding mode: store and forward
- ▶ IEEE 802.3 compliant
- ▶ IEEE 802.3u compliant
- ▶ IEEE 802.3ab compliant

- Supports half/full-duplex operation at 10/100Mbps
- Supports full-duplex operation at 1000Mbps
- Supports auto-negotiation for each port
- Auto MDI/MDIX
- ▶ IEEE 802.3x flow control support
- ▶ IEEE 802.3az compliant

RES HD SYSTEM SPECIFICATIONS

HD SYSTEM ENVIRONMENTAL SPECIFICATIONS, NOTE 1		
PARAMETER	NON-OPERATING	OPERATING
Temperature range	-40°C to 70°C	0°C to 55°C
Extended Temperature range	-40°C to 70°C	-15°C – 65°C, Note 2
Humidity (non-condensing)	5% to 95%	8% to 95%
Shock	3 axis, 35g at 25 ms	3 axis, 35g at 25 ms
Safety	EN60000	EN60000
RFI/EMI	EN55022/24	EN55022/24
Compliance	CE Mark	CE Mark
RES-HD SYSTEM MECHANICAL SPECIFICATIONS, NOTE		
PARAMETER	NON-OPERATING	
HD System Dimensions	Height: 4 chassis slot, 2RU or 3.5 inches (88.9 mm), 6 chassis slot, 3RU or 5.25 inches (133.35 mm) Width: 17.06 inches (433.3 mm) Depth: 20 inches (508 mm)	
Typical System Weight	2RU chassis: 40 pounds 3RU chassis: 55 pounds	
HD-Chassis Power Supply Options	Single or redundant 110/220 VAC (1200W) Single or redundant 28 VDC (500W, 750W DC)	
Chassis features	Coated aluminum for light weight and corrosion resistance Stainless steel in selected areas to add strength and stiffness Modular design for easy upgrade and service Optional rack-mount slides and shock pins Front to rear airflow	
RES-HD SYSTEM FAN AND POWER SPECIFIATIONS		
PARAMETER	DESCRIPTION	
Removable fans	3	
Power supply options	Single or redundant 110/220 VAC (50/60Hz, 400Hz) Single or redundant 18-36 VDC, 32 Amp Single or redundant 36-72 VDC, 18 Amp	
Hot pluggable disk drives	8	

Notes

- Themis designs all products to meet or exceed listed data sheet specifications. Some specifications are configuration dependent. I/O options are configuration dependent
 Extended temperature is dependent on system configuration, components, and application thermal profile. Please contact Themis for information specific to your desired configuration requirements.

3. Weights are provided for typical configurations. Weight may vary depending on configuration. Contact your Themis sales representatives for more information.

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For More Information For more information, product specifications, and contact information, go to www.themis.com

