

World-class Linux OS-tuned servers—at entry-level prices



IBM @server® OpenPower 710 System



OpenPower 710 rack mount

Highlights

- ***Flexible platform—tuned for the Linux® operating system (OS) and built on open Linux OS standards—for freedom and choice***
- ***Brings world-class features such as IBM Virtualization Engine™¹ technology and reliability, availability and serviceability (RAS) capabilities to an entry-level server, helping improve system utilization, reduce downtime and lower systems management costs***
- ***Delivers leading-edge performance and productivity***

Built on a mainframe-inspired technology and tuned for the Linux environment, IBM @server® OpenPower™ systems meet the requirements of clients by delivering the performance, reliability, availability and compute power they expect from larger systems—at affordable price-points. This competitively priced IBM 64-bit IBM POWER5™ processor-based server is designed for a flexible, open Linux architecture to help simplify today's complex IT environments.

The IBM @server OpenPower 710 is a powerful rack-mount 1- or 2-way system that delivers the expandability and availability required for constrained data centers. The OpenPower 710 systems' raw computing power positions it well for high-performance engineering and scientific workloads. Its system-level expandability and availability suits edge of network, general infrastructure, Web content serving and application hosting

services applications. By bringing optional enterprise-class virtualization technologies¹ like dynamic logical partitioning (LPAR²), Micro-Partitioning™, virtual LAN, virtual I/O and more to the open systems space, OpenPower servers provide companies with virtualization technology that can deliver significant savings on operational costs including system management, power, cooling, and real estate.

Micro-Partitioning brings virtualization to a whole new level, providing administrators with an unprecedented ability to fine-tune system resource allocations, and thus enabling clients to take a major step toward becoming an on demand business. With Micro-Partitioning, virtual servers on an OpenPower system can be as small as

1/10th of a processor and be extended in increments of as small as 1/100th of a processor, dramatically increasing the flexibility and scalability of a solution.

Linux OS tuning delivers freedom of choice

OpenPower systems are tuned for Linux and take advantage of inherent performance-enhancing characteristics of IBM Power Architecture™ technology, including improved memory and data access, as well as faster data locks and acquisitions. In addition, for even greater uptime and scalability, the Linux kernel leverages the performance features of POWER5 processors designed to help improve utilization and lower operational costs.

The IBM POWER™ platform is supported by thought leaders in the Linux community such as Red Hat and Novell SUSE LINUX, as open source development and standards groups.

Full range of services and support

With years of experience in installing hardware and software, IBM knows what it takes to plan and configure systems. IBM Technical Support Services provides comprehensive installation services to help clients get started on Linux on POWER, migrate from other hardware platforms and deploy key workloads. In addition, IBM Global Services (IGS) provides consulting and integration services to deploy and integrate complex applications into an IT environment.

OpenPower 710 at a glance

Feature	Description
Models	<ul style="list-style-type: none">• 1 processor; 1.65 GHz, 1.9MB L2 cache, 36MB L3 cache• 2 processors; 1.65 GHz, 1.9MB L2 cache, 36MB L3 cache• Simultaneous Multi-threading (SMT)
RAM (memory)	Minimum: 512MB on 1-way; 1GB on 2-way model Maximum: 32GB
Internal storage	Maximum 572GB internal disk
Internal disk bays	Four standard (73.4/146.8GB 10K rpm or 36.4GB/73.4GB 15K rpm disks)
Media bays	One DVD-ROM included as standard (can be upgraded to DVD-RAM)
Adapter slots	Three 64-bit PCI-X
Standard features	Description
I/O adapters	Dual ported integrated Ultra320 SCSI controller; two Ethernet 10/100/1000 Mbps controllers
Ports	Two serial, two USB, two HMC ports, keyboard and mouse
Power requirements	100-127v AC for 1-, 2-way models 200-240v AC for 4-way models
Form factor	Rack drawer 3.5"H x 19"W x 27"D (89 mm x 483 mm x 686 mm); weight Minimum configuration: 16.8 kg (37 lb) Maximum configuration: 23.2 kg (51 lb) ³

Advanced OpenPower Virtualization optional feature

Feature	Description
Prerequisite/corequisite	<ul style="list-style-type: none">• Hardware Management Console (HMC)
POWER Hypervisor™	<ul style="list-style-type: none">• LPAR, Dynamic LPAR, VLAN, Micro-Partitioning, SMP
Virtual I/O Server	<ul style="list-style-type: none">• Virtual storage and virtual Ethernet

Additional information

RAS features	Dynamic firmware updates (planned for 2Q 0405) IBM Chipkill ECC, bit-steering memory, ECC L2 cache Service processor Hot-swappable disk bays Dynamic deallocation of processors and PCI bus slots Hot-plug cooling fans power supplies Redundant cooling fans; Optional redundant power supply
Operating systems	SUSE LINUX Enterprise Server 9 for POWER (SLES 9) Red Hat Enterprise Linux AS 3 for POWER (RHEL AS 3)
Warranty	8 A.M. to 5 P.M., next-business-day for three years (limited) at no additional cost; on-site for selected components; CRU (customer replaceable unit) for all other units (varies by country). Warranty upgrades and maintenance are available.

For more information

To learn more about IBM **@server** OpenPower servers, contact your IBM representative or IBM Business Partner, or visit the following Web sites:

- **ibm.com/eserver/openpower**
- **ibm.com/linux/power**



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¹Required optional Advanced OpenPower Virtualization feature.

²Dynamic LPAR is not supported by Red Hat Enterprise Linux AS 3 for POWER.

³Weight will vary when disks, adapters and other peripherals are installed.