



HP ProLiant DL165 G7 Server

Data sheet

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

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, 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?

Now with the new DL165 G7 server, you can get more with its array of improved and robust features:

- Driving virtualization and high performance with:
 - Up to 2 eight- or twelve-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
- Providing flexibility and expandability with:
 - Multiple drive options
- 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
- Maintaining ProLiant confidence with:
 - 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 DL165 G7 server is affordable and easy to own, with features such as:

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

Right-sized solution with robust enhancements

The DL165 G7 server provides a right-sized solution, with the following improved and robust features:

- **The latest 8- and 12-core AMD Opteron™ processors**—offers up to 2 eight- or twelve-core AMD Opteron™ 6100 Series processors.
- **Versatile application solutions**—delivers 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**—includes 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 DL165 G7 server offers greater power efficiency and features:

- **High-efficiency power supplies save energy**—The server provides high-efficiency power supplies that increases data center power efficiency. It improves efficiency in the industry, as evidenced by meeting the Climate Savers Computing Initiative 80 PLUS Gold level, and sets the standard for Energy Star server compliance.
- **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 provides more opportunity to utilize your capacity. The HP Power Calculator also helps in selecting the right-size 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.

No wasted expense and no worries about hitting power limits

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 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	2.4 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	1GbE 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 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—years(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
- Various cluster deployments

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

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

When technology works, business works

The challenge of virtually every technology organization is similar: to develop and maintain an agile and efficient server infrastructure that delivers the service levels your business needs. HP Technology Services offers a comprehensive portfolio of HP Care Pack Services to help design, deploy, manage, and support your technology environment, enabling cost-effective upgrades to standard warranty with easy-to-buy and easy-to-use support packages.

Minimum recommended HP Care Pack offerings

- Three-year, next-business-day response, onsite nine-hour x five-day coverage, and hardware support
- Hardware installation

Enhanced service-level HP Care Pack offerings

- **Support Service:** 3-Year 24x7 24-Hour Call-to-Repair service support coverage
- **Support Service:** 3-Year 24x7 6-Hour Call-to-Repair service support coverage
- **Support Plus:** 24x7 24-Hour Call-to-Repair service support, including OS coverage Operating

Benefit from HP Care Pack Services

- Reduce deployment time and manage ProLiant server solutions smoothly and efficiently
- Increase uptime and server performance to your business
- Detect, diagnose, and repair problems to quickly save time, money, and resources

For more information, visit www.hp.com/services/proliantservices or www.hp.com/go/proliant/carepack

Share with colleagues



Get connected

www.hp.com/go/getconnected

Current HP driver, support, and security alerts delivered directly to your desktop

© Copyright 2010 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

AMD Opteron™ is a trademark of Advanced Micro Devices, Inc.

4AA0-6717ENW, Created March 2010

