



Highlights

- Designed for memory-intensive workloads
 - Allow clients the ability to consolidate their workloads and help to reduce the footprint in their data center
 - Gain insights faster from data with up to 4TB memory
 - Easily integrates into the organization's cloud and cognitive strategy and delivers industry leading price performance for mission critical workloads.
 - Designed for security, reliability and performance to face current and future security threats
 - Live partition mobility capabilities help to migrate from previous Power Systems™
 - Save on licensing cost with strongest per core performance in the industry
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IBM Power System H924

Future-forward Infrastructure for your Mission Critical SAP HANA Workloads

IBM Power Systems H924

IBM® Power Systems H924 for SAP HANA® is designed for clients to gain the greatest benefit from their SAP HANA environments. Optimized for in-memory workloads, these systems deliver increased performance as compared to the prior generation, while delivering virtualization and unmatched flexibility to help clients run multiple SAP HANA® production workloads concurrently including production and non-production (dev/test) in a single system. In addition, IBM Power Systems for SAP HANA® allow concurrently running virtualized SAP HANA® side-by-side with other Linux, AIX® or IBM i workloads. It is an infrastructure that supports today's mission-critical workloads and has the capabilities required to support new workloads of the future.

The H924 is based on the next generation of IBM Power Systems, with POWER9™ technology, which is built with innovations that deliver exceptional security and unprecedented reliability for data intense workloads of today's enterprises. POWER9 is designed from the ground up for data intensive workloads like Databases or Analytics. This new server generation provides 33 percent more memory per socket than the latest generation x86 servers, making it an ideal platform for in-memory and data centric applications. Designed to run commercial, cognitive and database workload better than any other competitive Server Platform, customers are trusting POWER Servers as the robust and secure backbone of their IT infrastructure.

The IBM Power System H924 server (9223-42H) is a powerful 2-socket server that ships with up to 24 activated cores and I/O configuration flexibility to meet today's growth and tomorrow's processing needs.

The server features:

- The following fully activated IBM POWER9 processor module configurations in a 19-inch rack-mount, 4U (EIA units) form factor:
 - 8-core Typical 3.8 to 4.0 GHz (max) POWER9 Processor
 - 10-core Typical 3.5 to 3.9 Ghz (max) POWER9 Processor
 - 12-core Typical 3.4 to 3.9 Ghz (max) POWER9 Processor
- Up to 4096 GB of DDR4 memory
- Running at speeds of 2133, 2400, and 2666 Mbps



**Systems
Data Sheet**

- Storage backplane options:
 - Base 12 SFF-3 Bays/RDX Bay
 - Split feature to 6+6 SFF Bays: Add a second SAS Controller
 - Expanded Function 18 SFF-3 Bays/Dual IOA with Write Cache and optional external SAS port
 - Expanded Function 12 SFF-3 Bays/RDX Bay and optional external SAS port
- Optional PCIe3 NVMe carrier card with two M.2 module slots
- Expansion capabilities for the EXP12SX/EXP24SX SFF Gen2-bay Drawer
- Hot-plug PCIe Gen4 and Gen3 slots
- Integrated:
 - Service processor
 - EnergyScale technology
 - Hot-plug and redundant cooling
 - USB 3.0 ports
 - Two HMC ports
 - One system port with RJ45 connector
- Four hot-plug, redundant power supplies
- 19-inch rack-mounting hardware (4U)

The new H924 - Highest flexibility and reliability with exceptional security and best-in-class integrated Virtualization for SAP HANA workloads.



