# V5 & V6 Rack Servers

Bring Pervasive Intelligent Computing with Chip Innovation





### 1288H V5 Server



## | High-Density Deployment with Lower OPEX |







1288H V5 (4-drive)

1288H V5 (8-drive)

1288H V5 (10-drive)

- 2 Intel® Xeon® Scalable processors in 1U space, with 24 DDR4 DIMMs
- Up to 4 3.5-inch or 10 2.5-inch hard drives for local storage, or 4/8 NVMe SSDs
- 2 10GE and 2 GE LAN on motherboard (LOM) ports, and 5 PCIe expansion slots
- Leverages intelligent energy saving to improve performance per watt by 15%; combines intelligent management features to enable up to 93% accuracy for fault locating

Delivers high computing density, which is especially suitable for scenarios such as virtualization, high-performance computing (HPC), and big data analytics.



### Superior Performance, Ultra-high Density

- Supports 2 Intel® Xeon® Scalable Processors in a 1U space. Its Ultra Path Interconnect (UPI) bus supports rates of up to 10.4 GT/s, and a single CPU supports up to 28 cores. The server supports the Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher compute power than the previous-generation processor.
- Supports 24 DDR4 DIMMs with a memory capacity of up to 3 TB (configured with 128 GB DIMMs) to meet large-capacity memory application requirements.
- Supports 12 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 12 DDR4 DIMMs, offering up to 7.5 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- Supports heterogeneous computing acceleration, configurable with 2 single-slot half-height half-length (HHHL) GPU accelerator cards.
- Supports two GE and two 10GE LAN on motherboard (LOM) ports, meeting networking requirements of 98% scenarios with streamlined configuration.



### **Smart Power Saving and Better Energy Efficiency**

- Leverages patented Dynamic Energy Management Technology (DEMT), and multiple power-saving measures such as component hibernation, proportional-integral-derivative (PID) algorithm based fan speed tuning, and active-standby power supplies, driving down overall equipment power consumption by up to 15% without compromising workload performance.
- Supports 80 Plus® Titanium power supply units (PSUs), with up to 96% conversion efficiency and compliant with China Energy Conservation Certification.
- Supports 550 W, 900 W, 1,200 W, and 1,500 W PSU options, flexibly adapting to different power requirements. The 1,200 W and 1,500 W PSUs support DC and high-voltage DC (HVDC) technologies, enabling better energy utilization.



- Uses patented intelligent Fault Diagnosis & Management (FDM) technology, delivering up to 93% accuracy in diagnosing core component faults.
- Integrates FusionDirector for smart entire-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates fault diagnosis LEDs on the front panel to display error codes in real time, enabling maintenance personnel to rapidly locate a fault.
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# 1288H V5 Server



Form factor	1U rack server
Processors	1 or 2 1st Generation Intel® Xeon® Scalable processors (3100/4100/5100/6100/8100 series), up to 205 W 1 or 2 2nd Generation Intel® Xeon® Scalable processors (3200/4200/5200/6200/8200 series), up to 205 W
Chipset platform	Intel C622
Memory	24 DDR4 DIMM slots, 2933 MT/s; up to 12 Intel® Optane™ PMem modules (100 series), 2666 MT/s
Internal storage	Supports hot-swappable hard drives with the following configuration options:  10 x 2.5-inch hard drives (6–8 NVMe SSDs and 2–4 SAS/SATA drives, with a total number of 10 or less)  10 x 2.5-inch SAS/SATA/SSDs (2–4 NVMe SSDs and 6–8 SAS/SATA HDDs, with a total number of 10 or less)  10 x 2.5-inch SAS/SATA/SSDs  8 x 2.5-inch SAS/SATA hard drives  4 x 3.5-inch SAS/SATA hard drives  Flash storage:  2 M.2 SSDs
RAID support	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration
Network ports	LOM: $2 \times 10$ GE + $2 \times$ GE ports Flexible NIC: $2 \times$ GE, $4 \times$ GE, $2 \times 10$ GE, $2 \times 25$ GE, or $1/2 \times 56$ G FDR IB ports
PCIe expansion	Up to 5 PCIe 3.0 slots, including 1 for a RAID controller card and 1 for a flexible NIC
Heterogeneous accelerator cards	2 single-slot HHHL GPU heterogeneous accelerator cards For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.
Fan modules	7 hot-swappable counter-rotating fan modules with support for N+1 redundancy
Power supply units	2 hot-swappable PSUs with support for 1+1 redundancy and the following configuration options:  • 550 W AC Platinum PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)  • 900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)  • 1500 W AC Platinum PSUs  1000 W (input: 100 V to 127 V AC)  1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC)  • 1500 W 380 V HVDC PSUs (input: 260 V to 400 V DC)  • 1200 W -48 V to -60 V DC PSUs (input: -38.4 V to -72 V DC)
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/VNC KVM; supports CD-free deployment and the Agentless feature, simplifying management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire-lifecycle management.</li> </ul>
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, VMware ESXi For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.
Security	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, and security front panel
Operating temperature	5°C to 45°C (41°F to 113°F), compliant with ASHRAE A3 and A4
Certification	CE, UL, FCC, CCC, and RoHS
Installation suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	Chassis with 3.5-inch hard drives: 43 mm x 447 mm x 748 mm (1.70 in. x 17.60 in. x 29.45 in.) Chassis with 2.5-inch hard drives: 43 mm x 447 mm x 708 mm (1.70 in. x 17.60 in. x 27.87 in.)

### For more information











1288X V5 (8-drive)

## | High-Density Deployment with Lower OPEX |

The Huawei FusionServer Pro 1288X V5 is a 1U 2-socket rack server that delivers high computing density. It is ideal for scenarios such as cloud computing, virtualization, high-performance computing (HPC), and big data processing, improving space utilization for data centers. The 1288X V5 supports 2 Intel® Xeon® Scalable processors in a 1U space, with 24 DDR4 DIMMs for memory and 8 x 2.5" hard drives for local storage. The 1288X V5 incorporates patented technologies, such as Dynamic Energy Management Technology (DEMT) and Fault Diagnosis & Management (FDM), and is configurable with Huawei's FusionDirector software for full-lifecycle management, helping reduce OPEX and improve ROI



### Superior Performance in Ultra-high Density

- Supports 2 Intel® Xeon® Scalable processors in a 1U space, with an Ultra Path Interconnect (UPI) bus speed of up to 10.4 GT/s. Each processor supports up to 28 cores. The server supports the Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher computing performance than its predecessor.
- Supports 24 DDR4 DIMMs with a memory capacity of up to 3 TB (configured with 128 GB DIMMs), meeting large-capacity memory application requirements.
- Supports heterogeneous computing acceleration, configurable with 2 single-slot HHHL GPU accelerator cards.
- Supports 2 x 10GE LAN on motherboard (LOM) ports and a single-slot OCP 2.0 mezzanine card, meeting the networking requirements of 98% scenarios with streamlined configuration.



