

# Huawei RH5885 V3 Rack Server

— High Efficiency, Flexible Expansion



Professional • Trusted • Future-oriented

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HUAWEI TECHNOLOGIES CO., LTD.



# Huawei RH5885 V3 Rack Server

## Fault-tolerant design to ensure stable system operation

- Chip-level fault-tolerant features, such as automatic recovery for processors and links, ensure stable system operation.
- Memory mirroring and memory sparing prevent system shutdown caused by memory hardware faults.
- Full redundancy and hot swap maintenance are supported for key components, such as PSUs, fan modules, and hard disks, without the need for opening the chassis cover. These features facilitate quick replacement for faulty components during normal system operation, ensuring high system reliability.
- The integrated intelligent management (iMana) software monitors system operation, triggers warnings, and rectifies faults.
- A diagnosis panel facilitates fault location, which reduces the time required to rectify faults.



RH5885 V3

The Huawei RH5885 V3 (RH5885 V3 for short) is a standard 4U 4-socket rack server and supports Intel® Xeon® E7-4800 v2 processors. To meet the requirements of mission-critical applications such as databases, business intelligence (BI), and virtualization, the RH5885 V3 provides up to 60 computing cores and supports flexible configurations for processors, DIMMs, I/O, and hard disks, achieving optimal cost effectiveness.

## Strong processing capabilities for optimal cost effectiveness

- The RH5885 V3 supports four Intel® Xeon® E7-4800 v2 processors. The maximum number of cores per processor increased from 10 to 15, and the maximum cache capacity is increased from 30 MB to 37.5 MB.
- To maximize the concurrent processing capability, up to 60 cores and 120 concurrent threads are supported.
- The overall performance is increased by 100% compared with the previous-generation Westmere-EX (E7-4800).
- Configured with Huawei ES series PCIe solid-state drives (SSDs), the RH5885 V3 provides excellent I/O performance, eliminating disk performance bottlenecks.

## Flexible expansion to fit various application scenarios

- Supporting PCIe 3.0, the RH5885 V3 offers a data throughput rate of 8 Gbit/s, with a rate increase of 60% compared with PCIe 2.0.
- The RH5885 V3 supports eight or twenty-three 2.5" hard disks, which allows flexible configuration of the local storage capacity. This applies to distributed databases and big data analysis.
- The built-in USD port is provided for pre-installing OS or encryption certificate.
- A plug-in NIC is used to provide LAN on motherboard (LOM). GE or 10GE ports can be flexibly configured.

## Optimized energy efficiency to reduce OPEX

- Power capping is adopted to increase the server deployment density without the need for changing the equipment room design.
- The dynamic energy-saving technology adjusts the processor frequency and voltage according to the processor usage, reducing energy consumption.
- Platinum PSUs offer power efficiency of up to 94% at 50% loads.

## Technical Specifications

Form factor	4U rack server
Number of processors	2 or 4
Processor model	Intel® Xeon® E7-4800 v2 processors, with an L3 cache capacity of 37.5 MB maximum
Maximum memory capacity	48 DDR3 DIMMs, up to 3 TB (64 GB DIMMs)
Maximum local storage	8 or 23 x 2.5" SAS/SATA HDDs or SSDs
RAID support	RAID 0, 1, 10, 5, and 6 RAID cache: up to 1 GB Power-off protection: BBU or supercapacitor
LOM network port	2 or 4 x GE ports, or 2 x 10GE ports
Expansion slot	A maximum of 7 PCIe slots
USB port	5 (front: 2; rear: 2; built-in: 1)
Fan module	5 hot-swappable, counter-rotating fan modules in N+1 redundancy mode
PSU	2 or 4 hot-swappable, redundant PSUs
Management	Integrated BMC that supports the following: IPMI 2.0, SNMPv3, SNMP Trap v1, CIM, and WS-MAN SOL, KVM over IP, WebUI, CLI, IPMI tool, and virtual media Black box function
Operating systems supported	Microsoft Windows Server Red Hat Enterprise Linux SUSE Linux Enterprise Server Oracle Enterprise Linux Debian CentOS Kylin Linux Oracle Server VM Citrix XenServer VMware ESXi
Power supply	110 V/220 V AC or –48 V DC
Operating temperature	5°C – 40°C
Dimensions	Height: 175 mm (6.89 in.) Width: 447 mm (17.60 in.) Depth: 790 mm (31.10 in.)