

Cisco MGX-XM60 Switching Module

Product Overview

The Cisco® MGX® 8000 Series Multiservice Switches are a scalable family of multiservice switches, scaling from 1.2 Gbps to 180 Gbps redundant switching capacity and from DS0 to OC-192/STM-64 interface capacity. This scalability provides exceptional savings and efficiency for network operations and services growth. The Cisco MGX 8000 family includes the Cisco MGX 8850, MGX 8850/B, MGX 8830/B and MGX 8950 Multiservice Switches.

The Cisco MGX-XM60 Switching Module is the switch fabric that powers the Cisco MGX 8950 Advanced ATM Multiservice Switch. The Cisco MGX-XM60 provides 60 Gbps of full-duplex nonblocking switching capacity. Each Cisco MGX 8950 can be configured with up to four Cisco XM-60s to provide 240 Gbps of switching capacity for the system.

The Cisco MGX-XM60 Switching Module meets service providers' demand for carrier-class availability by offering hot-standby, load-sharing redundancy. (Refer to Figure 1.)

Figure 1. Cisco MGX-XM60



Technical Specifications

The Cisco MGX-XM60 Switching Module has the following primary features:

- Single-height card
- 60-Gbps nonblocking crosspoint switch fabric
- Dynamic sharing of capacity across multiple Cisco XM-60s, allowing for N + 1 redundancy
- Four installed in each Cisco MGX 8950 for 240-Gbps total capacity, 180-Gbps redundant capacity
- Hot card insertion/removal
- Complete separation from control processor, allowing data forwarding in the event of control card failure

Table 1 provides product specifications.

Table 1. Product Specifications

Description	Specification
Chassis compatibility	MGX 8950
Software compatibility	MGX S/W Releases supporting MGX-XM60: <ul style="list-style-type: none"> • MGX RIs 4.0.15 and above
Network management	<ul style="list-style-type: none"> • Managed by Cisco WAN Manager Software suite • Based on Simple Network Management Protocol (SNMP)
Power	<ul style="list-style-type: none"> • Input power required: –48 VDC • Power consumption: 61 W
Physical dimensions	H x D: 7.25 x 16.5 in. (18.41 x 41.91 cm)
Weight	3.5 lb
Environmental conditions	<ul style="list-style-type: none"> • Storage Temperature: –40°C to 70°C (–40°F to 158°F) • Operating Temperature: <ul style="list-style-type: none"> ◦ Normal: 5°C to 40°C (41°F to 104°F) ◦ Short term: –5°C to 50°C (23°F to 122°F) • Relative Humidity: <ul style="list-style-type: none"> ◦ Normal: 5% to 85% ◦ Short-term: 5% to 90% but not to exceed 0.024 kg water/kg of dry air <p>Short-term refers to a period of not more than 96 consecutive hours and a total of not more than 15 days in 1 year. (This refers to a total of 360 hours in any given year, but no more than 15 occurrences during that 1 year period.)</p>

Approvals and Compliance

Table 2 lists compliance and agency approval details.

Table 2. Compliance and Agency Approvals

Compliance Type	Description
Safety standards	<ul style="list-style-type: none"> • UL/CSA/IEC/EN 60950-1 • IEC/EN 60825 Laser Safety • ACA TS001 • AS/NZS 60950 • FDA-Code of Federal Regulations Laser Safety
EMI	<ul style="list-style-type: none"> • FCC Class A • ICES 003 Class A • AS/NZS 3548 Class A • CISPR 22 (EN55022) Class A • VCCI Class A • BSMI Class A • IEC/EN 61000-3-2: Power Line Harmonics • IEC/EN 61000-3-3: Voltage Fluctuations and Flicker
Immunity (basic standards)	<ul style="list-style-type: none"> • IEC/EN-61000-4-2: Electrostatic Discharge Immunity (8kV Contact, 15kV Air) • IEC/EN-61000-4-3: Radiated Immunity (10V/m) • IEC/EN-61000-4-4: Electrical Fast Transient Immunity (2kV AC Power, 1kV DC Power) • IEC/EN-61000-4-5: Surge AC Port (2kV CM, 2kV DM) • IEC/EN-61000-4-5: Signal Ports (1kV) • IEC/EN-61000-4-5: Surge DC Port (1kV) • IEC/EN-61000-4-6: Immunity to Conducted Disturbances (10Vrms) • IEC/EN-61000-4-8: Power Frequency Magnetic Field Immunity (30A/m) • IEC/EN-61000-4-11: Voltage DIPS, Short Interruptions, and Voltage Variations
Network Equipment Building Systems (NEBS)	<p>This product is designed to meet the following requirements (qualification in progress):</p> <ul style="list-style-type: none"> • SR-3580: NEBS Criteria Levels (Level 3) • GR-1089-CORE: NEBS EMC and Safety • GR-63-CORE: NEBS Physical Protection

Compliance Type	Description
Telcordia CLEI	<ul style="list-style-type: none"> • GR-485-CORE – CLEI coding • GR-383-CORE – CLEI code product label • GR-209-CORE – PCN Process

Ordering Information

To place an order, visit the [Cisco Ordering Homepage](#). Table 3 gives ordering information.

Table 3. Ordering Information

Product Part Number	Product Name
MGX-XM60	60G Switch Fabric Card

For More Information

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