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## Highlights

- Highly secure architecture providing a stable database and middleware platform for efficient deployment of business processing applications
  - Ideal for mid-sized business customers consolidating UNIX, IBM i and Linux workloads
  - Gain faster insights with the IBM® POWER8™ processor and smart acceleration enabled by Coherent Accelerator Processor Interface (CAPI) technologies
  - Reduce energy consumption utilizing advanced energy control
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# IBM Power System S814

*Open technology server for mid-sized business solutions*

## Power Systems: Innovation to put data to work New innovation brings faster insight to the point of impact for today's data hungry applications

Built with innovation that puts data to work, IBM Power Systems™ deliver the foundation for organizations to bring insight to the point of impact 2x faster. These first generation systems push the physical and virtual boundaries of data center technology with innovation designed to drive faster and more efficient data-centric applications required for today's smarter enterprise.

With new innovations, Power Systems provide the ability to:

- Gain faster insights with the POWER8 processor and smart acceleration enabled by CAPI technologies such as accelerators for key workloads
- Achieve lower latency and smaller footprint with CAPI Flash
- Move data in and out of systems more quickly with twice the memory and I/O expansion
- Achieve greater speed and efficiency for database, transactional and other highly multi-threaded applications with transactional memory supported by 50 percent more cores and 2x the number of simultaneous threads per core



### Designed and optimized for big data and analytics

Businesses are amassing a wealth of data. Power Systems, built with innovation that puts data to work, can scale to support growing workloads and help businesses find business insights faster. Power Systems are designed for big data. From operational business intelligence and data warehouses to predictive analytics solutions, Power servers are optimized for the compute intensive performance demands of database and analytics applications. They can flexibly scale to support the demands of rapidly growing data for mid-market businesses.

### Delivering open innovation by revolutionizing the way IT is developed and delivered

With an architecture at the heart of the open server development community and the OpenPOWER Foundation, Power Systems' open technology platform presents a world of community created innovation, applications and technology components to deliver a broader set of applications and new technologies quickly. Leveraging open standards, Power Systems provides developers with tools tuned for a platform that boosts productivity and performance by removing constraints imposed by commodity architecture. With continuous innovation built into the platform, Power Systems will enable future integrated hardware solutions that dramatically accelerate compute and data-intensive tasks.



### IBM Power System S814

The Power system S814 is designed to be a highly secure architecture providing a stable database and middleware platform for efficient deployment of business processing applications. A 1-socket system with a 6-core POWER8 processor is available in either a rack or tower configuration. The 8-core higher performance system is only available in a rack configuration and supports new I/O capabilities including CAPI accelerators, higher internal disk and SSD capacities, and hot plug PCIe Gen3 slots.

**IBM Systems and Technology**  
**Data Sheet**

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**IBM Power System S814 at a glance**

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System configurations	Model 8286-41A
<b>Processor and Memory</b>	
Microprocessors	One 6 core 3.02 GHz POWER8 processor card (rack and tower) or One 8 core 3.72 GHz POWER8 processor card (rack only)
Level 2 (L2) cache	512 KB L2 cache per core
Level 3 (L3) cache	8 MB L3 cache per core
Level 4 (L4) cache	16 MB per DIMM
Memory Min/Max	16 GB, 32 GB and 64 GB 1600 MHz DDR3 module, 16/512 GB Active Memory Sharing
Processor-to-memory bandwidth	192 GBps per socket
<b>Storage and I/O</b>	
Standard backplane	12 SFF bays for HardDiskDrive/SolidStateDisk
With dual IOA higher function backplane	18 SFF bays for HDD/SSD
Media bays	One slimline DVD
Integrated SAS controller	Standard RAID 0,5,6,10. optional: 7200 MB <sup>†</sup> cache & Easy Tier function
Adapter slots	Included one x8 PCIe slots must contain a 4-port 1 Gb Ethernet LAN available for client use Seven PCIe Gen3 slots with concurrent maintenance: two x16 plus five PCIe Gen3 x 8 1 CAPI adapter per processor card
I/O bandwidth	96 GBps per socket
<b>Power, RAS, System Software, Physical Characteristics and Warranty</b>	
Power supply	Tower: 100 V to 240 V; Rack: 200 V to 240 V
RAS features	Processor instruction retry Alternate processor recovery Selective dynamic firmware updates Chipkill memory ECC L2 cache, L3 cache Service processor with fault monitoring Hot-swappable disk bays Hot-plug concurrent maintenance PCIe slots Hot-plug and redundant power supplies and cooling fans Dynamic processor deallocation Extended error handling on PCI slots
Operating systems*	AIX, IBM i and Linux on POWER
System dimensions	Rack: 427.5 W x 173 H x 750.5 D mm Tower: 328.5 W x 522 H x 751.7 D mm
Warranty	3 year Limited Warranty, on site for selected components; CRU (customer replaceable unit) for all other units (varies by country), Next business day 9x5 (excluding holidays), warranty service upgrades and maintenance are available.

## For more information

To learn more about the IBM Power System S814, please contact your IBM marketing representative or IBM Business Partner, or visit the following websites:

[ibm.com/systems/power/hardware/s814/index.html](http://ibm.com/systems/power/hardware/s814/index.html)

For more information on hardware maintenance, software support, solution support and managed support, visit:

[ibm.com/services/maintenance](http://ibm.com/services/maintenance)

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Actual available storage capacity may be reported for both uncompressed and compressed data and will vary and may be less than stated.

\* See facts and features document for detailed OS level support.

† 1.8 GB write cache with compression up to 7.2 GB effective



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