



HP ProLiant DL165 G7 Server

Data sheet

Achieve flexible virtualization and meet your computing needs with the high-performing, energy-efficient, affordable, and easy-to-deploy HP ProLiant DL165 G7 Server

Get more value with improved features at lower cost

The HP ProLiant DL165 G7 Server is the latest addition to the ProLiant portfolio of energy-efficient servers. The HP ProLiant DL165 G7 Server is a cost-efficient, 1U server with support for up to two AMD Opteron 6100 Series processors and 24 DIMM slots, driving outstanding performance and flexible virtualization for cost-conscious server deployments.

The server increases performance and saves power, and its Easy Setup CD reduces deployment time—making it especially suitable for web serving, scale-out grid computing, and memory-intensive applications. Coupled with its unmatched expandability, this server is ideal for high-performance computing (HPC) environments, small and medium businesses (SMBs), and corporate scale-out market segments.

Ready for more?

The new HP ProLiant DL165 G7 Server gives you more with its array of improved and robust features including:

- Flexible virtualization and high performance
 - Up to two 8- or 12-core AMD Opteron 6100 Series processors
 - 24 DIMM sockets—up to 256 GB of DDR3 memory
 - 2 dual-port multifunction Gigabit NICs standard
 - 2 PCI Gen 2 expansion slots

- Internal USB support; optional SD card reader
- Flexibility and expandability
 - Multiple drive options including 8 SFF or 4 LFF drives
 - SAS, SATA, or SSD drives for increased I/O performance, and optional RAID 5 data protection
 - Optional rear SD card reader
 - PCI-e Gen 2 x16 slot and internal-only x4 slot
- Trusted ProLiant confidence
 - N+1 fan redundancy (optional; standard in 2-processor models)
 - Advanced ECC memory
 - HP Lights-Out 100 (LO100), Systems Insight Manager (SIM), and Easy Setup CD for rapid deployment
 - Trusted Platform Module (TPM) support
 - Common ProLiant options and accessories

Key features and benefits

Easy to own and simple to maintain

The HP ProLiant DL165 G7 Server is affordable and easy to own with features such as:

- **Affordability:** This well-featured dual-processor system is available at an affordable price.
- **Rack-optimized, 1U form factor:** The server's rack-optimized, 1U form factor provides for fast deployment and efficient maintenance of large-scale cluster and grid solutions.



No wasted expense and no worries about hitting power limits

- **Fast and simple maintenance and expansion:** The easy-access chassis and internal component labels make maintenance and expansion fast and simple.
- **Easy Setup CD for rapid deployment:** The server includes an Easy Setup CD, an additional feature added to the 100-series line, which enables rapid deployments.
- **Comprehensive management agents:** SNMP agents provide comprehensive management solutions.

Watch the demo of HP ProLiant DL165 G7 Server by the HP product marketing manager



Right-sized solution with robust enhancements

The HP ProLiant DL165 G7 Server provides a right-sized solution with the following improved and robust features:

- **The latest 8- and 12-core AMD Opteron processors:** offer up to two 8- or 12-core AMD Opteron 6100 Series processors.
- **Versatile application solutions:** deliver high performance for 32-bit and 64-bit application solutions.
- **Support for up to 256 GB of DDR3 memory:** offers standard industry-leading DDR3 registered and unbuffered DIMMs that can be expanded to 256 GB to provide increased bandwidth for high uptime and memory-intensive performance. The standard models are configured with 4 GB and 6 GB of memory, and performance models are configured with 12 GB of memory; the model also provides a choice of memory expansion using 2 GB, 4 GB, 8 GB, or 16 GB DIMMs.
- **2 dual-port 1 GB NICs on board:** includes two integrated HP NC362i dual-port 1 GB

NICs that feature load-balancing, failover, and sideband support.

- **4 LFF or 8 SFF drives:** include even more scalable internal bays to meet your storage needs, with up to four 3.5-inch large form factor non-hot plug SATA or hot-plug SATA/SAS or support of up to eight 2.5-inch small form factor hot-plug SAS or SSD hard drive bays.

Save power with energy-efficient leadership solutions

The HP ProLiant DL165 G7 Server offers greater power efficiency and features:

- **High-efficiency power supplies save energy:** The server provides power supplies that increase data center power efficiency. It meets the Climate Savers Computing Initiative 80 PLUS Gold level, and sets the standard for ENERGY STAR® server compliance.¹
- **Right-sized power supplies reclaim lost power:** You can reclaim lost data center power by right-sizing your power supply to meet your exact needs. Now you can run more equipment with your existing infrastructure. Less oversubscription means more opportunity to utilize your allocated power capacity. The HP Power Calculator also helps in selecting the right-sized power supply.
- **Smart sensors compensate for wasted power:** ProLiant G7 systems can tell when you are wasting power and can compensate for it. Smart sensors throughout the server enable intelligent actions that help preserve, protect, and enhance performance. This, in turn, unlocks the lost capacity in your data center and produces energy savings.

Global support

- **Single point of contact with global server support—**HP offers a global server support network to assist you with setup and installation, and to provide reliable post-sales support when you need it, from a single point of contact.
- **Large range of cluster packages—**HP provides a broad choice of preconfigured, factory-integrated, and tested cluster packages that are ideal for midrange technical computing.