Power System H924 (9223-42H) at a glance

System configurations

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| Microprocessors | 2x POWER9 CPUs 8, 10, 12 cores |
| Level 2 (L2) cache | 512 K |
| Level 3 (L3) cache | 120 MB |
| RAM (memory) | Up to 4 TB, from 32 DDR4 IS DIMM @ 2666, 2400, and 2133 Mhz, |
| Internal disk storage | 12 or 18 SFF SAS Bay options (HDD or SDD), 2 internal PCIe G3 Slots for Storage Controller or NVMe |
| Processor-to-memory bandwidth | Up to 170 GB/s per socket, 340 GB/s per system |
| L2 to L3 cache bandwidth | 7 TB/s on chip bandwidth |
| Internal SCSI disk bays | n/a |

**Systems
Data Sheet**

Power System H924 (9223-42H) at a glance

System configurations

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|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Media bays | Optional RDX drive with 12 SFF Bay option only |
| Adapter slots | 3 x16 Gen4 full-height, half-length (CAPI) 2 x8 Gen4 full-height, half-length (with x16 connectors) (CAPI) 2 x8 Gen3 full-height, half-length (with x16 connectors) 4 x8 Gen3 full-height, half-length (one of these slots is used for the required base LAN adapter) |

Standard features

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| I/O ports | <ul style="list-style-type: none"> • One front USB 3.0 ports <ul style="list-style-type: none"> – Two rear USB 3.0 ports – Two HMC 1GbE RJ45 ports – One system port with RJ45 connector – 1x USB 3.0 front, 2x USB 3.0 rear, 2x HMC 1 GB Eth RJ45 ports, one system port with RJ45 connector, 2x High Speed 25 Gb/s ports |
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Connectivity support (optional)

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| Advanced POWER Virtualization | PowerVM® Enterprise integrated |
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| RAS features | <p>Processor instruction retry Selective dynamic firmware updates Chip kill memory ECC L2 cache, L3 cache Service processor with fault monitoring Hot-swappable disk bays Redundant cooling fans</p> |
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| Operating systems | <p>Primary:</p> <ul style="list-style-type: none"> • SUSE Linux Enterprise Server 12 Service Pack 3 • SUSE Linux Enterprise Server for SAP with SUSE Linux Enterprise Server 11 Service Pack 4 • SUSE Linux Enterprise Server for SAP with SUSE Linux Enterprise Server 12 Service Pack 3 • Red Hat Enterprise Linux 7 for Power LE, 7.4 • Red Hat Enterprise Linux for SAP with Red Hat Enterprise Linux 7 for Power LE, 7.4 <p>Secondary: AIX 6.1, 7.1, 7.2 and IBM i 7.2, 7.3</p> |
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| Power requirements | <p>Operating voltage: 1400 W PSU: 200 - 240 V AC Operating frequency: 47/63 Hz</p> |
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| System dimensions | <ul style="list-style-type: none"> • Width: 482 mm (18.97 in.) • Depth: 769.6 mm (30.3 in.) • Height: 173.3 mm (6.8 in.) • Weight: 39.9 kg (88 lb) |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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| Warranty | 3-year limited warranty, CRU (customer replaceable unit) for all other units (varies by country) next business day 9am to 5pm (excluding holidays), warranty service upgrades and maintenance are available. |
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Why IBM?

With IBM's cutting-edge innovation with enterprise dependability, a roadmap designed for big data and in memory workloads, as well as a trusted and differentiated infrastructure built for the future, IBM is a partner to rely on to support your future business demands. IBM's strong 40+ year partnership with SAP delivers continuous alignment on roadmaps and offerings. IBM Power Systems' advantage combines the highest flexibility and reliability with exceptional security and best-in-class integrated Virtualization for SAP HANA® workloads.

For more information

To learn more about the Power System H924 please contact your IBM representative or IBM Business Partner, or visit the following website:

ibm.com/us-en/marketplace/small-enterprise-servers-hana

Additionally, IBM Global Financing provides numerous payment options to help you acquire the technology you need to grow your business. We provide full lifecycle management of IT products and services, from acquisition to disposition.

For more information, visit: ibm.com/financing

IBM Systems Lab Services can provide on-site professional services to help clients build their SAP HANA® solutions using a tailored data center infrastructure strategy. For more information on Lab Services offerings, clients should contact their IBM representative or go to the [Lab Services Power Systems](#) website.



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Armonk, NY 10504

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