

HP Integrity NonStop NS3000AC Server

Data sheet



HP Integrity NonStop servers provide outstanding service levels while extending the framework of the HP Adaptive Enterprise and complex business applications.

The HP Integrity NonStop NS3000AC Server, powered by Intel® Itanium® 2 processors, is the most recent addition to the Integrity NonStop product family. The Integrity NonStop NS3000AC Server is an entry-level, AC power-based server tailored for the telecommunications industry. It is based on the HP NonStop Value Architecture (NSVA) and adds a new option in price/performance levels while maintaining high levels of availability and providing industry-standard data integrity through the use of industry-standard components. As business needs evolve and demand grows, Integrity NonStop NS3000AC Servers support complex application requirements. Systems can be purchased in either two- or four-processor configurations.

HP Integrity NonStop servers are widely recognized as the ideal choice for complex enterprise applications. Their integrated hardware, operating system, and database stack not only provide outstanding scalability but also contribute to a server platform that has the highest built-in reliability, availability, and serviceability (RAS) levels in the industry. In addition, Integrity NonStop servers can take advantage of future Intel Itanium 2 processors through in-box upgrades—further providing investment protection and low cost of ownership.

Powered by the industry-standard Intel Itanium processor, Integrity NonStop servers provide levels of throughput, out-of-the-box availability and manageability, ultimate scalability, and data integrity.

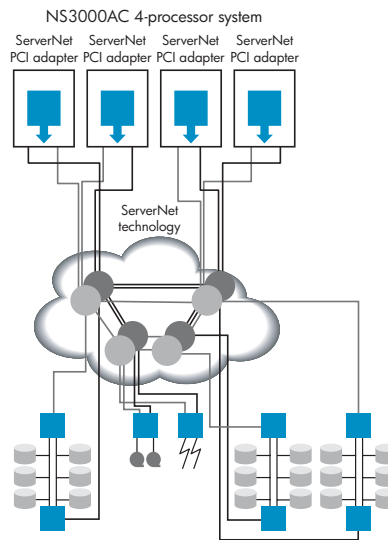
Cost-effective choice

The Integrity NonStop NS3000AC Server, and all NonStop Integrity servers that are based on the NonStop Value Architecture (NSVA), exploit the traditional advantage of NonStop servers with their fully integrated hardware and software, which provide application availability and fault tolerance right out of the box.

The Integrity NonStop NS3000AC Server is based on industry-standard Intel Itanium 2 processor technology, so you have the advantage of the world's most available system—now even more resilient—and benefit from an innovative microprocessor technology that can target multiple demand levels of complex business applications with improved price/performance.

Key features of the Integrity NonStop NS3000AC Server

- Standards-based architecture utilizing the latest Intel Itanium 2 processor technology
- Integrated hardware and software that provides fault tolerance out of the box
- Support for SS7 telecommunications protocol
- Based on the HP NSVA, which delivers the highest built-in RAS levels in the industry
- A flexible platform for heterogeneous environments with a choice of application architectures and management tools
- Ease of upgrade to future generations of Intel Itanium processors
- Designed and built for the highest levels of availability, extending the tradition of providing systems that have average system uptimes measured in years and have no unscheduled downtime
- Complete application compatibility with all other NonStop servers



Support of the Signaling System 7 protocol

For intelligent network (IN) applications, HP provides HP OpenCall Intelligent Network Server software as an interface between the Integrity NonStop NS3000AC Server and Signaling System 7 (SS7) networks. The available protocols offered on the SS7 controllers include

- Channelized T1/E1 low-speed links
- SS7 over ATM (SAAL) on T1/E1 high-speed links (HSLs)
- Unchannelized T1/E1 HSLs (also called Clear Channel)
- SS7 over IP/M3UA (SIGTRAN)

Compliance for MTP, SCCP, TCAP, and ISUP protocol layers meets ITU-T White Book and the ANSI Issue 3 standards. Support for China and Japan TTC SS7 standards is also provided.

Focused innovation

The Integrity NonStop NS3000AC Server provides an additional option for meeting your real-time business needs, delivering real-time business interaction with outstanding levels of service.

To help you respond to changing business demands, HP delivers a leading integrated virtual application environment. Data can be pooled and shared across an enterprise to enhance information utilization. The HP NonStop mission-critical operating environment provides high flexibility and allows you to transparently distribute applications across nodes, spreading risk geographically.

The figure above provides an architectural view of the HP NonStop Value Architecture of Integrity NonStop NS3000AC Servers.

The NSVA provides you with all the benefits of the NonStop software suite, including software fault tolerance and fault isolation, dynamic workload balancing, linear scalability, Application Virtualization, and cluster programming transparency. The Integrity NonStop NS3000AC Server can be configured with two or four processors, executing on industry-standard servers.



Manageability is designed into Integrity NonStop servers, not added later. Advanced manageability features are delivered right out of the box, even for your most demanding workloads. You can manage large applications with a single system image. Availability features are built in and automatically configured, so there is no need for complex reconfiguring.

With Integrity NonStop servers, you benefit from an architecture that has value-added innovation and uses industry-standard servers and NonStop software fault tolerance.

Key benefits of Integrity NonStop servers

- Support real-time business interactions with outstanding service levels
- Are the leading integrated virtual application environment, allowing you to make resource enhancements easily
- Offer the lowest TCO for complex mission-critical applications
- Provide a solid foundation that leverages and capitalizes on change
- Are a flexible platform tailored for dynamic business environments
- Offer one-stop accountability and a complete portfolio that provides a superior solution
- Provide flexible financing options and services enhanced for continuous application availability
- Provide unmatched expertise through HP Services
- Include a complete range of support products ranging from e-support through mission-critical support, as well as education services
- Protect investments in previous generations of NonStop server-based applications
- Are a trusted platform that includes world-class partnerships and meets your complete solution requirements



World-class experience

With the Integrity NonStop NS3000AC Server, HP continues to deliver world-class systems that provide a collaborative approach to designing and building an agile infrastructure. HP offers much more than high-availability servers, delivering on the promise of the agile enterprise by designing complete real-time solutions.

