

# Cisco MGX 8230 Edge Concentrator

The Cisco MGX™ 8230 Advanced ATM Multiservice Edge Concentrator provides the most cost-effective gateway for narrowband services in space and power limited situations. The MGX 8230 acts as a stand alone gateway or as an edge concentrator for the Cisco BPX 8600, Cisco MGX 8850 with PXM-45, and IGX 8400 series multiservice switches. The MGX 8230 offers a full range of narrowband service interfaces and a switching capacity up to 1.2 Gbps.

## Key Features

- Full featured narrowband ATM for managed data, voice, and video services
- Route Processor Module (RPM) 1:N Redundancy
- Comprehensive range of Frame Relay, ATM, Circuit Emulation, Voice and IP services
- Full redundancy for maximum service flexibility
- Compact form factor

## Services

- Frame Relay
- ATM
- Frame Relay-to-ATM network interworking
- Frame Relay-to-ATM service interworking
- Circuit emulation
- Voice

- IP VPNs
- Virtual Switch Architecture for Multiple Control Plane Usage

## Cisco MGX 8230 System Specifications

### Mechanical Configuration

- 14 single-height (7 double-height) function module slots (single-height slots can be in-service converted to double-height slots by removal of midrail dividers)
- 2 double-height slots reserved for redundant processor switch modules
- 8 single-height (4 double-height) slots for service modules
- 2 single-height slots reserved for Service Resource Module (SRM)

### Dimensions

- Height: 12.25 in. (excluding optional AC power tray) 14.00 in. (including optional AC power tray)
- Width: 17.72 in. (excluding rack-mounting brackets)
- Depth: 23.5 in. (excluding cable management)
- Rack-mountable in 19 and 23 in. EIA/REMA and European Telecommunications Standards Institute (ETSI) racks





### **Switching Fabric**

- 1.2-Gbps shared-memory fabric (processor switching module)

### **Network Interfaces**

- OC-12c/STM-4
- OC-3c/STM-1
- T3
- E3
- Channelized T3 (down to DS0)
- n x T1/E1
- T1/E1
- Channelized T1 (DS0 and DS0A)
- Channelized E1
- High-Speed Serial Interface (HSSI), X.21, V.35
- Ethernet
- Fast Ethernet

Optional

### **Optional Redundancy**

All core components can be configured for redundancy including the control processor, switching fabric, critical backplane signals, power supplies, and power modules.

### **Node Synchronization**

- Internal Stratum-4E clocking
- Internal Stratum-3 clocking (optional)
- BITS clocking
- External T1/E1 building integration timing supply (BITS) source
- External source received inband over the network
- Synchronization to software-programmable primary and secondary sources, with automatic switchover



## **Network Management**

Cisco WAN Manager (CWM) is a Telecommunications Management Network standards-based network and element management system that enables operations, administration, and maintenance (OA&M) of the Cisco MGX 8230 Multiservice Gateway.

- Robust and scalable architecture meets the demand of service providers to provision and deliver a complete portfolio of differentiated services
- Web-based graphical user interface
- SNMP and Open API for seamless integration with OSS and third-party management systems
- Full FCAPS (fault, configuration, accounting, performance, and security) features
- Integrates with Cisco Info Center and Cisco Provisioning Center for multivendor, multitechnology end-to-end VPN service assurance and activation
- Collection of usage data from network connections and interfaces for innovative usage-based billing to customers
- Available on major UNIX platforms (Solaris, HP-UX, AIX) and integrate with HP OpenView

## **Professional Services**

Cisco offers a full range of professional service options for the Cisco MGX 8230 Advanced ATM Multiservice Edge Concentrator, including network design and audit services, project management, equipment installation, and turnkey network implementation.

## **Electrical Specifications**

### **AC Power**

- Input voltage range: 100–120 and 200–240 VAC
- Maximum input current: 12A at 100 VAC, 7A at 200 VAC
- Maximum power: 1400W
- Frequency: 50–60 Hz

### **DC Power**

- Input voltage range: 42–56 VDC
- Maximum input current: 30A
- Maximum power: 1200W
- Efficiency: 97 percent

## Electromagnetic Compatibility

- EN55022 (CISPR22)
- CFR 47 Part 15 (FCC)
- AS/NZS 3548 (Australia/New Zealand)
- ETS 300 386-2 (EN300 386-2)
- EN 61000-4-2 (IEC-61000-4-2)
- EN 61000-4-3 (IEC-61000-4-3)
- EN 61000-4-4 (IEC-61000-4-4)
- EN 61000-4-5 (IEC-61000-4-5)

## Electrical Standards

### Safety

- UL 1950, CSA C22.2 No. 950, EN60950, AS/NZS 3260, IEC 60950
- IEC 60825-1, EN60825-1

## Standards Compliance

### Telecom

- FCC 47 CFR Part 68
- Industry Canada CS-03
- ITU-T G.703
- ANSI T1.102
- ANSI T1.107
- ANSI T1.105
- ITU-T G.957
- ITU G-783 Annex-A



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