### **Intelligent Power Saving for Higher Energy Efficiency**

- Leverages the patented DEMT and multiple power-saving technologies, such as component hibernation, fan speed tuning based on the proportional-integral-derivative (PID) algorithm, and active-standby power supplies, to reduce overall equipment power consumption by up to 15% without compromising workload performance.
- Equipped with 80 Plus® Titanium power supply units (PSUs) to deliver up to 96% conversion efficiency, compliant with China Energy Conservation Certification.
- Supports 550 W, 900 W, 1200 W, and 1500 W PSU options, flexibly adapting to different power requirements. The 1200 W and 1500 W PSUs support DC and high-voltage DC (HVDC) technologies, improving energy utilization.



### **Intelligent Management, Integration, and Openness**

- Adopts the patented FDM technology for up to 93% accuracy in diagnosing core component faults.
- Configurable with FusionDirector for intelligent full-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates fault diagnosis LEDs on the front panel to display error codes in real time, allowing O&M personnel to quickly locate faults.
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# Huawei FusionServer Pro 1288X V5 Server



Form factor	1U rack server
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Processors	1 or 2 x 1st Generation Intel® Xeon® Scalable Processors (3100/4100/5100/6100/8100 series), up to 205 W 1 or 2 x 2nd Generation Intel® Xeon® Scalable Processors (3200/4200/5200/6200/8200 series), up to 205 W
Chipset platform	Intel C622
Memory	24 DDR4 DIMM slots, up to 2933 MT/s
Local storage	Supports hot-swappable hard drives with the following configuration options:  • 8 x 2.5" SAS/SATA HDDs or SSDs  Flash storage:  • 2 M.2 SSDs
RAID support	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration
Network ports	LOM: 2 x 10GE and one OCP 2.0 slot
PCIe expansion	Up to 5 PCIe 3.0 slots, including 1 for RAID controller card and 1 for OCP 2.0 mezzanine card
Heterogeneous accelerator cards	2 single-slot HHHL GPU heterogeneous accelerator cards. For details, visit https://support.huawei.com/onlinetoolweb/ftca/indexEn?serise=2
Fan modules	7 hot-swappable counter-rotating fan modules, supporting N+1 redundancy
Power supply units	<ul> <li>2 hot-swappable PSUs supporting 1+1 redundancy and the following configuration options:</li> <li>550 W AC Platinum PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>1500 W AC Platinum PSUs: 1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC); 1000 W (input: 100 V to 127 V AC)</li> <li>1500 W 380 V HVDC PSUs (input: 260 V to 400 V DC)</li> <li>1200 W -48 V to -60 V DC PSUs (input: -38.4 V to -72 V DC)</li> </ul>
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features, including fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces, such as Redfish, SNMP, and IPMI 2.0, provides a remote management interface based on HTML5/VNC KVM, and supports CD-free deployment and the Agentless feature to simplify management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire-lifecycle management.</li> </ul>
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, and VMware ESXi For details, visit https://support.huawei.com/onlinetoolweb/ftca/indexEn?serise=2.
Security	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, and security front panel
Operating temperature	5°C to 45°C (41°F to 113°F), compliant with ASHRAE A3 and A4
Certification	CE, UL, FCC, CCC, and RoHS, etc.
Installation suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	Chassis with 2.5" hard drives: 43 mm x 447 mm x 708 mm (1.70 in. x 17.60 in. x 29.45 in.)

### For more information







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## Flexible Configurations for Diverse Workloads |









2288H V5 (8-drive)

2288H V5 (12-drive)

2288H V5 (24-drive)

2288H V5 (25-drive)

The Huawei FusionServer Pro 2288H V5 is a 2U 2-socket rack server that supports various configurations and can be widely used in scenarios such as cloud computing virtualization, databases, and big data. The server can be configured with two Intel® Xeon® Scalable processors, 24 DDR4 DIMM slots, 10 PCIe slots, and large-capacity local storage resources.

It incorporates patented technologies such as Dynamic Energy Management Technology (DEMT) and Fault Diagnosis & Management (FDM), and integrates Huawei's FusionDirector software for entire-lifecycle management, helping customers drive down OPEX and improve ROI.



### **Supreme Performance with Flexible Configurations**

- Supports 2 Intel® Xeon® Scalable processors in a 2U space, with an Ultra Path Interconnect (UPI) bus speed of up to 10.4 GT/s. Each CPU supports up to 28 cores. The server supports the Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher compute power than its predecessor.
- Supports 24 DDR4 DIMMs with a memory capacity of up to 3 TB (configured with 128 GB DIMMs) to meet large- capacity memory application requirements.
- Supports 12 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 12 DDR4 DIMMs, offering up to 7.5 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- Supports heterogeneous computing acceleration. It can be configured with two dual-slot full-height full-length GPU accelerator cards.
- Supports 20 x 3.5-inch or 31 x 2.5-inch (4/8/12/24/28 NVMe SSDs) local storage drives.
- Supports 2 GE and 2 x 10GE LOM ports, meeting the networking requirements of 98% scenarios with streamlined configuration.



### **Smart Power Saving and Better Energy Efficiency**

- Leverages patented Dynamic Energy Management Technology (DEMT), and multiple power-saving measures such as component hibernation, proportional-integral-derivative (PID) algorithm based fan speed tuning, and active-standby power supplies, driving down overall equipment power consumption by up to 15% without compromising workload performance.
- Supports 80 Plus® Titanium power supply units (PSUs), with up to 96% conversion efficiency and compliant with China Energy Conservation Certification.
- Supports 550 W, 900 W, 1,200 W, and 1,500 W PSU options, flexibly adapting to different power requirements. The 1,200 W and 1,500 W PSUs support DC and high-voltage DC (HVDC) technologies, enabling better energy utilization.



- Uses patented intelligent Fault Diagnosis & Management (FDM) technology, delivering up to 93% accuracy in diagnosing core component faults.
- Integrates FusionDirector for smart entire-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates a touchscreen LCD panel for fault diagnosis, allowing O&M personnel to quickly locate faults (supported only by the 2288H V5 8-drive models).
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# 2288H V5 Server



