

Telco Systems

XM-8102



Cost-Effective High-Performance Mobile Backhaul Aggregation

The **XM-8102**, part of the X-Series, is designed for **cost-effective mobile backhaul aggregation** and Ethernet services. It delivers robust performance with **2×100G/40G ports** and **24×10G/1G/100M ports**, ensuring high-capacity, reliable network operations for service providers.

With **Layer 2/3 VPN support**, **MPLS**, and **comprehensive OAM tools**, the XM-8102 is ideal for critical mobile backhaul applications and enterprise connectivity.

Highlights

Cost-Effective Design	Provides high performance at an affordable price, supporting 2×100G ports and 24×10G/1G ports for efficient network aggregation.
Compact and Efficient	1 RU form factor with a switching capacity of 640 Gbps, making it perfect for space-constrained deployments.
Reliable and Secure	Features LAG, MPLS redundancy, and VRRP for high availability and seamless failover, ensuring uninterrupted services.
Advanced Synchronization	Supports SyncE for precise clock synchronization, enabling reliable performance for critical applications.



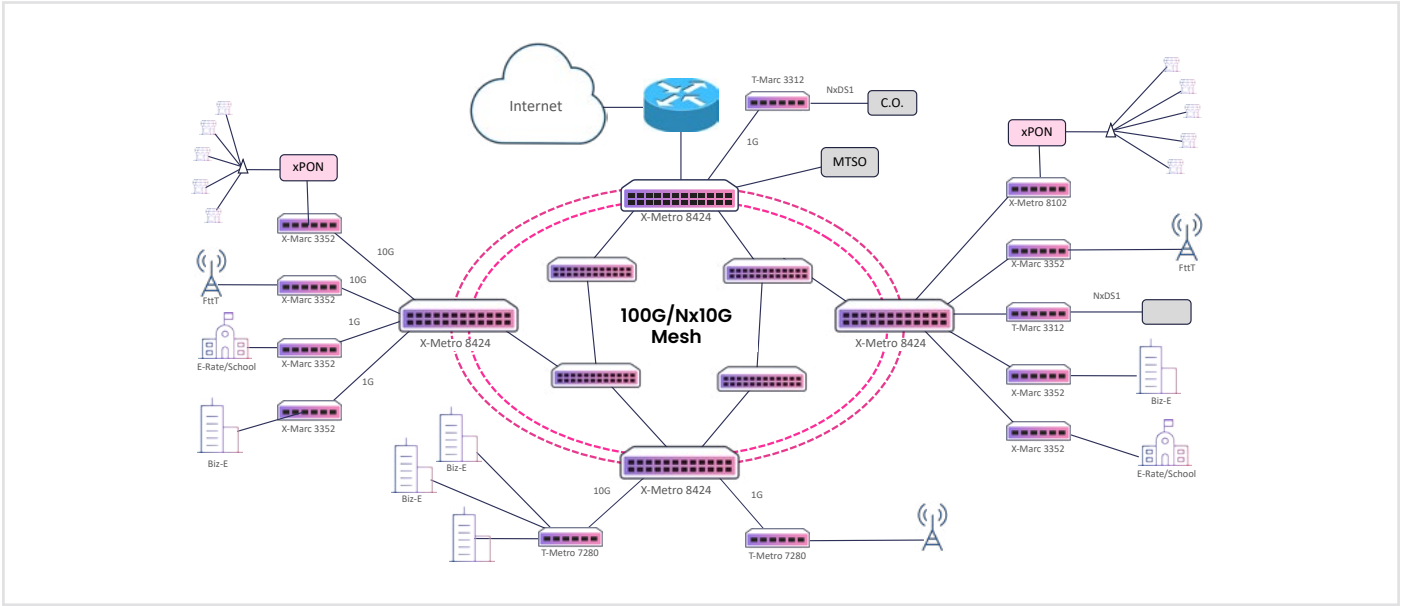
Technical Specifications

Interfaces	2 × 100G/40G QSFP28/QSFP+ & 24 × 10G/1G/100M SFP+
Switching Capacity	640 Gbps
Latency	Sub-1 microsecond switching latency
Management	CLI, SNMP, REST API
QoS Features	8 hardware queues per port, traffic shaping
Security	802.1x, ACLs
Redundancy	Dual redundant power supplies, failover
Power Supply	2 hot-swappable AC/DC power supplies provide 1+1 redundancy AC: 220V, 100~240VAC DC: -48V, -36~-72V
Enclosure Type	1U, 19" rack-mountable
Dimensions (WxDxH)	44 cm x 36 cm x 4.4 cm 17.32" x 14.17" x 1.73"
Weight	4.47kg
Operating Temperature	-5°C to +55°C
Compliance	MEF 2.0, CE 2.0, RoHS, CE, FCC

Features and Capabilities

Ethernet Services	- Supports MAC address table (32k), Jumbo frame support (up to 12288 Bytes), and 4094 VLANs - MEF services (E-LINE, E-LAN)
IP Services	- IPv4/v6 static routing, RIP v1/v2, OSPF v2/v3, ISIS v4/v6, BGP4/4+, SRv6, DHCP server/client/relay - VRF Lite for IPv4/v6
MPLS Services	MPLS L2VPN (VPWS, VPLS, H-VPLS), L3VPN, MPLS TE, RSVP-TE, 6PE/6vPE
QoS Capabilities	- Classification based on MAC, IP, port, VLAN, CoS - Traffic shaping per queue/port, WRED, SP/WRR queue scheduling
Reliability	IEEE 802.1ax Link Aggregation (LACP), ITU-T G.8031/G.8032 ERPS, VRRP, MPLS PW redundancy
OAM & SLA Assurance	Hardware-based IEEE 802.1ag/ITU-T Y.1731, performance monitoring (LM, DM), BFD, RFC2544, Y.1564
Synchronization	SyncE only for high-precision timing

Applications



Mobile Backhaul

The XM-8102 supports **MPLS L2VPN/L3VPN services**, ensuring reliable mobile backhaul aggregation with precise synchronization for **4G/5G networks**.

Enterprise Connectivity

Offers secure and robust **Ethernet and VPN services**, ensuring high availability and performance for enterprise network environments.

High-Speed Broadband

Ideal for service providers delivering high-speed broadband services, including **IPTV, VoIP**, and other high-bandwidth applications..

Ordering Information

Part Number	Description
XM-8102-AC-x *	1U, 2x100G/40G QSFP28/QSFP+, 24x10G/1G SFP+/SFP, CE/MPLS, single swappable AC power supply
XM-8102-DC	1U, 2x100G/40G QSFP28/QSFP+, 24x10G/1G SFP+/SFP, CE/MPLS, single swappable DC power supply
XM-8102-2AC-x *	1U, 2x100G/40G QSFP28/QSFP+, 24x10G/1G SFP+/SFP, CE/MPLS, dual hot-swappable AC power supply
XM-8102-2DC	1U, 2x100G/40G QSFP28/QSFP+, 24x10G/1G SFP+/SFP, CE/MPLS, dual hot-swappable DC power supply
XM-8102-AC/DC	1U, 2x100G/40G QSFP28/QSFP+, 24x10G/1G SFP+/SFP, CE/MPLS, one hot-swappable AC power supply and one hot-swappable DC power supply

* **XM-8102-AC-x**, where x indicates the power cord type (e.g., NA, EUR).

Experience the Power of the Telco Systems X-Series:

Invest in the **XM-8102** to boost your network's efficiency and scalability.

Contact Telco Systems at sales@telco.com to learn how the XM-8102 can transform your network.