When you add up the scorecard, Integrity NonStop servers are a platform you can trust that will meet your complete solution requirements. HP partners with outstanding ISVs to provide business-critical solutions in many vertical industries and delivers a complete portfolio of enterprise solutions from leading HP partners, extending our joint capability, and, ultimately, enhancing your value.

HP Services

HP's end-to-end service solutions, built on the Solution Lifecycle (SLC) process, offer consistent quality and service levels for the Integrity NonStop servers. The SLC process helps to achieve rapid productivity and maximum availability by examining specific needs at each of five distinct phases (Plan, Design, Integrate, Install, and Manage) and then designing solutions based upon those needs. We offer three different service solutions designed to meet customer needs:

HP Critical Service Solution

- Startup and Deployment Services—build the solution to your exact specifications, complete the installation, and make the solution application ready
 - Assessment and Design Services—define requirements and translate your business and technical needs into a solution that melds the necessary hardware and software
 - Deployment Management Services—up-front project coordination from HP
 - Education Services—training curricula relevant to needs and existing expertise based upon a needs analysis
- HP Critical Service—comprehensive, ongoing support designed to help minimize the business impact of downtime on mission-critical applications

HP Proactive Service Solution

- Startup and Deployment Services
- HP Proactive 24 Service—integrated hardware and software support, including proactive and reactive services to improve stability and availability throughout your IT environment

HP Foundation Service Solution

- Startup and Deployment Services
- HP Support Plus 24 Service—integrated hardware and software support services designed specifically for your technology

For more information: www.hp.com/services/nonstop

Technical specifications

Processor	2–4 processors per node Intel Itanium 2 processors
RAM	Minimum: 4 GB Maximum: 8 GB
Standard features	Redundant power supplies Redundant fans Dual power distribution units Dual power cords
Enclosure	42U commercial cabinet with front door

Environmental specifications

Weight	Cabinet maximum payload: 907.2 kg (2,000 lb) Cabinet weight (empty): 137.44 kg (303 lb) Shipping pallet and package: 40.8 kg (90 lb)
Dimensions (H x D x W)	Cabinet: 199.9 x 111.76 x 60.96 cm (78.7 x 44 x 24 in) Palletized: 219.0 x 132.08 x 81.28 cm (86.22 x 52.0 x 32.0 in)
Floor-space requirements	Front (appearance side): 91.4 cm (36 in) minimum; 130 cm (51.2 in) recommended Rear (service side): 91.4 cm (36 in) minimum; 130 cm (51.2 in) recommended Aisles: 182.9 cm (72 in) minimum; 260 cm (102.4 in) recommended
Temperature	Operating: 5°C to 35°C (41°F to 95°F) Nonoperating: –40°C to 70°C (–40°F to 158°F)
Humidity	Operating: 15% to 80%, noncondensing Nonoperating: 10% to 80%, noncondensing
Power dissipation (power on both lines)	1.6 GHz processor, 4 GB memory: 1,058 Btu/hr (310 W) 1.6 GHz processor, 8 GB memory: 1,090 Btu/hr (319 W) 2 processor 4 GB server (1 cabinet): 10,284 Btu/hr (2,144 W) 4 processor 4 GB server (1 cabinet): 13,526 Btu/hr (2,764 W)
Altitude	Maximum operating: 3,048 m (10,000 ft) Maximum nonoperating: 4,500 m (15,000 ft) Temperature derating factor: 1°C per 305 m above 1,800 m (1.8°F per 1,000 ft above 5,900 ft)
AC input voltage	200–240 V, 50–60 Hz
Electromagnetic interference	Complies with FCC rules and regulations, Part 15, as a Class A Digital Device; manufacturer's declaration to EN 55022 Level A
Power line LF emissions	EN 61000-3-2 (Europe); EN 61000-3-3 (Europe)
Regulatory	Certifications are for individual modules
Safety	CUL certified; compliant with EN 60950
Acoustic noise	70dBA (maximum operation)
System cabling	Designed to accommodate top-down cabling using either cable grid work or cable trays installed on tops of cabinets; design will also accommodate underfloor cabling system if cabinets are installed on a conventional computer-room raised floor

Ordering information

Integrity NonStop NS3000AC Server base configuration bundles

Part number	Description
M3002M4N	HP Integrity NonStop NS3000AC Server 2-processor bundle: 4 GB memory
M3004M4N	HP Integrity NonStop NS3000AC Server 4-processor bundle: 4 GB memory
M3002M8N	HP Integrity NonStop NS3000AC Server 2-processor bundle: 8 GB memory
M3004M8N	HP Integrity NonStop NS3000AC Server 4-processor bundle: 8 GB memory

Integrity NonStop NS3000AC Server upgrades

Part number	Description
M3000P2M4	HP Integrity NonStop NS3000AC Server processor add-on bundle (2 processors, 4 GB memory per processor, plus ServerNet fabric connectivity)
M3000P2M8	HP Integrity NonStop NS3000AC Server processor add-on bundle (2 processors, 8 GB memory per processor, plus ServerNet fabric connectivity)



For more information

For more information about the HP Integrity NonStop NS3000AC Server, visit:

www.hp.com/go/integritynonstop/3000AC

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

www.hp.com/go/hpfinancialservices

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To learn more, visit www.hp.com/go/integritynonstop/3000AC

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