Form factor	2U rack server
Processors	1 or 2 1st Generation Intel® Xeon® Scalable processors (3100/4100/5100/6100/8100 series), up to 205 W 1 or 2 2nd Generation Intel® Xeon® Scalable processors (3200/4200/5200/6200/8200 series), up to 205 W
Chipset platform	Intel C622
Memory	24 DDR4 DIMM slots, 2933 MT/s; up to 12 Intel® Optane™ PMem modules (100 series), 2666 MT/s
Internal storage	Supports hot-swappable hard drives with the following configuration options:  • 8 x 2.5-inch SAS/SATA hard drives  • 12/16/20 x 3.5-inch SAS/SATA hard drives  • 4, 8, 12, 24, or 28 NVMe SSDs  • 31 x 2.5-inch SAS/SATA hard drives  Flash storage:  • 2 M.2 SSDs
RAID support	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration
Network ports	LOM: $2 \times 10$ GE + $2 \times GE$ ports Flexible NIC: $2 \times GE$ , $4 \times GE$ , $2 \times 10$ GE, $2 \times 25$ GE, or $1/2 \times 56$ G FDR IB ports
PCIe expansion	Up to 10 PCIe 3.0 slots, including 1 for a RAID controller card and 1 for a flexible NIC.
Heterogeneous accelerator cards	2 dual-slot FHFL GPU heterogeneous accelerator cards For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.
Fan modules	4 hot-swappable counter-rotating fan modules with support for N+1 redundancy
Power supply units	<ul> <li>2 hot-swappable PSUs with support for 1+1 redundancy and the following configuration options:</li> <li>550 W AC Platinum PSUs (input:100 V to 240 VAC, or 192 V to 288 V DC)</li> <li>900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>1500 W AC Platinum PSUs</li> <li>1000 W (input: 100 V to 127 V AC)</li> <li>1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC)</li> <li>1500 W 380 V HVDC PSUs (input: 260 V to 400 V DC)</li> <li>1200 W -48 V to -60 V DC PSUs (input: -38.4 V to -72 V DC)</li> </ul>
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/VNC KVM; supports CD-free deployment and the Agentless feature, simplifying management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire-lifecycle management.</li> </ul>
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, VMware ESXi For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.
Security	Power-on password, Administrator password, Trusted Platform Module (TPM), Security front panel
Operating temperature	5°C to 45°C (41°F to 113°F), compliant with ASHRAE A3 and A4
Certification	CE, UL, FCC, CCC, and RoHS
Installation suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	Chassis with 3.5-inch hard drives: $86.1 \text{ mm} \times 447 \text{ mm} \times 748 \text{ mm}$ (3.39 in. x 17.60 in. x 29.45 in.) Chassis with 2.5-inch hard drives: $86.1 \text{ mm} \times 447 \text{ mm} \times 708 \text{ mm}$ (3.39 in. x 17.60 in. x 27.87 in.)

### For more information







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## Flexible Configurations for Diverse Workloads |









2288X V5 (8-drive)

2288X V5 (12-drive)

2288X V5 (24-drive)

2288X V5 (25-drive)

The Huawei FusionServer Pro 2288X V5 is a 2U 2-socket rack server that supports various configurations and can be widely applied to scenarios such as cloud computing, virtualization, databases, and big data. It can be configured with 2 Intel® Xeon® Scalable processors, 24 DDR4 DIMMs, 11 PCIe slots, and large-capacity local storage resources.

The 2288X V5 incorporates patented technologies such as Dynamic Energy Management Technology (DEMT) and Fault Diagnosis & Management (FDM), and is configurable with Huawei's FusionDirector software for full-lifecycle management, helping reduce OPEX and improve ROI.



### Robust Performance with Flexible Configurations

- Supports 2 Intel® Xeon® Scalable processors in a 2U space, with an Ultra Path Interconnect (UPI) bus speed of up to 10.4 GT/s. Each processor supports up to 28 cores. The server supports the Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher computing performance than its predecessor.
- Supports 24 DDR4 DIMMs with a memory capacity of up to 3 TB (configured with 128 GB DIMMs), meeting large-capacity memory application requirements.
- Supports heterogeneous computing acceleration. It can be configured with 8 HHHL GPU or 2 FHFL GPU cards.
- Supports 20 x 3.5" or 25 x 2.5" (configurable with 4 NVMe SSDs) local storage drives.
- Supports 2 x 10GE LAN on motherboard (LOM) ports and 2 onboard OCP 2.0 mezzanine cards, meeting the networking requirements of 98% scenarios with streamlined configuration.



### **Intelligent Power Saving for Higher Energy Efficiency**

- Leverages the patented DEMT and multiple power-saving technologies, such as component hibernation, fan speed tuning based on the proportional-integral-derivative (PID) algorithm, and active-standby power supplies, to reduce overall equipment power consumption by up to 15% without compromising workload performance.
- Equipped with 80 Plus® Titanium power supply units (PSUs) to deliver up to 96% conversion efficiency, compliant with China Energy Conservation Certification.
- Supports 550 W, 900 W, 1200 W, and 1500 W PSU options, flexibly adapting to different power requirements. The 1200 W and 1500 W PSUs support DC and high-voltage DC (HVDC) technologies, improving energy utilization.



### **Intelligent Management, Integration, and Openness**

- Adopts the patented FDM technology for up to 93% accuracy in diagnosing core component faults.
- · Configurable with FusionDirector for intelligent full-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
     » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates a touchscreen LCD panel for fault diagnosis, allowing O&M personnel to quickly locate faults (supported only by the 2288X V5 8-drive model).
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# Huawei FusionServer Pro 2288X V5 Server



Form factor	2U rack server
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Processors	1 or 2 x 1st Generation Intel® Xeon® Scalable Processors (3100/4100/5100/6100/8100 series), up to 205 W 1 or 2 x 2nd Generation Intel® Xeon® Scalable Processors (3200/4200/5200/6200/8200 series), up to 205 W
Chipset platform	Intel C622
Memory	24 DDR4 DIMM slots, up to 2933 MT/s
Local storage	Supports hot-swappable hard drives with the following configuration options:  • 8/24/25 x 2.5" SAS/SATA HDDs or SSDs  • 12/20 x 3.5" SAS or SATA hard drives  • 4 NVMe SSDs  • 2 M.2 SSDs
RAID support	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration
Network ports	LOM: 2 x 10GE ports Flexible NIC: 2 x 25GE OCP 2.0 mezzanine cards
PCIe expansion	Up to 11 PCIe 3.0 slots, including 8 standard slots, 1 for RAID controller card, and 2 for OCP 2.0 mezzanine card
Heterogeneous accelerator cards	Supports 8 HHHL GPU or 2 FHFL GPU cards
Fan modules	4 hot-swappable counter-rotating fan modules, supporting N+1 redundancy
Power supply units	<ul> <li>2 hot-swappable PSUs supporting 1+1 redundancy and the following configuration options:</li> <li>550 W AC Platinum PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>1500 W AC Platinum PSUs: 1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC); 1000 W (input: 100 V to 127 V AC)</li> <li>1500 W 380 V HVDC PSUs (input: 260 V to 400 V DC)</li> <li>1200 W -48 V to -60 V DC PSUs (input: -38.4 V to -72 V DC)</li> </ul>
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features, including fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces, such as Redfish, SNMP, and IPMI 2.0, provides a remote management interface based on HTML5/VNC KVM, and supports CD-free deployment and the Agentless feature to simplify management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire-lifecycle management.</li> </ul>
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, and VMware ESXi For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.
Security features	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, security front panel, and out-of-box intrusion alarm
Operating temperature	5°C to 45°C (41°F to 113°F), compliant with ASHRAE A3 and A4
Certification	CE, UL, FCC, CCC, and RoHS, etc
Installation suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	Chassis with 3.5" hard drives: 86.1 mm x 447 mm x 748 mm (3.39 in. x 17.60 in. x 29.45 in.) Chassis with 2.5" hard drives: 86.1 mm x 447 mm x 708 mm (3.39 in. x 17.60 in. x 27.87 in.)

