

# REDCOM SERVER 1600

*Ruggedized MIL-spec small form factor computing platform*

REDCOM Server 1600 is a compact, powerful, and ruggedized Intel®-based computing platform, proudly engineered and assembled in the USA by the experts at REDCOM. Server 1600 makes use of industrial-grade, extended-lifecycle components and meets MIL-STD-810 specifications for temperature, altitude, vibration, and shock resistance.



## **SWaP optimized design**

REDCOM Server 1600 is optimized for low Size, Weight, and Power (SWaP), making it ideal for tactical deployments, harsh environments, mobile communications, and industrial automation. The server's unique 1U, half-rack form factor allows two units to be installed side-by-side in a standard 19" rack or transit case, enabling redundancy and High Availability in a very compact space. Front-to-rear airflow allows Server 1600 to stack with other components without impacting performance.



## **Applications**

REDCOM Server 1600 is ideally suited for applications where small size and high reliability are critical, including:

- Mobile communications
- Industrial automation
- Manufacturing
- Energy (utilities, oil & gas, exploration)
- Agriculture
- Military
- Tactical
- Humanitarian aid and disaster response



## **Rugged and reliable**

REDCOM leveraged decades of hardware design experience to build Server 1600 to withstand the test of time. The system uses extended lifecycle components and meets MIL-STD-810 specifications for temperature, altitude, vibration, and shock resistance. Server 1600 is backed by a three-year hardware warranty.



## **Key features**

- Intel Core i7 processor with four dual-threaded cores running at 3.2GHz
- Full processing speed across an extended operating range (0° to 50° C)
- Operating system agnostic
- Ideal server for virtualization: supports hypervisor platforms such as VMware®, KVM, and Xen
- Dual 2.5" SATA drive bays supporting removable solid-state drives (SSD)
- Four 1-Gigabit Ethernet ports
- Intel DPDK technology
- Dual Power Inputs
- Built-in AC power supply
- Wide range of power input 90–264 VAC
- DC input 18–36 VDC
- Run AC, DC, or both for redundant power

# REDCOM Server 1600 Hardware Specifications

## PHYSICAL

|                    |  |
|--------------------|--|
| Type               | Small form factor, standalone server                                       |
| Form Factor        | 1U x 1/2 width   |
| Dimensions (WxHxD) | 8.42 x 1.72 x 15.16 inches<br>21.39 x 4.37 x 38.51 cm                      |
| Weight             | 8.5 lbs. / 3.9 kg  |
| Motherboard        | Mini-ITX   |
| Power Input        | 90-264 VAC, 50-60 Hz, 207 watt and/or 18-36 VDC                            |
| Mounting           | Optional bracket kits for mounting one or two units in a standard 19" rack |

## ENVIRONMENTAL

|                           |  |
|---------------------------|--|
| Temperature (operational) | 32 to 122 °F / 0 to 50 °C<br>MIL-STD-810G, Method 501.6, Procedure II  |
| Temperature (storage)     | -4 to 158 °F / -20 to 70 °C<br>MIL-STD-810G, Method 501.6, Procedure I   |
| Altitude (operational)    | up to 10,000 ft. / 3.0 km at 122 °F / 50 °C<br>up to 15,000 ft. / 4.5 km at 104 °F / 40 °C<br>MIL-STD-810G, Method 500.6, Procedure II |
| Altitude (storage)        | up to 30,000 ft. / 9.1 km<br>MIL-STD-810G, Method 500.6, Procedure I   |
| Vibration                 | 7.7 Grms<br>MIL-STD-810G, Method 514.7, Procedure I,<br>Category 24: General Minimum Integrity<br>Exposure                             |
| Shock                     | 20 G<br>MIL-STD-810G, Method 516.7, Procedure I  |
| Safety: ETL-listed        | UL STD 62368-1 (United States)<br>CSA STD C22.2 # 62368-1 (Canada)   |

## CPU

|          |                       |
|----------|-----------------------|
| Type     | Intel i7-4790S        |
| Speed    | 3.2 GHz               |
| L3 Cache | 8 MB                  |
| TDP      | 65 W                  |
| Features | 4 dual-threaded cores |

## MEMORY

|                |                                      |
|----------------|--------------------------------------|
| Capacity       | 16 GB                                |
| Specifications | 2 x 8 GB SO-DIMM, PC3-12800, Non-ECC |
| Data Rate      | 1600 MT/s                            |

## HARD DRIVE

|          |                                  |
|----------|----------------------------------|
| Type     | Two 2.5" SATA 3.0 drive bays     |
| Capacity | 256GB SSD (default, upgradeable) |

## PORTS

|              |                                   |
|--------------|-----------------------------------|
| USB 3.0      | 4 x rear                          |
| USB 2.0      | 2 x front                         |
| Ethernet     | 4 x 1 GbE, RJ45 (2 front, 2 rear) |
| Audio Output | 1/8" Jack, stereo                 |
| Microphone   | 1/8" Jack, monaural               |
| Video        | 1 x HDMI, 1 x DisplayPort         |



Front View



Rear View