



---

## 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
- 

# 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**

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**

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**

I/O ports	<ul style="list-style-type: none"> <li>• One front USB 3.0 ports</li> <li>– Two rear USB 3.0 ports</li> <li>– Two HMC 1GbE RJ45 ports</li> <li>– One system port with RJ45 connector</li> <li>– 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</li> </ul>
-----------	--

Connectivity support (optional)

Advanced POWER Virtualization	PowerVM® Enterprise integrated
-------------------------------	--------------------------------

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>
--------------	--

Operating systems	<p>Primary:</p> <ul style="list-style-type: none"> <li>• SUSE Linux Enterprise Server 12 Service Pack 3</li> <li>• SUSE Linux Enterprise Server for SAP with SUSE Linux Enterprise Server 11 Service Pack 4</li> <li>• SUSE Linux Enterprise Server for SAP with SUSE Linux Enterprise Server 12 Service Pack 3</li> <li>• Red Hat Enterprise Linux 7 for Power LE, 7.4</li> <li>• Red Hat Enterprise Linux for SAP with Red Hat Enterprise Linux 7 for Power LE, 7.4</li> </ul> <p>Secondary: AIX 6.1, 7.1, 7.2 and IBM i 7.2, 7.3</p>
-------------------	---

Power requirements	<p>Operating voltage: 1400 W PSU: 200 - 240 V AC          Operating frequency: 47/63 Hz</p>
--------------------	---

System dimensions	<ul style="list-style-type: none"> <li>• Width: 482 mm (18.97 in.)</li> <li>• Depth: 769.6 mm (30.3 in.)</li> <li>• Height: 173.3 mm (6.8 in.)</li> <li>• Weight: 39.9 kg (88 lb)</li> </ul>
-------------------	--

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.
----------	--

## 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](http://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](http://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.



---

© Copyright IBM Corporation 2018

IBM Systems  
New Orchard Road  
Armonk, NY 10504

Produced in the United States of America  
February 2018

IBM, the IBM logo, ibm.com, Power Systems, and POWER, are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at [ibm.com/legal/copytrade.shtml](http://ibm.com/legal/copytrade.shtml)

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

SAP HANA® is a registered trademark of SAP SE in Germany and in several other countries.

NVIDIA, NVIDIA Volta, NVIDIA NVLink are trademarks of NVIDIA Corporation in the United States, other countries, or both.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

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



Please Recycle

---