

# Features and specifications

Product features, technical specifications

Lenovo

# Specifications

Feature	7DHN-CTO1WW	7DHN-CTO2WW
Air flow	Non-port-side air intake, port-side exhaust	
Fibre Channel ports	<ul style="list-style-type: none"><li>• 24 active ports</li><li>• Eight active port licenses with 32 Gbps SWL SFP+</li></ul>	<ul style="list-style-type: none"><li>• 24 active ports</li><li>• Eight active port licenses with 64 Gbps SWL SFP+</li></ul>
Scalability	Full-fabric architecture with a maximum of 239 switches	
Performance	<ul style="list-style-type: none"><li>• 8.5 Gbps line speed, full duplex</li><li>• 14.025 Gbps line speed, full duplex</li><li>• 28.05 Gbps line speed, full duplex</li><li>• 57.8 Gbps line speed, full duplex</li><li>• Auto-sensing of 8, 16, 32, and 64 G port speeds</li></ul>	
Aggregate bandwidth	1.536 Tbps	
Port types	<ul style="list-style-type: none"><li>• F_Port, E_Port, M_Port, D_Port (ClearLink® Diagnostic Port) on 24 SFP+ ports</li><li>• Brocade Access Gateway mode: F_Port and NPIV-enabled N_Port</li></ul>	
Power	Base switch includes a single, fixed 105 W power supply with four integrated system cooling fans	
Software license	Enterprise Software Bundle (Trunking, Fabric Vision, Extended Fabrics)	

**Note:** For detailed DB710S specifications, refer to [Lenovo Press](#).

# Supported transceivers

Part number	Feature code	Description
<b>64 Gb FC SFP+ transceivers</b>		
4M27A65425	BF6J	Brocade Secure 64-Gb SWL SFP+ Transceiver
4M27A65426	BF6K	Brocade Secure 64-Gb SWL SFP+ Transceiver 8-pack
4M27A65433*	BQQG	Brocade Secure 64Gb LWL SFP+ Transceiver (10 km)
4M27A65434*	BQQH	Brocade Secure 64Gb LWL SFP+ Transceiver (10 km) 8-pack
<b>32 Gb FC SFP+ transceivers</b>		
4M27A65416	BF69	Brocade Secure 32-Gb SWL SFP+ Transceiver
4M27A65417	BF6A	Brocade Secure 32-Gb SWL SFP+ Transceiver 8-pack
4M27A65418	BF6B	Brocade Secure 32-Gb LWL SFP+ Transceiver (10 km)
4M27A65419	BF6C	Brocade Secure 32-Gb LWL SFP+ Transceiver (10 km) 8-pack
4M27A65431‡	BQQE	Brocade Secure 32Gb ELWL SFP+ V2 Transceiver (25 km)

**Note:** \* Limited to two 64 G at 10 km per switch

‡ Limited to two 32 G at 25 km per switch. This transceiver is also limited to 16 G and 32 G connection speeds

# **DB710S enterprise bundle (included in the base license)**

- **Fabric Vision**

- Enables Fabric Vision features such as the Monitoring and Alerting Policy Suite (MAPS) and Flow Vision – it is equivalent to a combination of the previous Advanced Performance Monitor and Fabric Watch licenses

- **Trunking**

- Enables Brocade ISL Trunking – provides the ability to aggregate multiple physical links into one logical link for enhanced network performance and fault tolerance  
This includes Access Gateway ISL Trunking

- **Extended Fabrics**

- Provides greater than 10 km of switched fabric connectivity at full bandwidth over long distances (up to the maximum supported by the platform)

# ThinkSystem Gen 7 Fibre Channel switch comparison

Switch	Lenovo DB710S	Lenovo DB720S	Lenovo DB730S
Total bandwidth	1.536 Tbps	4.096 Tbps	8.192 Tbps
Total line-rate ports	8 ports at 64 Gbps	24 to 64 ports at 64 Gbps	48 to 128 ports at 64 Gbps
Maximum port speed	64 Gbps	64 Gbps	64 Gbps
Power	105 W, single fixed power supplies	349 W, dual hot-swappable power supplies	969 W, dual hot-swappable power supplies
Frame-based ISL Trunking	Up to 512 Gbps per ISL trunk	Up to 512 Gbps per ISL trunk	Up to 512 Gbps per ISL trunk
ClearLink diagnostic port	Included	Included	Included
10 Gbps native Fibre Channel	Yes	Yes	Yes
Forward error correction (FEC)	Included	Included	Included
I/O and VM insight	Included	Included	Included
Integrated routing	Yes	Yes	Yes
Virtual Fabrics	Included	Included	Included
Access Gateway	Supported	Supported	Not available
FICON support	Yes	Yes	No

# Fibre Channel port names

Port	Full Name	Port Function
E_Ports	Expansion port	Used to cascade Fibre Channel switches together and is the connection between two FC switches When E_ports between two switches form a link, that link is referred to as an inter-switch link (ISL)
F_Ports	Fabric port	Switch port used to connect the Fibre Channel fabric to an N_port on a node
D_Ports	Diagnostic port	Used to diagnose optics and cables
EX_Ports	External port	Provides the connection between an FC router and an FC switch On the side of the switch, it looks like a normal E_port, but on the side of the router, it is an EX_port
N_Ports	Node port	A port on the node (such as a host or storage device)
M_Ports	Mirror port	Used to configure a switch port to mirror the traffic between a specific source and destination port – this is only supported between F_Ports This is a useful way to troubleshoot a problem port without bringing down the host and destination links to insert an inline analyzer