### For more information











### | Large-Capacity and Versatile |

2298 V5 (24-drive)

The Huawei FusionServer Pro 2298 V5 is a 2U 2-socket rack server that supports various configurations and can be widely applied to scenarios such as cloud computing, virtualization, databases, and big data. It can be configured with 2 Intel® Xeon® Scalable processors, 12 DDR4 DIMMs, 4 PCIe slots, and large-capacity local storage resources.

The 2298 V5 incorporates patented technologies such as Dynamic Energy Management Technology (DEMT) and Fault Diagnosis & Management (FDM), and is configurable with Huawei's FusionDirector software for full-lifecycle management, helping reduce OPEX and improve ROI.



### Robust Performance with Flexible Configurations

- Supports 2 Intel® Xeon® Scalable processors in a 2U space, with an Ultra Path Interconnect (UPI) bus speed of up to 10.4 GT/s. Each processor supports up to 20/28 cores. The server supports the Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher computing performance than its predecessor.
- Supports 12 DDR4 DIMMs with a memory capacity of up to 768 GB, meeting large-capacity memory application requirements.
- Supports local storage resources of 24 x 3.5" SAS/SATA HDDs and 4 NVMe SSDs with 2 built-in M.2 SSDs.
- Supports 2 x 10GE LAN on motherboard (LOM) ports and 2 onboard OCP 2.0 mezzanine cards, meeting the networking requirements of 98% scenarios with streamlined configuration.



### **Intelligent Power Saving for Higher Efficiency**

- Leverages the patented DEMT and multiple power-saving technologies, such as component hibernation, fan speed tuning based on the proportional-integral-derivative (PID) algorithm, and active-standby power supplies, to reduce overall equipment power consumption by up to 15% without compromising workload performance.
- Equipped with 80 Plus® Titanium power supply units (PSUs) to deliver up to 96% conversion efficiency, compliant with China Energy Conservation Certification.
- Supports 550 W, 900 W, 1200 W, and 1500 W PSU options, adapting flexibly to different power requirements. The 1200 W and 1500 W PSUs support DC and high-voltage DC (HVDC) technologies, improving energy utilization.



### Intelligent Management, Openness, and Integration

- Adopts the patented FDM technology for up to 93% accuracy in diagnosing core component faults.
- Configurable with FusionDirector for intelligent full-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# Huawei FusionServer Pro **2298 V5 Server**



Form factor	2U rack server	
Processors	1 or 2 1st Generation Intel® Xeon® Scalable processors (3100/4100/5100/6100/8100 series), 205 W thermal design power (TDP) 1 or 2 2nd Generation Intel® Xeon® Scalable processors (3200/4200/5200/6200/8200 series), 205 W TDP	
Chipset platform	Intel C622	
Memory	12 DDR4 DIMM slots, up to 2933 MT/s	
Local storage	Supports hot-pluggable hard drives with the following configuration options:  • 24 x 3.5" SAS/SATA HDDs  • 4 NVMe SSDs configurable for flash storage  • 2 M.2 SSDs	
RAID support	RAID 0 or 1.  Configured with a supercapacitor for cache power-off protection, and supports RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration.	
Network ports	LOM: 2 x 10GE (optical ports) + 2 x GE ports FlexIO card: 2 x 25GE OCP 2.0 mezzanine cards	
PCIe expansion	Up to 4 PCIe 3.0 slots	
Fan modules	5 hot-swappable counter-rotating fan modules, supporting N+1 redundancy	
Power supply units	<ul> <li>2 hot-swappable PSUs supporting 1+1 redundancy and the following configuration options:</li> <li>900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>1500 W AC Platinum PSUs: 1000 W (input: 100 V to 127 V AC); 1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC)</li> <li>1500 W 380 V HVDC PSUs (input: 260 V to 400 V DC)</li> <li>1200 W -48 V to -60 V DC PSUs (input: -38.4 V to -72 V DC)</li> </ul>	
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features, including fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces, such as Redfish, SNMP, and IPMI 2.0, provides a remote management interface based on HTML5/VNC KVM, and supports CD-free deployment and the Agentless feature to simplify management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire-lifecycle management.</li> </ul>	
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, and VMware ESXi. For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.	
Security features	Power-on password, administrator password, and Trusted Platform Module (TPM) 2.0	
Operating temperature	5°C to 35°C (41°F to 113°F), compliant with ASHRAE A3 and A4	
Certification	CE, UL, FCC, CCC, and RoHS, etc.	
Installation suite	Adjustable guide rails	
Dimensions (H x W x D)	86.1 mm × 447 mm × 890 mm	

### For more information







Scan to learn more about Huawei servers

# 2488/2488H V5 Server





# New Option for Distributed Deployment with Higher Computing Efficiency |

### 2488/2488H V5

- 4 Intel® Xeon® Scalable processors in 2U space, with 32/48 DDR4 DIMMs
- Up to 25 2.5-inch hard drives for local storage, or 8 NVMe SSDs
- 2 10GE and 2 GE LOM ports, and 9/11 PCle expansion slots
- Delivers lower OPEX than 2U 2-socket servers; leverages intelligent energy saving to improve performance per watt by 15%; combines intelligent management features to enable up to 93% accuracy for fault locating

Unlocks high computing efficiency for scenarios such as virtualization, HPC, database, and SAP HANA in-memory computing.



### **Superior Performance with Higher Efficiency**

- Supports 4 Intel® Xeon® Scalable Processors (Platinum or Gold series) in a 2U space. Its Ultra Path Interconnect (UPI) bus supports rates of up to 10.4 GT/s, and a single processor supports up to 28 cores. The server supports Intel® Turbo Boost, hyperthreading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher compute power than the previous-generation processor.
- Supports 32/48¹ DDR4 DIMMs with a memory capacity of up to 4 TB / 6 TB (configured with 128 GB DIMMs) to meet large-capacity memory application requirements.
- The 2488 V5 supports 8 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 24 DDR4 DIMMs, offering up to 7 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- The 2488H V5 supports 24 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 24 DDR4 DIMMs, offering up to 15 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- Supports two GE and two 10GE LAN on motherboard (LOM) ports, meeting networking requirements of 98% scenarios with streamlined configuration.
- Supports up to 25 2.5-inch local hard drives (configurable with 8 NVMe SSDs).
- One 2488/2488H V5 saves up to 32%<sup>2</sup> OPEX in the virtualization scenario compared with two traditional 2U 2S servers.
  - <sup>1</sup> The 2488 V5 supports up to 32 DIMMs and 2488H V5 supports 48 DIMMs.

