



## RES-XR4-2U-FIO Dual Socket, 13.5 or 16.5 Inch Rack Mountable Server

### INDUSTRY-LEADING PERFORMANCE, ENHANCED RELIABILITY AND SUPERIOR RESILIENCE TO SHOCK, VIBRATION, AND TEMPERATURE EXTREMES

Featuring one or two E5-2400 or E5-2600 V2 Series Intel® Xeon® processors with up to twelve cores, 512 GB DDR3 ECC memory, and enhanced reliability features, the Themis RES-XR4-2U-FIO server provides industry-leading performance and superior resilience to shock, vibration, and temperature extremes.

Designed for military, industrial, or rugged commercial use, the RES-XR4-2U-FIO server keep mission-critical applications available in demanding environments where Size, Weight, and Power (SWAP) is an important consideration.

### CONFIGURATION FLEXIBILITY

The RES-XR4-2U-FIO server provides configuration versatility and system expansion to meet your current and future system requirements. The RES-XR4-2U-FIO rack mounted servers can be mounted in standard commercial racks or mobile rugged transit cases.

### 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.

For the most current information on Themis products, visit [www.themis.com](http://www.themis.com).

### PROCESSOR AND CPU

- ▶ Up to two E5-2400 or E5-2600 V2 Series Intel® Xeon® processors with up to twelve cores
- ▶ Up to 512 GB DDR3 ECC

### MANAGEMENT AND OPERATING SYSTEM

- ▶ Windows® and Linux® application support
- ▶ IPMI v2.0 support

### ENVIRONMENTAL RESILIENCY

- ▶ 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, MIL-STD-167-1\*,
- ▶ MIL-STD-461 options available

### MECHANICAL

- ▶ Height: 2RU or 3.5 inches (88.9 mm)
- ▶ Width: 17 inches (432 mm)
- ▶ Depth: 13.5 or 16.5 inches (345 or 419 mm)
- ▶ Weight (typical)\*
  - 13.5 inch depth : 21.0 lbs (9.5 kg)
  - 16.5 inch depth : 25.3 lbs (11.5 kg)

### MODULAR MAINTAINABILITY

- ▶ Removable fans (5)
- ▶ 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 (2)

\* 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.



| PROCESSOR AND CPU |   |
|-------------------|---|
| PARAMETER         | DESCRIPTION   |
| Processor         | One or two E5-2400 or E5-2600 V2 Series Intel® Xeon® processors with up to twelve cores |
| Memory            | Up to 512 GB DDR3 ECC   |

| ON-BOARD EXPANSION |  |
|--------------------|--|
| PARAMETER          | DESCRIPTION  |
| Expansion slots    | Up to seven PCI-E 3.0 x16 (low-profile cards only). Up to two PCI-E 3.0 x16 (full-height cards only) |

| FRONT PANEL ACCESS I/O, NOTE 1        |            |             |
|---------------------------------------|------------|-------------|
| I/O                                   | QUANTITY   | ACCESS      |
| Removable 2.5 SATA or SAS disk drives | Up to 2    | Front panel |
| CD-RW/DVD-RW drive                    | 1          | Front panel |
| Status LEDs                           | 7          | Front panel |
| Gigabit Ethernet ports (RJ45)         | 2          | Front panel |
| USB 2.0 ports                         | 4 standard | Front panel |
| RS-232 serial ports (DB9)             | 1 standard | Front panel |
| Power connector                       | 1 or 2     | Front panel |
| Power switch                          | 1          | Front panel |
| VGA graphics                          | 1          | Front panel |

| ENVIRONMENTAL, 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%, Note 1              |
| Shock                      | 3 axis, 35g at 25 ms           | 3 axis, 35g at 25 ms           |
| Vibration (10-2000Hz)      | 4.76 Grms, 5Hz to 2000Hz (SSD) | 4.76 Grms, 5Hz to 2000Hz (SSD) |

| MECHANICAL               |   |
|--------------------------|---|
| PARAMETER                | NON-OPERATING   |
| Dimensions               | Height: 2RU or 3.5 inches (88.9 mm)<br>Width: 17 inches (432 mm)<br>Depth: 13.5 or 16.5inches (345 or 419 mm)   |
| Weight (typical), Note 3 | 13.5 inch depth: 21 lbs (9.5 kg)<br>16.5 inch depth: 25.3 lbs (11.5 kg)   |
| Chassis features         | Coated aluminum for light weight and corrosion resistance<br>Stainless steel in selected areas to add strength and stiffness<br>Modular design for easy upgrade and service<br>Optional rack-mount slides and shock pins<br>Front to rear airflow |

| MODULAR MAINTAINABILITY   |  |
|---------------------------|--|
| PARAMETER                 | DESCRIPTION  |
| Removable fans            | 5  |
| Power supply options      | Single or redundant 110/220 VAC (50/60Hz, 400Hz)<br>Single or redundant 18-36 VDC, 32 Amp<br>Single or redundant 36-72 VDC, 18 Amp |
| Hot pluggable disk drives | 2  |

- Notes**
1. Themis designs all products to meet or exceed listed data sheet specifications. Some specifications are configuration dependent. I/O options are configuration dependent
  2. Extended temperature range 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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