HP Financial Services

HP Financial Services provides innovative financing and financial asset management programs to help you cost-effectively acquire, manage, and ultimately retire your HP solutions. For more information about these services, contact your local HP representative, or visit:

www.hp.com/go/hpfinancialservices

¹ www.80plus.com

HP ProLiant DL165 G7 Server



Processor and memory

Processor type	AMD Opteron 6100 Series processors
Available processors	12-core and 8-core processors AMD Opteron Processor Model 6140 (2.6 GHz, 12 MB Level 3 cache, 80 W) AMD Opteron Processor Model 6132 HE (2.2 GHz, 12 MB Level 3 cache, 80 W) AMD Opteron Processor Model 6176 (2.3 GHz, 12 MB Level 3 cache, 80 W) AMD Opteron Processor Model 6128 (2.0 GHz, 12 MB Level 3 cache, 80 W) AMD Opteron Processor Model 6128 HE (2.0 GHz, 12 MB Level 3 cache, 65 W) AMD Opteron Processor Model 6134 (2.3 GHz, 12 MB Level 3 cache, 80 W) AMD Opteron Processor Model 6136 (2.4 GHz, 12 MB Level 3 cache, 80 W) AMD Opteron Processor Model 6164 HE (1.7 GHz, 12 MB Level 3 cache, 65 W) AMD Opteron Processor Model 6172 (2.1 GHz, 12 MB Level 3 cache, 80 W) AMD Opteron Processor Model 6174 (2.2 GHz, 12 MB Level 3 cache, 80 W)
Processor core	8 or 12 core
Cache memory	Up to 12 MB shared L3 cache
Maximum processor speed	2.64 GHz
Memory type	DDR3 RDIMMs and UDIMMs
Standard memory	4, 8, or 16 GB RDIMMs
Maximum memory	256 GB
Memory slots	24 DIMM slots
Advanced memory protection	Advanced ECC Unbuffered ECC
Storage type	SAS, SATA, or SSD drives
Number of hard drives	Up to 8 drives
Removable media bays	Optional DVD-ROM, or DVD-RW/CD-RW
Expansion slot	Up to 2
Network controller	1 GbE NC362i ports per controller
Storage controller	HP Smart Array B110i SATA RAID

Deployment

Form factor	Rack
Rack height	1U
Remote management software	HP ProLiant Onboard Administrator powered by HP Lights-Out 100 and Systems Insight Manager
Drive bays	Up to 4 LFF or 8 SFF
Standard storage connection	Hot-plug 2.5-inch SAS Hot-plug 3.5-inch SAS Hot-plug 3.5-inch SATA Non-hot plug 3.5-inch SATA 2.5-inch SATA-SSD 3.5-inch SATA-SSD
Power supply type	High-efficiency power supply
System fans features	Optional N+1 redundant fans
Warranty—year (s) (parts/labor/onsite)	3/0/0

Ideal environments and applications

The HP ProLiant DL165 G7 Server is well suited for the following environments:

- High-performance computing environments (using compute node for server deployments)
- Corporate scale-out market segments (using web serving and search applications)
- Domain/directory server environments
- SMB and emerging markets

The HP ProLiant DL165 G7 Server is ideal for the following applications:

- Server-based computing
- File and print
- Web 2.0
- HPC-specific applications
- Scientific applications
- Financial applications and models
- Seismic applications
- CAD, DCC, and visualization
- Various grid computing applications
- Various cluster deployments

HP Factory Express

HP Factory Express is designed to help you get a better return from your IT investment by providing customization, integration, and deployment services along with your storage and server purchases.

It provides predictable, trusted, and tested IT solutions tailored to your business needs. We allow you to customize hardware to your exact specifications in the factory—helping to speed up deployment and free up internal resources. Visit:

www.hp.com/go/factoryexpress

Customer technical training

Consider education as an integral part of your strategy to get the best return on investment for your HP storage solution. HP offers a variety of training courses on storage software, networking, archiving, and disk storage systems. Our classes are available in many delivery modalities from traditional instructor-led courses at one of our 80 training centers worldwide to onsite training customized to your needs or online training classes. Visit: www.hp.com/learn/storage

To understand how the HP ProLiant DL165 G7 Server can be easily deployed to virtualize your environment and achieve greater power efficiency, visit: www.hp.com/servers/dl165-g7

HP Services

HP Technology Services—consultants and support experts to solve your most complex infrastructure problems. We help keep your business running, no matter what.

Boost availability and avoid downtime; trust our expertise to optimize your HP solution

Recommended services

3-year, 13x5, same-business-day, 4-hour onsite response coverage

HP Hardware Support Onsite Service provides high-quality remote assistance and predictable onsite support service level for your covered hardware, helping you to improve server and application uptime. Service is available during the coverage window.

Deployment services

HP hardware-only installation service provides for the installation of HP branded servers. It is part of a suite of HP deployment services that are designed to give you the peace of mind knowing your products have been installed by an HP specialist.

Related services

3-year, 24x7, same-business-day, 4-hour onsite response coverage

HP 24x7 Hardware Support Onsite Service delivers round-the-clock, fast, reliable, 4-hour-response onsite support. You get product expertise from the manufacturer for fast and accurate problem resolution with integrated high-quality remote monitoring.

Proactive Select

Proactive Select is a flexible way to purchase HP best-in-class consultancy and services. You can buy Proactive Select service credits when you purchase your hardware, and then use the credits over the next 12 months, or 3–5 years.

3-year, 9x5, next-business-day onsite coverage, excluding holidays

Provides a low-cost hardware support option to uplift hardware warranty coverage. Service level delivers next-business-day support with a coverage window of 9 hours per day, between 8:00 a.m. and 5:00 p.m. local time, Monday through Friday.

Trust the services professionals at HP; for more information, contact an HP-authorized Channel Partner or visit: <http://www.hp.com/hps>

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4AA0-6717ENW, Created March 2010; Updated February 2011, Rev. 1

