

ThinkSystem DB620S FC SAN Switch

Ultradense, highly scalable,
midrange storage switch



Ultradense, Highly Scalable

The Lenovo ThinkSystem DB620S Fibre Channel SAN Switch is built for maximum flexibility, scalability and ease of use. Organizations can scale from 24 to 64 ports with 48 SFP+ and four Q-Flex ports, all in an efficient 1U package. In addition, a simplified deployment process and a point-and-click user interface make the ThinkSystem DB620S easy to use.

With the ThinkSystem DB620S, organizations gain the best of both worlds: high-performance access to industry-leading storage technology and “pay-as-you-grow” scalability to support an evolving storage environment.

Maximize Performance

Faced with unpredictable virtualized workloads and growing flash storage environments, organizations need to ensure that the network does not become the bottleneck. The ThinkSystem DB620S delivers increased performance for growing and dynamic workloads through a combination of market-leading throughput and low latency across 32Gbps and 128Gbps links.

With Generation 6 ASIC technology providing up to 566 million frames switched per second, the ThinkSystem DB620S switch shatters application performance barriers with up to 100 million IOPS to meet the demands of flash-based storage workloads.

At the same time, port-to-port latency is minimized to 900 nanoseconds through the use of cut-through switching at 32Gbps. With 48 SFP+ ports and four Q-Flex ports, each providing four 32Gbps connections, the ThinkSystem DB620S can scale up to 64 device ports for an aggregate throughput of 2Tbps.

Moreover, administrators can achieve optimal bandwidth utilization, high availability and load balancing by combining up to eight ISLs in a 256Gbps framed-based trunk. This can be achieved through eight individual 32Gbps SFP+ ports or two 4x 32Gbps QSFP ports. Moreover, exchange-based Dynamic Path Selection (DPS) optimizes fabric-wide performance and load balancing by automatically routing data to the most efficient, available path in the fabric. This augments ISL Trunking to provide more effective load balancing in certain configurations.

Simplify Management

Designed for maximum flexibility and value, this enterprise-class switch offers “pay-as-you-grow” scalability with ports on demand (PoD) capability. Organizations can quickly, easily and cost-effectively scale from 24 to 64 ports with a combination of 12-port SFP+ PoD and 16-port Q-Flex PoD. Each of the 48 SFP+ ports supports 4, 8, 10, 16 and 32Gbps FC speeds, while each of the four Q-Flex ports is capable of supporting 4x 32Gbps, or 128Gbps FC speeds. In addition, Q-Flex ports are designed to support QSFP optics to deliver 4-to-1 cable consolidation (combining four cables into one cable per port).

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Gain Control and Insight

The ThinkSystem DB620S, with Generation 6 FC technology and integrated network sensors, helps organizations achieve greater control and insight to quickly identify root cause at the storage tier, reducing time to resolution so critical service level agreements (SLAs) can be met. The I/O Insight capability nonintrusively gathers I/O statistics, which can be used within an intuitive, policy-based monitoring and alerting suite to configure thresholds and alarms. In-band device latency and IOPS monitoring detects degraded storage performance, allowing administrators to proactively optimize performance and availability to ensure maximum performance.

Specifications

Models	<ul style="list-style-type: none"> • Entry 16Gbps: 24 ports with SWL FC transceivers • Entry 32Gbps: 24 ports with SWL FC Transceivers • Enterprise: 48 ports with 32Gbps SWL FC transceivers, plus Enterprise Software Bundle • Flexible: 24 ports with no transceivers
Fibre Channel Ports	Minimum of 24 ports and maximum of 64 ports configuration. Both models reach 64 ports through one 4-port QSFP PoD, providing 16-port increments through a Q-Flex license. Also supports: E_Ports, F_Ports, D_Ports, EX_Ports.
Port on Demand Options	<ul style="list-style-type: none"> • 12-Port Software License (12 transceivers either 16 or 32Gbps) • 12-Port Software License (no transceivers) • QSFP+ Port Software License V2 (4 transceivers 128Gbps) • QSFP+ Port Software License (no transceivers)
Performance	Fibre Channel: 4.25Gbps line speed, full duplex; 8.5Gbps line speed, full duplex; 10.53Gbps line speed, full duplex; 14.025Gbps line speed, full duplex; 28.05Gbps, full duplex; 112.2Gbps, full duplex; auto-sensing of 4, 8, 16, 32Gbps port speeds and capable of supporting 128Gbps speeds; 10Gbps optionally programmable to fixed port speed
ISL Trunking*	Frame-based trunking with up to eight 32Gbps SFP+ ports per ISL trunk or up to two 128Gbps QSFP ports per ISL trunk. Exchange-based load balancing across ISLs with DPS included in Brocade Fabric OS
Aggregate Bandwidth	2Tbps
Maximum Fabric Latency	Latency for locally switched ports is 900 ns; compression is 1 us per node
Media Types	16/32Gbps SWL SFP Transceivers come standard with each switch or with ports on demand software license packs. Optional transceivers are also supported for longer distances. Optional hot-pluggable QSFP+ options are also available for the 128Gbps Q-Flex ports
Rack-Mount Rail Kits	Fixed rail kit is included standard, midmount rack kit (Part # 01KN770) –optional
Software Offerings	<ul style="list-style-type: none"> • Enterprise Software Bundle includes Trunking, Fabric Vision, Extended Fabric: included standard or optional depending on model • Optional: Mainframe Enterprise Bundle Software (Trunking, Fabric Vision, Extended Fabric and Control Unit Port) • Optional: Integrated Routing Software
Dimensions/Weight	Height: 4.39cm (1.73 in.); Width: 44cm (17.32 in.); Depth: 35.56cm (14.0 in.)/Weight: 8.53kg (18.80 lbs) fully loaded
Power Supply	Dual, hot-swappable redundant power supplies standard with integrated cooling fans

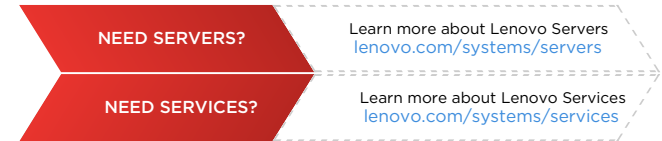
For technical details, refer to the [Lenovo ThinkSystem DB620S Product Guide](#)

About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US\$45 billion Fortune 500 company and a global technology leader in driving Intelligent Transformation. Lenovo's data center solutions (ThinkSystem, ThinkAgile) are creating the capacity and computing power that are changing business and society.

For More Information

To learn more about the Lenovo ThinkSystem DB620S Fibre Channel SAN Switch, contact your Lenovo representative or Business Partner, or visit lenovo.com/systems/servers then select Storage, Storage Area Network and then Fibre Channel Switches.



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