

The high-density rack server

# NEC Express5800/R120h-1M



## Key Feature

- Support for the latest Intel® Xeon® Processor Scalable Family
- Up to 1.5 TB of high speed DDR4 memory
- Five PCIe slots in a 1U form factor
- Agent-less management with integrated management controller

## Overview

The Express5800/R120h-1M, a high-density dual-socket 1U rack server, offers outstanding performance, scalability, and reliability. Supporting the new high-performance and energy efficient Intel® Xeon® Processor Scalable Family, high speed DDR4-2666 memory, and high performance

storage controllers, agent-less management capability, and various redundant options, the R120h-1M delivers an the right balance of performance and features for the workload of large enterprise business.

## Features

### Distinguished Performance for Enterprise Workload

Featuring the Intel® Xeon® Processor Scalable family with up to 28-core and 38.5 MB cache, up to 1.5 TB of DDR4 memory, up to 42 TB of storage capacity, the R120h-1M is ideal for the most demanding applications such as virtualization, databases, and ERP systems for medium to large enterprise.

### Superior Expandability and Reliability

The Express5800/R120h-1M offers superior expandability and reliability for meeting enterprise business needs. With 24 DIMM slots, 11 2.5-inch drive bays, four standard gigabit NIC ports, and five PCIe slots, the R120h-1M offers superior memory and storage capability, and flexible network connectivity. The redundant storage, fan, and power supply options help improve system uptime.

### Cost Savings Through Efficiency

The Express5800/R120h-1M helps to reduce IT expense with NEC's innovative features. Combining intelligent cooling technology, redundant power supplies with cold-standby mode, and 92 percent efficiency, the R120h-1M helps to reduce energy costs. The agent-less remote monitoring feature minimizes administrator time and effort of by allowing staff to monitor and receive server status notifications from remote sites without dedicated management software. NEC's unique setup tool, EXPRESSBUILDER, helps reduce the time and effort required for server deployment.

## Hardware Specifications

MODEL	NEC Express5800/R120h-1M
<b>Form factor / height</b>	1U Rack
<b>Number of processors</b>	1 to 2
<b>Processors</b>	Intel® Xeon® Processor Bronze 3104(6C/6T, 1.70 GHz, 8.25MB) / 3106(8C/8T, 1.70 GHz, 11MB) Intel® Xeon® Processor Silver 4108(8C/16T, 1.80 GHz, 11M) / 4110(8C/16T, 2.10 GHz, 11MB) / 4112(4C/8T, 2.60 GHz, 8.25MB) / 4114(10C/20T, 2.20 GHz, 13.75MB) / 4116(12C/24T, 2.10 GHz, 16.50MB) Intel® Xeon® Processor Gold 5115(10C/20T, 2.40 GHz, 13.75MB) / 5118(12C/24T, 2.30 GHz, 16.50MB) / 5120(14C/28T, 2.20 GHz, 19.25MB) / 5122(4C/8T, 3.60 GHz, 16.50MB) / 6126(12C/24T, 2.60 GHz, 19.25MB) / 6128(6C/12T, 3.40 GHz, 19.25MB) / 6130(16C/32T, 2.10 GHz, 22MB) / 6132(14C/28T, 2.60 GHz, 19.25MB) / 6134(8C/16T, 3.20 GHz, 24.75MB) / 6136(12C/24T, 3 GHz, 24.75MB) / 6138(20C/40T, 2GHz, 27.50MB) / 6140(18C/36T, 2.30 GHz, 24.75MB) / 6142(16C/32T, 2.60 GHz, 22MB) / 6148(20C/40T, 2.40 GHz, 27.50MB) / 6150(18C/36T, 2.70 GHz, 24.75MB) / 6152(22C/44T, 2.10 GHz, 30.25MB) / 6154(18C/36T, 3GHz, 24.75MB) / 6134M(8C/16T, 3.20 GHz 24.75M ) / 6140M(18C/36T, 2.30 GHz, 24.75MB) / 6142M(16C/32T, 2.60 GHz, 22MB) Intel® Xeon® Processor Platinum 8153(16C/32T, 2 GHz, 22MB) / 8156(4C/8T, 3.60 GHz, 16.50MB) / 8158(12C/24T, 3GHz, 24.75MB) / 8160(24C/48T,2.10 GHz, 33MB) / 8164(26C/52T, 2GHz, 35.75MB) / 8168(24C/48T, 2.70 GHz, 33MB) / 8170(26C/52T, 2.10 GHz, 35.75MB) / 8176(28C/56T, 2.10 GHz, 38.50MB) / 8180(28C/56T, 2.50 GHz, 38.50MB) / 8160M(24C/48T, 2.10 GHz, 33MB) / 8170M(26C/52T, 2.10 GHz, 35.75MB) / 8176M(28C/56T, 2.10 GHz, 38.50MB) / 8180M(28C/56T, 2.50 GHz, 38.50MB)
<b>Memory type</b>	DDR4-2666 ECC RDIMM / LRDIMM
<b>Memory slots</b>	24
<b>Maximum memory</b>	1.5 TB
<b>Storage type</b>	Hot plug 2.5-inch SAS HDD Hot plug 2.5-inch SATA HDD Hot plug 2.5-inch SATA SSD Hot plug 3.5-inch SAS HDD * Hot plug 3.5-inch SATA HDD * Available in October 2017
<b>Maximum internal drive bays</b>	2.5-inch : 11 3.5-inch : 4
<b>Maximum internal storage</b>	42 TB
<b>Removable media</b>	1 bay for optical drive
<b>Expansion slots (Standard)</b>	1 PCIe x16 Gen 3 1 PCIe x8 Gen 3 1 PCIe x8 Gen 3 for a dedicated RAID card 1 PCIe x8 Gen 3 for a dedicated LOM controller * The slot mix changes by installing optional riser cards
<b>Video (VRAM)</b>	Integrated in the server management controller (16 MB)
<b>Network</b>	4 1000BASE-T plus 1 1000BASE-T for management
<b>Redundant power supply</b>	Standard, hot plug
<b>Redundant cooling fan</b>	Standard, hot plug
<b>Power supplies</b>	500W/800W/1600W 500W/800W: 100-240 VAC ± 10% 50 / 60 Hz ± 3 Hz 1600W: 200-240 VAC ± 10% 50 / 60 Hz ± 3 Hz
<b>Interface</b>	1 VGA, 1 serial (optional), 3 to 4USB 3.0 (plus 2 internal USB 3.0), 4 LAN, 1 management LAN
<b>Dimensions (W x D x H)</b>	2.5-inch: 434.6 x 707.0 x 42.9 mm / 17.1 x 27.8 x 1.7 in 3.5-inch: 434.6 x 749.8 x 42.9 mm / 17.1 x 29.5 x 1.7 in
<b>Temperature and humidity conditions</b>	Operating: 10 to 35 °C / 50 to 95 °F, 8 to 90% Non-operating: -30 to 60 °C / -22 to 140 °F, 5 to 95%
<b>Operating systems and virtualization software</b>	Microsoft® Windows Server® 2012 R2 Standard / Datacenter Microsoft® Windows Server® 2016 Standard / Datacenter Red Hat® Enterprise Linux® 7 VMware® ESXi™ 6.0 VMware® ESXi™ 6.5 * * Available in October 2017

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