<sup>&</sup>lt;sup>2</sup> Data is derived from Huawei lab tests; actual improvement depends on the real-world scenario.



### **Smart Power Saving and Better Energy Efficiency**

- Leverages patented Dynamic Energy Management Technology (DEMT), and multiple power-saving measures such as component hibernation, proportional-integral-derivative (PID) algorithm based fan speed tuning, and active-standby power supplies, driving down overall equipment power consumption by up to 15% without compromising workload performance.
- Supports 2,000 W Platinum AC power supply unit (PSU), meeting ultra-high performance requirements; leverages the DC and high-voltage DC (HVDC) technologies to improve energy utilization.
- PSUs meet the requirement of China Energy Conservation Certification.



- Uses patented intelligent Fault Diagnosis & Management (FDM) technology, delivering up to 93% accuracy in diagnosing core
  component faults.
- Integrates FusionDirector for smart entire-lifecycle O&M, driving a leap in deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates a touchscreen LCD panel for fault diagnosis, allowing O&M personnel to quickly locate faults (supported only by the 2488/2488H V5 8-drive models).
- Integrates fault diagnosis LEDs on the front panel to display error codes in real time, enabling maintenance personnel to rapidly locate a fault.
- · Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# 2488/2488H V5 Server



	2488 V5	2488H V5
Form factor	2U rack server	
Processors	2 or 4 1st Generation Intel® Xeon® Scalable processors (5100/6100/8100 series), up to 205 W 2 or 4 2nd Generation Intel® Xeon® Scalable processors (5200/6200/8200 series), up to 205 W	
Chipset platform	Intel C622	
Memory	32 DDR4 DIMM slots, 2933 MT/s; up to 8 Intel® Optane™ PMem modules (100 series), 2666 MT/s	48 DDR4 DIMM slots, 2933MT/s; up to 24 Intel® Optane™ PMem modules (100 series), 2666 MT/s
Internal storage	Supports hot-swappable hard drives with the following configuration options:  • 8 x 2.5-inch SAS/SATA hard drives  • 25 x 2.5-inch SAS/SATA hard drives  • 8 x 2.5-inch NVMe SSDs and 16 x 2.5-inch SAS/SATA hard drives  Flash storage:  • 2 M.2 SSDs	Supports hot-swappable hard drives with the following configuration options:  • 8 x 2.5-inch SAS/SATA hard drives  • 25 x 2.5-inch SAS/SATA hard drives  • 24 x 2.5-inch SAS/SATA hard drives  • 8 x 2.5-inch NVMe SSDs and 16 x 2.5-inch SAS/SATA hard drives  • 24 x 2.5-inch NVMe SSDs  Flash storage:  • 2 M.2 SSDs
RAID support	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration	
LOM network ports	2 x GE + 2 x 10GE ports	
PCIe expansion	Up to 9 PCle 3.0 slots	Up to 11 PCIe 3.0 slots
Fan modules	4 hot-swappable fan modules, providing protection against single-	fan failures
Power supply units	2 hot-swappable PSUs, with support for 1+1 redundancy. The following PSUs are supported:  • 2000 W AC Platinum PSUs  1800 W (input: 200 V to 220 V AC, or 192 V to 200 V DC)  2000 W (input: 200 V to 240 V AC, or 200 V to 288 V DC)  • 1500 W AC Platinum PSUs  1000 W (input: 100 V to 127 V AC)  1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC)  • 900 W AC Platinum PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)  • 1200 W DC PSUs (input: -38.4 V to -72 V DC)	
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/VNC KVM; supports CD-free deployment and the Agentless feature, simplifying management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire-lifecycle management.</li> </ul>	
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, VMware ESXi For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.	
Security	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, secure startup, and security front panel	
Operating temperature	5°C to 45°C (41°F to 113°F), compliant with ASHRAE Classes A3 and	nd A4
Certification	CE, FCC, CCC, RoHS	
Installation suite	L-shaped guide rails, adjustable guide rails, and holding rails	
Dimensions (H x W x D)	86.1 mm x 447 mm x 748 mm (3.39 in. x 17.60 in. x 29.45 in.)	

#### For more information







Scan to learn more about Huawei servers





## | Flexible Configurations for Diverse Workloads |

5288 V5

- 2 Intel® Xeon® Scalable processors in 4U space, with 24 DDR4 DIMMs
- Up to 44 3.5-inch hard drives for local storage, or 4/8 NVMe SSDs
- 2 10GE and 2 GE LOM ports, and 10 PCIe expansion slots
- Leverages intelligent energy saving to improve performance per watt by 15%; combines intelligent management features to enable up to 93% accuracy for fault locating

Offers ultra-large storage capacities, which is ideal for hot, warm, and cold data tiered storage in scenarios such as Content Delivery Network (CDN), video cloud, and massive data archiving.



### **Ultralarge Capacity, Tiered Storage**

- Supports 2 Intel® Xeon® Scalable Processors in a 4U space. Its Ultra Path Interconnect (UPI) bus supports rates of up to 10.4 GT/s, and a single CPU supports up to 28 cores. The server supports Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher compute power than the previous-generation processor.
- Supports 24 DDR4 DIMMs with a memory capacity of up to 3 TB (configured with 128 GB DIMMs) to meet large-capacity memory application requirements.
- Supports 12 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 12 DDR4 DIMMs, offering up to 7.5 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- Ultra-large storage space with 44 3.5-inch and 4 2.5-inch hard drives (up to 8 NVMe SSDs), ideal for tiered storage of hot, warm, and cold data.
- Supports two GE and two 10GE LAN on motherboard (LOM) ports, meeting networking requirements of 98% scenarios with streamlined configuration.



### Smart Power Saving and Better Energy Efficiency

- Leverages patented DEMT, and multiple power-saving measures such as component hibernation, proportional-integral-derivative (PID) algorithm based fan speed tuning, and active-standby power supplies, driving down overall equipment power consumption by up to 15% without compromising workload performance.
- Fitted with 80 Plus® Platinum power supply units (PSUs), up to 94% conversion efficiency; complies with China Energy Conservation Certification.
- PSUs with 900 W, 1500 W and more power options to flexibly adapt to different power requirements, improving energy utilization.



