

The 1U slim rack server

NEC Express5800/R120b-1

ENERGY EFFICIENT SERVER OPTIMIZED FOR SPACE CONSTRAINED INSTALLATIONS



HIGH PERFORMANCE

ENERGY SAVING

SIMPLIFIED MANAGEABILITY

High density mounting

The Express5800/R120b-1 is a dual-socket 1U rack server enabling high-density mounting and combines outstanding performance, reliability, energy saving parts and green technology. Suitable for businesses seeking to maximize processing power in space constrained environments.

Ideal environments and applications

Mid-sized businesses, corporate datacenters and remote branch offices, Internet service providers, application service providers. Perfect for front-end applications for proxy, firewall, VPN, load balancing, HPC, and cache servers.

Advanced system management

R120b-1 comes standard with a practical remote management solution. Remote monitoring and management are possible through a Web browser regardless of the status of the operating system and even when the platform is turned off.

High performance

- Powered by Intel® Xeon® 5600 series processors
- Up to 192GB DDR3L-1333 memory
- Two PCI Express 2.0 support
- High-speed 6Gb/s SAS HDD
- Up to three 3.5-inch SATA or six 2.5-inch SAS/SATA disk drives with RAID 0/1/5/6/10/50 capability

Energy saving

- 1.35v low-voltage DDR3L memory
- NEC engineered dynamic fan control technology
- 80 PLUS® Gold certified power supply achieving maximum power conversion rate of 92% to reduce AC/DC loss and increase power efficiency

Simplified manageability

- The EXPRESSBUILDER setup support tool provides step-by-step guidance via intuitive GUI and automates the setup process to reduce hands-on management.
- The ESMPRO management software and the EXPRESSSCOPE Engine 2 remote management controller interact to monitor, control and troubleshoot from a remote console.

HARDWARE SPECIFICATION

MODEL	Express5800/R120b-1
Processors	Number of processor: 1-2 Intel® Xeon® Processor X5690 (3.46 GHz/6-core/12 MB)* Intel® Xeon® Processor X5675 (3.06 GHz/6-core/12 MB)* Intel® Xeon® Processor X5650 (2.66 GHz/6-core/12 MB) Intel® Xeon® Processor E5645 (2.40 GHz/6-core/12 MB)* Intel® Xeon® Processor L5640 (2.26 GHz/6-core/12 MB)* Intel® Xeon® Processor E5620 (2.40 GHz/4-core/12 MB) Intel® Xeon® Processor E5606 (2.13 GHz/4-core/8 MB) * 2.5-inch disk drive model only
Memory	DDR3-1333 ECC registered low power DIMM (1/2/4/8 GB), DDR3-1066 ECC registered low power DIMM (16 GB) Max.: 192 GB (12 x 16 GB)
Maximum storage	3.5-inch SATA: 9 TB (3 x 3 TB) 2.5-inch SAS: 5.4 TB (6 x 900 GB), 2.5-inch SATA: 6 TB (6 x 1 TB), 2.5-inch SSD: 600 GB (6 x 100 GB)
Removable media	1 bay for optical disk drive
Expansion slots	Total: 2 slots available*, ** 1 PCIe 2.0 x8 (x8 connector) 1 PCIe 2.0 x16 (x16 connector) * The slot mix changes by installing optional riser card ** Plus one dedicated slot for a RAID controller
Video	Integrated in the Server Management Controller (32 MB)
Network	2 1000BASE-T/100BASE-TX/10BASE-T + 1 100BASE-TX for management
Power consumption	710 VA / 700 Watt (max., at 100 VAC)
Redundant power supply	Optional, hot plug
Redundant cooling fan	Standard
Management	Server Management Controller (EXPRESSSCOPE Engine 2)
Interface	2 VGA, 1 keyboard, 1 mouse, 1 serial*, 4 USB 2.0 (plus 4 internal USB 2.0), 2 LAN, 1 management LAN * Total 2 with optional port
Dimensions (W x D x H) and weight	427.5 x 722.0 x 43.5 mm / 16.8 x 28.4 x 1.7 in (1U) Max.: 21 kg / 46.3 lb
Temperature and humidity condition (non-condensing)	Operating: 10 to 35°C / 50 to 95°F , 20 to 80% Non-operating: -10 to 50°C / 14 to 122°F, 20 to 80%
Operating systems and virtualization software	Microsoft® Windows Server® 2003, Standard Edition (SP1 or later) / Enterprise Edition (SP1 or later) Microsoft® Windows Server® 2003 R2, Standard Edition / Enterprise Edition Microsoft® Windows Server® 2003 R2, Standard x64 Edition / Enterprise x64 Edition Microsoft® Windows Server® 2008 Standard / Enterprise Microsoft® Windows Server® 2008 Standard (x64) / Enterprise (x64) Microsoft® Windows Server® 2008 R2 Standard / Enterprise Red Hat® Enterprise Linux® VMware® ESX™i 4.1

Note : For Linux support, go to the NEC website at <http://www.nec.com/global/prod/express/linux/>, or contact our sales representative

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