Cisco MDS 9132T 32-Gbps 32-Port Fibre Channel Switch

What is the Cisco® MDS 9132T Multilayer Fabric Switch?
The MDS 9132T is a 32-Gbps Fibre Channel switch. It is built on our next-generation 32-Gbps line-rate application-specific integrated circuit (ASIC) with built-in telemetry capability, that powers the currently shipping 32-Gbps Fibre Channel module for the 32-Gbps Cisco MDS 9700 Series Multilayer Directors. It has a semi modular architecture with an expansion module that supports both entry-level and enterprise-class SAN deployments using 4-, 8-, 16-, and 32-Gbps Fibre Channel server connectivity.

What are the top three use cases for this switch?
The top three use cases are:

• Low-latency, line-rate, cost-efficient, 4-, 8-, 16-, and 32-Gbps connectivity for small SANs that require fewer ports at the top of the rack (ToR): Customers can avoid the costs of higher port configurations due to the unique semi modular design.

• Frame-by-frame visibility into every Fibre Channel workload: Visibility is built into the ASIC, which also has integrated telemetry capabilities. Customers seeking deep visibility into workload performance can have all the key performance metrics available at line rate from the SAN without having to invest in additional hardware.

• Director-class capabilities for newer workloads: Modular high availability, enterprise-class performance, and multiprotocol platform support for newer workloads such as Non-Volatile Memory Express (NVMe) over Fibre Channel are extended to the fixed ToR switch.

Why does this switch have a port expansion module?
The port expansion module introduces a semi modular architecture, similar to our modular platforms. The expansion module provides cost optimization for customers planning to deploy up to 16 ports at 32 Gbps using a more affordable base switch and lower power consumption. For enterprise-class customers, the module allows them to achieve exceptional high availability by stitching port-channel member links across the base switch and expansion module.

What are the top value propositions for this switch?
These are the top value propositions:

• 4-, 8-, 16-, and 32-Gbps connectivity in a cost-optimized semi modular form

• Built-in SAN telemetry capability

• Enterprise-class features comparable to those for director-class switches
**Does the expansion module have any trade-offs?**

The expansion module uses the same robust design that Cisco MDS 9000 Family switches have used over the years and adds new cost-optimization and high-availability features. It is built on the same 100 percent bandwidth, non-blocking, consistent, and deterministic packet forwarding architecture that is available on our director-class switches. In addition, it uses an advanced integrated arbitration logic that guarantees the same low latency as fixed switches with the added benefits of a semi modular design.

**How many different configurations can I build with this switch?**

The switch can be ordered in four different configurations: 8 ports, 16 ports, 24 ports, and 32 ports. The entry-level configuration of 8 ports can be expanded in the following manner:

- Expand to 16 ports using an 8-port activation license: Thereafter, customers can choose to upgrade to 32 ports using the 16-port expansion module.
- Expand to 24 ports using a 16-port expansion module: Customers can choose to upgrade to 32 ports in the future using the 8-port activation license.

**How many airflow variants are supported on this switch?**

This switch supports both port-side intake and port-side exhaust airflow patterns. For more details, please refer to the [hardware configuration guide](https://www.cisco.com/c/en/us/support/docs/switches/lan-switching/11610-x67-1010961.html).

**How many power supplies and fans ship with the switch in a standard configuration?**

The base 8-port model and 8-port optics bundled options ship with one power supply unit and two fan trays as standard. Customers who need power grid redundancy and redundant fan trays can optionally configure an additional power supply and up to two additional fans. For Enterprise customers who prefer redundancy, the 24-port optics bundled options ship with two power supply units and four fan trays as standard.

**Where can I get additional information?**