- Uses patented intelligent Fault Diagnosis & Management (FDM) technology, delivering up to 93% accuracy in diagnosing core component faults.
- Integrates FusionDirector for smart entire-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates fault diagnosis LEDs to display error codes in real time, enabling maintenance personnel to rapidly locate a fault.
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# Huawei FusionServer Pro **5288 V5 Server**



Form Factor	4U rack server
Processors	1 or 2 1st Generation Intel® Xeon® Scalable processors (3100/4100/5100/6100/8100 series), up to 205 W 1 or 2 2nd Generation Intel® Xeon® Scalable processors (3200/4200/5200/6200/8200 series), up to 205 W
Chipset	Intel C622
Memory	24 DDR4 DIMM slots, 2933 MT/s; up to 12 Intel® Optane™ PMem modules (100 series), 2666 MT/s
Internal Storage	Supports hot-swappable hard drives with the following configuration options:  Front:  24 x 3.5-inch SAS/SATA hard drives  Embedded:  4 x 3.5-inch SAS/SATA hard drives  Rear:  16 x 3.5-inch SAS/SATA hard drives  16 x 3.5-inch SAS/SATA hard drives  16 x 3.5-inch SAS/SATA hard drives  14 x 3.5-inch SAS/SATA hard drives + 4 x 2.5-inch SAS/SATA hard drives or NVMe SSDs  14 x 3.5-inch SAS/SATA hard drives (configurable with 4 NVMe SSDs) + 4 x 2.5-inch SAS/SATA hard drives or NVMe SSDs  (This configuration does not support internal hard disk and I/O module 1)  Flash storage:  Two M.2 SSDs
RAID	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration
Network Ports	LAN on motherboard (LOM): 2 x 10GE + 2 x GE ports Flexible NIC: 2 x GE, 4 x GE, 2 x 10GE, 2 x 25GE, or 1/2 x 56G FDR IB ports
PCIe Expansion	Up to 10 PCIe 3.0 slots, including 1 for a RAID controller card and 1 for a flexible NIC
Fan Modules	4 hot-swappable counter-rotating fan modules with optional N+1 redundancy
Power Supply	<ul> <li>2 hot-swappable PSUs with optional 1+1 redundancy. Supported options include:</li> <li>900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>1500 W AC Platinum PSUs</li> <li>1000 W (input: 100 V to 127 V AC)</li> <li>1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC)</li> </ul>
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/VNC KVM; supports CD-free deployment and the Agentless feature, simplifying management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire-lifecycle management.</li> </ul>
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, VMware ESXi For details, see https://support.huawei.com/onlinetoolsweb/ftca/index?serise=2.
Security	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, and security front panel
Operating Temperature	5°C to 40°C (41°F to 104°F) (ASHRAE Class A3 compliant)
Certification	CE, UL, FCC, CCC, and RoHS
Installation Suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	175 mm x 447 mm x 748 mm (6.89 in. x 17.60 in. x 29.45 in.)

### For more information











# | Hybrid Storage Architecture, Tiered Data Storage |

5288X V5

- 2 Intel® Xeon® Scalable processors in 4U space, with 24 DDR4 DIMMs
- Up to 38 3.5-inch hard drives for local storage, or 4 NVMe SSDs
- 2 10GE LOM ports, and 11 PCIe expansion slots
- Leverages intelligent energy saving to improve performance per watt by 15%; combines intelligent management features to enable up to 93% accuracy for fault locating

Offers ultra-large storage capacities, which is ideal for hot, warm, and cold data tiered storage in scenarios such as Content Delivery Network (CDN), video cloud, and massive data archiving.



### **Ultralarge Capacity, Tiered Storage**

- Supports 2 Intel® Xeon® Scalable Processorsin a 4U space. Its Ultra Path Interconnect (UPI) bussupports rates of up to 10.4 GT/s, and a single CPU supports up to 28 cores. The server supports Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 40% higher compute power than the previous-generation processor.
- Supports 24 DDR4 DIMMs with a memory capacity of up to 3 TB (configured with 128 GB DIMMs) to meet large-capacity memory application requirements.
- Ultra-large storage space with 38 3.5-inch and 6 2.5-inch hard drives (up to 4 NVMe SSDs), ideal for tiered storage of hot, warm, and cold data.
- Supports two 10GE LAN on motherboard (LOM) ports, meeting networking requirements of 98% scenarios with streamlined configuration.



### **Smart Power Saving and Better Energy Efficiency**

- Leverages patented DEMT, and multiple power-saving measures such as component hibernation, proportional-integral-derivative (PID) algorithm based fan speed tuning, and active-standby power supplies, driving down overall equipment power consumption by up to 15% without compromising workload performance.
- Fitted with 80 Plus® Platinum power supply units (PSUs), up to 94% conversion efficiency.
- PSUs with 900 W, 2000 W and more power options to flexibly adapt to different power requirements, improving energy utilization.



- Uses patented intelligent Fault Diagnosis & Management (FDM) technology, delivering up to 93% accuracy in diagnosing core component faults.
- Integrates FusionDirector for smart entire-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates fault diagnosis LEDs to display error codes in real time, enabling maintenance personnel to rapidly locate a fault.
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# Huawei FusionServer Pro **5288X V5 Server**



Form Factor	4U rack server
Processors	1 or 2 1st Generation Intel® Xeon® Scalable processors (3100/4100/5100/6100/8100 series), up to 205 W 1 or 2 2nd Generation Intel® Xeon® Scalable processors (3200/4200/5200/6200/8200 series), up to 205 W
Chipset	Intel C622
Memory	24 DDR4 DIMM slots, 2933 MT/s
Internal Storage	Supports hot-swappable hard drives with the following configuration options:  Front:  • 24 x 3.5-inch SAS/SATA hard drives  Rear:  • 14 x 3.5-inch SAS/SATA hard drives + 2 x 2.5-inch SAS/SATA hard drives + 4 x 2.5-inch NVMe SSDs (configured with PCle RAID controller card)  • 14 x 3.5-inch SAS/SATA hard drives + 4 x 2.5-inch NVMe SSDs (configured with two PCle RAID controller card)
RAID	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor to protect cache data from power failures; RAID level migration, drive roaming, self-diagnosis, and web-based remote configuration
Network Ports	LAN on motherboard (LOM): 2 x 10GE ports Flexible NIC: 2 x OCP 2.0 standard NICs
PCIe Expansion	Up to 11 PCIe 3.0 slots, including 1 for a RAID controller card and 2 for OCP 2.0 standard NICs
Fan Modules	4 hot-swappable counter-rotating fan modules with optional N+1 redundancy
Power Supply	<ul> <li>2 hot-swappable PSUs with optional 1+1 redundancy. Supported options include:</li> <li>900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>2000 W AC Platinum PSUs</li> <li>1800 W (input: 200 V to 220 V AC, or 192 V to 200 V DC)</li> <li>2000 W (input: 200 V to 240 V AC, or 200 V to 288 V DC)</li> </ul>
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/VNC KVM; supports CD-free deployment and the Agentless feature, simplifying management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire- lifecycle management.</li> </ul>
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, VMware ESXi For details, see https://support.huawei.com/onlinetoolsweb/ftca/index?serise=2.
Security	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, and security front panel
Operating Temperature	5°C to 40°C (41°F to 104°F) (ASHRAE Class A3 compliant)
Certification	ccc
Installation Suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	175 mm x 447 mm x 748 mm (6.89 in. x 17.60 in. x 29.45 in.)

