

IS5025

36-port Non-blocking Unmanaged 40Gb/s InfiniBand Switch System

The IS5025 switch system provide the highest-performing fabric solutions in a 1RU form factor by delivering 2.88Tb/s of non-blocking bandwidth to High-Performance Computing and Enterprise Data Centers, with 100ns port-to-port latency.

Built with Mellanox's 4th generation InfiniScale® InfiniBand switch device, the IS5025 provides up to 40Gb/s full bidirectional bandwidth per port. This stand-alone switch is an ideal choice for top-of-rack leaf connectivity or for building small to medium sized clusters. The IS5025 is designed to carry converged LAN and SAN traffic with the combination of assured bandwidth and granular Quality of Service (QoS).

Unmanaged switches are plug and play out of the box. All switches come with the latest FW burned on the Flash and EEPROM. Update of FW on unmanaged switches is done in-band only.

Sustained Network Performance

The IS5025 enable efficient computing with features such as static routing, adaptive routing, and advanced congestion management. These features ensure the maximum effective fabric bandwidth by eliminating congestion hot spots. Whether used for parallel computation or as a converged fabric, the IS5000 family of switches provides the industry's best traffic-carrying capacity.

World-Class Design

The IS5025 is an elegant top of the rack design, that are designed for performance, serviceability, energy savings and high-availability. The design is optimized for fitting into industry-standard racks and also for scale-out computing solutions from industry leaders. The IS5025 supports reversible airflow making the design fit into data centers with different thermal designs. Redundant and hot swappable power supplies and fans provide high availability for both High-Performance Computing and Enterprise Data Center applications. Status LEDs for fans and power supply units are placed on both sides of the system for easy status identification. Quick start guide, rack mount kit, AC power cord and RJ45 to DB9 console cables are provided as part of the standard system providing new levels of out of the box experience and performance.



HIGHLIGHTS

BENEFITS

- Industry-leading, switch platform in performance, power, and density
- Designed for energy and cost savings
- Ultra low latency
- Granular QoS for Cluster, LAN and SAN traffic
- Maximizes performance by removing fabric congestions

KEY FEATURES

- 36 QDR (40Gb/s) ports in a 1U switch
- 2.88Tb/s switching capacity
- Quality of Service enforcement
- Redundant power supplies and fan drawers

HARDWARE

INFINIBAND SWITCH

- 36 QSFP non-blocking ports
- Aggregate data throughput up to 2.88 Tb/s
- Port-to-port latency < 100ns
- IBTA 1.21 compliant
- 9 virtual lanes: 8 data + 1

MANAGEMENT PORTS

- 1°C (RJ45)

CONNECTORS AND CABLING

- QSFP connectors
- Passive/Active copper or fiber cables
- Fiber media adapters

INDICATORS

- Per port status LED: Link, Activity
- System status LEDs:
System, fans, power supplies

POWER SUPPLY

- Dual redundant slots
- Hot plug operation
- Input range: 100 - 240VAC
- Frequency: 50-60Hz, single phase AC

FANS

- Front-to-rear or rear-to-front cooling
(fan unit ordering option)
- Hot-swappable fan unit

COMPLIANCE

SAFETY

- US/Canada: cTUVus
- EU: IEC60950
- International: CB

EMC (EMISSIONS)

- USA: FCC, Class Canada: ICES, Class A
- EU: EN55022, Class A
- EU: EN55024, Class A
- EU: EN61000-3-2, Class A
- EU: EN61000-3-3, Class A
- Japan: VCCI, Class A

ENVIRONMENTAL

- EU: IEC 60068-2-64: Random Vibration
- EU: IEC 60068-2-29: Shocks, Type I / II
- EU: IEC 60068-2-32: Fall Test

ACCOUSTIC

- ISO 7779
- ETS 300 753

OPERATING CONDITIONS

- Operating 0°C to 45°C,
Non Operating -40°C to 70°C
- Humidity: Operating 5% to 95%,
- Altitude: Operating -60 to 2000m,
- Noise: 55dB - Noise reduction by
controlling fan speed

OTHERS

- RoHS-5 compliant
- Rack-mountable, 1U
- 1-year warranty

Ordering Part Number	Description
MIS5025D-1SFC	InfiniScale® IV DDR InfiniBand Switch, 36 QSFP ports, 1 power supply, Unmanaged, PSU side to connector side airflow, (standard depth) with rack rails
MIS5025D-1SRC	InfiniScale® IV DDR InfiniBand Switch, 36 QSFP ports, 1 power supply, Unmanaged, Connector side to PSU side airflow, (standard depth) with rack rails
MIS5025Q-1SFC	InfiniScale® IV QDR InfiniBand Switch, 36 QSFP, 1 Power Supply, PSU side to connector side airflow, Standard depth, Rail Kit, RoHS5
MIS5025Q-1SRC	InfiniScale® IV QDR InfiniBand Switch, 36 QSFP, 1 Power Supply, Connector side to PSU side airflow, Standard depth, Rail Kit, RoHS5

Also available in short depth form factor. Consult your Mellanox Sales Representative for further details.



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