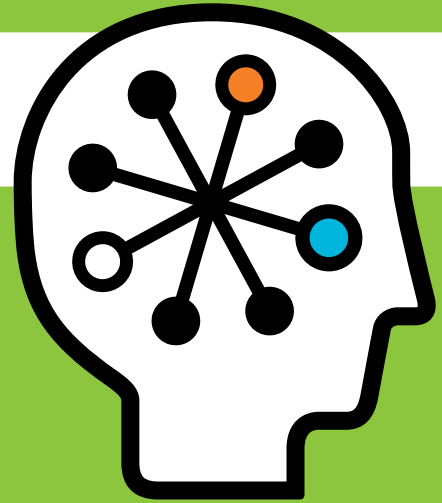# HP ProLiant DL165 G6

Data sheet

Realise greater compute capacity, resource efficiency and flexibility with a modest budget

The investment is low, but the returns are higher

The HP ProLiant range is proven for its thought-leading innovation that can give your business a technology edge. The latest addition to this range, the HP ProLiant DL165 G6 server is a high-performance, low-cost and ultra-dense rack server node that meets the needs of I/O-intensive and Web-serving compute environments looking for cost-conscious server deployments.

HP ProLiant DL165 G6 features the latest Six-Core AMD Opteron™ 2400 series processors, embedded on a cost-optimised 1U platform. Engineered for reliability, quality and durability, the server offers high-efficiency options and essential management capabilities.

Key features and benefits

Higher compute capacity

Greatly increases performance throughput, aided by:

• The higher core count (six-core processors) that packs in more processing power in the same thermal envelope

• Optional 400W redundant hot plug power supply that increases uptime/availability

• 6MB shared L3 cache that enables greater processing power

• ServerWorks chipset (HT2100, HT1000) that enhances memory access and bandwidth, by supporting:

  – AMD Opteron™ 2400 series processors

  – 32GB of PC2-6400 DDR2 memory or 64GB of PC2-5300 DDR2 memory

– One x16 PCI-Express, PCI-X 133MHz or HTX slot

– One low-profile x8 PCI-Express (x4 electrical) slot

- Direct Connect Architecture that enables fast memory and I/O access

- AMD Core Select – the ability to select the number of software visible cores per CPU through BIOS, which enables increased memory bandwidth and cache per core, while reducing software licensing costs by recognising the reduced core count through the CPU-ID and scheduling licenses accordingly

HP services that can further enhance the server functionality include:

- Packaged assessment, tuning, optimisation and education services, which help improve performance

- Mission critical, security, Information Technology Service Management (ITSM) assessment and improvement services, which help increase availability

Resource efficiency

Lowers total cost of ownership by limiting the resources needed to run the server, while enabling better outcomes in the compute environment, with features such as:

- High-efficiency 500W multi-output power supply that improves performance-watt ratio

- AMD Smart Fetch technology that can reduce CPU-level power consumption by up to 21 per cent and cap the average power consumption even as performance is enhanced – by allowing cores to enter a 'halt' state, causing them to draw lesser power during idle times

- AMD-V™ technology that helps increase the efficiency of virtual environments

- Lights-Out 100i Select, advanced upgrades and IPMI 2.0, which help you manage the compute environment with limited resources and save power

- 8 DIMM slots of DDR2 800MHz (up to 64GB with DDR2 667MHz , 8x8GB) and up to 4 large form factor SAS or SATA hard drives that can reduce footprint

HP services that can help improve return on investment include:

- Hardware and Software Support

- Education Services

Greater flexibility

Makes deployment easy even for complex, dynamic environments, having been built on the latest industry-standard modular technology, which includes:

- P212 Smart Array storage controllers (with an optional 256MB BBWC), which offer common form factors, hardware and firmware as well as seamless upgradeability from zero memory to 512 BBWC

- Support for various features such as hot plug redundant power – appropriate for a wide range of customers from corporate data centres to sophisticated small and medium businesses

- Drop-in upgradeability of the processor that enables new remote management capabilities

- Common socket that makes generation-to-generation transitions simpler and more cost-effective

- Mainstream parts and features with stabilised cost structures that enable new computing models such as the cloud

- Gigabit Ethernet adaptors that allow more networking options

- Tool-less quick-deploy rails that speed up deployment

HP Services

When technology works, business works
The challenge of virtually every IT organisation is similar: To develop and maintain an agile and efficient server infrastructure that delivers the service levels your business needs.

HP Technology Services offer a comprehensive range of HP Care Pack services to help design, deploy, manage and support your IT environment, enabling cost-effective upgrades to standard warranty with easy-to-buy and easy-to-use support packages.

Minimum recommended HP Care Pack services
- Three-year, next-business-day response, on-site nine-hour x five-day coverage and hardware support

- Hardware installation

Enhanced service-level Care Pack services
- Three-year, same-business-day four-hour response, on-site 13-hour x five-day coverage and hardware support

- Proactive Select – access to best-in-class technical consultants from HP, with the option to purchase service credits and obtain expertise when needed

Benefit from HP Care Pack services
- Reduce deployment time and manage ProLiant server solutions smoothly and efficiently

- Increase uptime and performance of server availability 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

HP ProLiant DL165 G6

Processor and memory	
Processor type	AMD Opteron™ 2400 Series
Available processors	Six-Core AMD Opteron™ processor model 2427 (2.2 GHz) BTO/CTO Six-Core AMD Opteron™ processor model 2431 (2.4 GHz) CTO Six-Core AMD Opteron™ processor model 2435 (2.6 GHz) BTO/CTO
Processor core	Six
Cache memory	6MB of level-3 cache
Maximum processor speed	2.6GHz
Multi-processor	2
Memory type	PC2-6400 DDR2-800MHz or PC2-5300 DDR2-667MHz
Standard memory	4GB (2x2GB) PC2-6400 DDR2-800MHz
Maximum memory	64GB (8x8GB) PC2-5300 DDR2-667MHz
Memory slots	8
Advanced memory protection	Advanced ECC
Storage type	Hot plug 3.5-inch SAS Hot plug 3.5-inch SATA Non-hot plug 3.5-inch SATA
Number of hard drives	4
Removable media bays	1
Expansion slot	2 total; 1 PCI-E x16 full-length, full-height and 1 PCI-E x4 low-profile
Storage controller	Integrated SATA, optional Smart Array controller for SAS/RAID configurations

Deployment	
Form factor	Rack
Rack Height	1U
Networking	Embedded HP NC7782 dual-port gigabit server adaptor
Remote management	Lights-Out 100i IPMI SMASH CLP
Redundant power supply	Optional
Redundant fans	Standard
Warranty – year(s) (parts/labour/on-site)	3/0/0

HP Financial Services

HP Financial Services provides innovative financing and financial asset management programmes to help you cost-effectively acquire, manage and ultimately retire your HP solutions. For more information, contact your local HP representative or visit **www.hp.com/go/hpfinancialservices**

For more information

To learn more about the HP ProLiant DL165 G6 server, contact your local HP representative or visit **www.hp.com/servers/dl165-g6**

Technology for better business outcomes

To learn more, visit www.hp.com/servers/dl165-g6