### For more information











### 5885H V5

# Deliver Excellent Performance and Scalability to Enable Fast and Stable Mission-Critical Services |

- 4 Intel® Xeon® Scalable processors in 4U space, with 48 DDR4 DIMMs
- Up to 25 2.5-inch hard drives for local storage, or 8 NVMe SSD
- 2 10GE and 2 GE LOM ports, and 15 PCIe expansion slots
- Leverages intelligent energy saving to improve performance per watt by 15%; combines intelligent management features to enable up to 93% accuracy for fault locating

Delivers excellent stability and reliability for scenarios such as virtualization, HPC, and database.



### High Efficiency, Stability, and Expandability

- Supports four Intel® Xeon® Scalable processors in a 4U space. Its Ultra Path Interconnect (UPI) bus supports a speed of up to 10.4 GT/s, and a single CPU supports up to 28 computing cores. The server supports Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512). A single processor delivers up to 65% higher compute performance than the previous-generation processor.
- Supports 48 DDR4 DIMMs with a memory capacity of up to 6 TB (configured with 128 GB DIMMs) to meet large-capacity memory application requirements.
- Supports 24 Intel® Optane™ persistent memory (Optane™ PMem) modules (100 series) as volatile or non-volatile storage, which can be used together with 24 DDR4 DIMMs, offering up to 15 TB memory capacity (configured with 512 GB Optane™ PMem and 128 GB DDR4 DIMMs) to meet various workload requirements.
- 15 PCIe slots, providing excellent scalability.
- Two GE and two 10GE LAN on motherboard (LOM) ports with streamlined configuration, meeting networking requirements of 98% scenarios.
- Supports up to 25 x 2.5-inch local hard drives (configurable with 8 NVMe SSDs).



### Smart Power Saving and Better Energy Efficiency

- Leverages patented DEMT, and multiple power-saving measures such as component hibernation, proportional-integralderivative (PID) algorithm based fan speed tuning, and active-standby power supplies, driving down overall equipment power consumption by up to 15% without compromising workload performance.
- Fitted with 80 Plus® Platinum power supply units (PSUs), up to 94% conversion efficiency; complies with China Energy Conservation Certification.
- PSUs with 900 W, 1200 W, 1500 W, and more power options to flexibly adapt to different power requirements, improving energy utilization



- Uses patented intelligent Fault Diagnosis & Management (FDM) technology, delivering up to 93% accuracy in diagnosing core component faults.
- Integrates FusionDirector for smart entire-lifecycle O&M, driving a leap in deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - » Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.
- Integrates a touchscreen LCD panel for fault diagnosis, allowing O&M personnel to quickly locate faults (supported only by the 5885H V5 8-drive models).
- Integrates fault diagnosis LEDs on the front panel to display error codes in real time, enabling maintenance personnel to rapidly locate a fault.
- · Provides standardized open interfaces and development quides, facilitating seamless integration with third-party management software.

# 5885H V5 Server



Form Factor	4U rack server
Processors	2 or 4 1st Generation Intel® Xeon® Scalable processors (5100/6100/8100 series), up to 205 W 2 or 4 2nd Generation Intel® Xeon® Scalable processors (5200/6200/8200 series), up to 205 W
Chipset	Intel C622
Memory	48 DDR4 DIMM slots, 2933 MT/s; up to 24 Intel® Optane™ PMem modules (100 series), 2666 MT/s
Internal Storage	Supports hot-swappable hard drives with the following configuration options:  8 x 2.5-inch SAS/SATA hard drives (front)  24 x 2.5-inch SAS/SATA hard drives (front)  25 x 2.5-inch SAS/SATA hard drives (front)  16 x 2.5-inch SAS/SATA hard drives and 8 x 2.5-inch NVMe SSDs (front)  Flash storage:  Two M.2 SSDs
RAID	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration
Network Ports	LAN on motherboard (LOM): 2 x 10GE + 2 x GE ports
PCIe Expansion	Up to 15 PCIe slots for 15 PCIe 3.0 slots 2 dual-width full-height full-length GPU cards (PCIe 3.0 x16) or 4 full-height half-length GPU cards (PCIe 3.0 x16)
Fan Modules	5 hot-swappable counter-rotating fan modules with optional N+1 redundancy
Power Supply	<ul> <li>4 hot-swappable PSUs with optional 2+2 redundancy. Supported options include:</li> <li>1500 W AC Platinum PSUs 1000 W (input: 100 V to 127 V AC) 1500 W (input: 200 V to 240 V AC, or 192 V to 288 V DC)</li> <li>900 W AC PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)</li> <li>1200 W DC PSUs (input: -38.4 V to -72 V DC)</li> </ul>
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/VNC KVM; supports CD-free deployment and the Agentless feature, simplifying management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling smart and automatic entire- lifecycle management.</li> </ul>
Operating Systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, VMware ESXi For details, visit https://support.huawei.com/onlinetoolsweb/ftca/indexEn?serise=2.
Security	Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, and security front panel
Operating Temperature	5°C to 45°C (41°F to 113°F) (ASHRAE A3 and A4 compliant)
Certification	CE, UL, FCC, CCC, and RoHS
Installation Suite	L-shaped guide rails, adjustable guide rails, and holding rails
Dimensions (H x W x D)	175 mm x 447 mm x 790 mm (6.89 in. x 17.60 in. x 31.10 in.)

### For more information







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2488H V6

Huawei FusionServer Pro 2488H V6 is the next-generation 2U 4-socket (4S) rack server, ideal for computing-intensive scenarios such as cloud computing, virtualization, high-performance computing (HPC), database, and SAP HANA. In virtualization scenarios, the OPEX of one FusionServer Pro 2488H V6 is lower than that of two 2U 2S rack servers. The 2488H V6 houses four 3rd Gen Intel® Xeon® Scalable processors in a 2U space, and supports 48 DDR4 DIMMs, 11 PCIe slots, and up to 25 x 2.5" drives for local storage. It incorporates patented technologies such as Dynamic Energy Management Technology (DEMT) and Fault Diagnosis & Management (FDM), and can be configured with Huawei FusionDirector software for entire-lifecycle management, helping drive down OPEX and improve ROI.



### **Superior Performance with Higher Efficiency**

- Supports four 3rd Gen Intel® Xeon® Scalable processors in a 2U space. Each processor provides up to 28 cores and six 10.4 GT/s Ultra Path Interconnect (UPI) links. The server supports Intel® Turbo Boost, hyper-threading, and Advanced Vector Extensions (AVX-512) to improve processing performance.
- Supports Intel® Deep Learning Boost (Intel® DL Boost). Thanks to the latest bfloat16 instruction set and Vector Neural Network Instruction (VNNI), the 3rd Gen Intel Xeon Scalable processor delivers up to 93% higher training and 90% higher inference performance than its predecessor (FP32).
- Supports up to 48 DDR4 RDIMMs or LRDIMMs of 3200 MT/s, providing a maximum memory capacity of 12 TB to meet large-capacity memory application requirements.
- Supports up to 24 Intel® Optane™ persistent memory (Optane™ PMem) modules (200 series), which can be used with DDR4 memory modules to offer a maximum memory capacity of 18 TB, meeting various workload requirements.
- Supports two dual-slot FHFL or four single-slot HHHL GPU heterogeneous accelerator cards, unleashing superior computing power for AI analytics, inference, and training scenarios.
- Supports up to 25 x 2.5" SAS/SATA HDDs and 24 NVMe SSDs, combining multiple storage media for data tiering and ultimate performance.
- Supports the Boot Speedup Storage Technology (BSST). The OS is installed on two M.2 SSDs and deployed separated from service data. The two M.2 SSDs support hot-plug and hardware RAID.



### **Smart Power Saving and Better Energy Efficiency**

- Leverages the patented DEMT and multiple power-saving measures such as component hibernation, intelligent fan module speed tuning based on the proportional-integral-derivative (PID) algorithm and digital thermal sensor (DTS), and active-standby power supplies, reducing power consumption of the server by up to 15% without compromising workload performance.
- Uses power supply units (PSUs) with different power options, such as 900 W, 1200 W, 1500 W, 2000 W, 2200 W, and 3000 W, to meet various workload requirements with high performance.
- Supports 1500 W HVDC PSU; leverages the HVDC technology for over 94% of power utilization.
- Equipped with 80 Plus® Titanium PSUs to deliver up to 96% conversion efficiency.



- Uses the patented FDM technology, delivering up to 93% accuracy in diagnosing core component faults.
- Integrates FusionDirector for smart entire-lifecycle O&M, boosting deployment and O&M efficiency.
  - » Supports batch OS installation, slashing the average OS installation time of each server from hours to minutes.
  - » Supports automated firmware upgrade, with flexible and configurable upgrade policies for different components and drivers.
  - ${\color{blue} > } {\color{blue} Supports stateless computing, allowing for rapid replication of live-network configuration and swift failover.}\\$
- Integrates a touchscreen LCD panel for fault diagnosis, allowing O&M personnel to quickly locate faults (supported only by the 2488H V6 8-drive model).
- Integrates fault diagnosis LEDs on the front panel to display error codes in real time, allowing O&M personnel to quickly locate faults.
- Provides standardized open interfaces and development guides, facilitating seamless integration with third-party management software.

# 2488H V6 Server



Form factor	2U rack server
Processors	2 or 4 x 3rd Gen Intel® Xeon® Scalable processors (5300/6300/8300 series), TDP up to 250 W
Chipset platform	Intel C621A
Memory	48 DDR4 DIMM slots, up to 3200 MT/s; up to 24 Intel® Optane™ PMem modules (200 series), 2666 MT/s
Local storage	Supports hot-pluggable drives with the following configuration options:  • 8 x 2.5" front SAS/SATA drives  • 24 x 2.5" front SAS/SATA drives  • 25 x 2.5" front SAS/SATA drives  • 4 x 2.5" front SAS/SATA drives and 8 x 2.5" NVMe SSDs  • 4 x 2.5" front SAS/SATA drives and 16 x 2.5" NVMe SSDs  • 24 x 2.5" front NVMe SSDs <sup>1</sup> Flash storage: 2 M.2 SSDs
RAID	RAID 0, 1, 1E, 5, 50, 6, or 60; optional supercapacitor for cache power-off protection; RAID-level migration, drive roaming, self-diagnosis, and web-based remote configuration
LOM network port	1 x OCP 3.0 NIC (optional): 2 x GE/10GE/25GE/100GE ports, supporting hot swap, NC-SI, WOL, and PXE 1 Wi-Fi module (optional): allowing mobile terminals to connect to the iBMC in wireless mode
PCIe expansion	Up to 11 PCle 3.0 slots, including one dedicated PCle slot for the OCP 3.0 NIC
Heterogeneous accelerator card	2 dual-slot FHFL or 4 single-slot HHHL GPU heterogeneous accelerator cards. For details, visit https://support-it.huawei.com/ftca/indexEn?serise=2
Fan modules	6 hot-swappable fan modules in N+1 redundancy mode
Power supply unit (PSU)	2 hot-swappable PSUs with support for 1+1 redundancy and the following configuration options:  • 3000 W AC Titanium PSUs 2500 W (input: 200 V to 220 V AC) 2900 W (input: 220 V to 230 V AC) 3000 W (input: 230 V to 240 V AC)  • 2000 W AC Platinum PSUs 1800 W (input: 200 V to 220 V AC, or 192 V to 200 V DC) 2000 W (input: 220 V to 240 V AC, or 200 V to 288 V DC)  • 900 W AC Platinum/Titanium PSUs (input: 100 V to 240 V AC, or 192 V to 288 V DC)  • 1500 W HVDC PSUs (input: 260 V to 400 V AC)  • 2200 W DC PSUs (input: -38.4 V to -72 V DC)  • 1200 W DC PSUs (input: -38.4 V to -72 V DC)
Management	<ul> <li>Huawei iBMC integrates one dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&amp;M, and hardware security hardening.</li> <li>iBMC supports standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/VNC KVM; supports CD-free deployment and the Agentless feature for smart and simplified management.</li> <li>(Optional) Configured with the Huawei FusionDirector management software to provide advanced management features such as stateless computing, batch OS deployment, and automated firmware upgrade, enabling automatic entire-lifecycle management.</li> </ul>
Operating system (OS)	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Citrix XenServer, and VMware ESXi. For details, visit https://support-it.huawei.com/ftca/indexEn?serise=2.
Security	Power-on password, administrator password, TCM/TPM 2.0, security front panel, and out-of-box intrusion alarm, etc.
Operating temperature	5°C to 40°C (41°F to 104°F), compliant with ASHRAE Classes A3
Certification	CE, UL, FCC, CCC, and RoHS, etc.
Installation suite	Adjustable guide rails, holding rails, and cable management arms (CMAs)
Dimensions (H x W x D)	Chassis: 86.1 mm x 447 mm x 790 mm (3.39 in. x 17.60 in. x 31.10 in.)

#### Note

### For more information







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 $<sup>^{\</sup>rm 1}$  The configuration of 24 NVMe SSDs is expected to be released in Q4 2020.

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### Why Huawei servers?

Huawei is a world-leading server provider with a broad spectrum of server offerings including rack, high-density, blade servers, liquid cooling, heterogeneous and KunLun Mission Critical Servers. Huawei is the industry's only vendor that has the integrated capabilities of server R&D, manufacture, and delivery. Huawei servers have been recognized for their superior quality, rock-solid reliability, extraordinary performance, ease of management, energy efficiency, and security. Huawei servers have served over 10,000 customer accounts across various industries around the globe, including government, finance, electric power, Internet, telecom, energy, transportation, and education.