



NVIDIA MetroX-3 XC Long-Haul InfiniBand

High Data Throughput, InfiniBand RDMA
Connectivity Over DWDM Infrastructure

Extending InfiniBand Performance to Remote Infrastructures and the Edge

The NVIDIA® MetroX®-3 XC long-haul system seamlessly and securely extends the reach of the NVIDIA Quantum InfiniBand networking platform. It provides high data throughput, In-Network Computing, and native remote direct-memory access (RDMA) communications over long distances and dense wavelength-division multiplexing (DWDM) infrastructures.

MetroX-3 XC can extend the reach of InfiniBand up to 40 kilometers, enabling connectivity between remote data centers, from edge infrastructures to data centers, or between data centers and remote storage infrastructures for high availability and disaster recovery.

Optimized for High Density and Scalability

MetroX-3 XC guarantees high-performance, high-volume data sharing. Users can easily migrate application jobs from one InfiniBand-based data center to another or combine the compute power of multiple remote data centers together for higher overall performance and scalability.

MetroX-3 XC is designed for today's business continuity needs and simplified disaster recovery. In addition to enabling data center expansion, data mirroring, and campus connectivity, select models of MetroX-3 XC systems that support long-haul data encryption will be available in the future. MetroX-3 XC comes as an appliance with four ports: Two provide connectivity to the local InfiniBand network while the other two provide long-haul connectivity over a DWDM infrastructure.

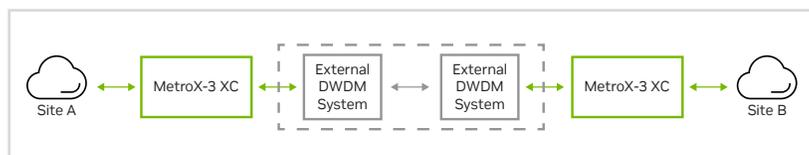


Figure 1. The MetroX-3 XC system aggregates the data sent from an InfiniBand data center (Site A); it then sends it over a single, external, consolidated fabric to an InfiniBand storage network (Site B).

Specifications

Performance	400Gb/s bidirectional throughput 2x 100Gb/s long-distance ports
Connectors	4x QSFP112 for data 2x QSFP112 for InfiniBand in-band management
Power supply	80 PLUS Titanium 1+1 redundant power supply > 1100W at ~100-240V
Cooling	Front-to-rear
Management ports	> 4x RJ4: 2x 1GbE Base-T ports and 2x 10GbE Base-T ports > 1x RJ45: iDRAC > 1x micro-USB: iDRAC direct micro port
Software	NVDA-OS-XC
System dimensions	Width: 17.2in (438mm) Height: 3.4in (88mm) Depth: 30.0in (760mm)
Rack mount	1U 19-inch rack mounts
EMC	CE, FCC, VCCI, ICES, RCM
Operating conditions	Temperature > Operating: 0°–35°C > Non-operating: -20°–60°C Humidity > Operating: 10–85% at 40°C (non-condensing) > Non-operating: 10–95% at 40°C (non-condensing)
Safety	RoHS, CS, cTUVus, CE, CU

The MetroX-3 XC system comes with built-in chassis management (NVDA OS XC) software, including administrative tools to manage firmware, power supplies, fans, ports, and other system interfaces. The MetroX-3 XC software's GUI-based web management provides full alarm, event history, activities log, and performance monitoring for all optical modules.

Unified Fabric Management

MetroX-3 XC systems can be managed by NVIDIA Unified Fabric Manager (UFM®) software. UFM enables data center operators to efficiently provision, monitor, and operate the state-of-the-art InfiniBand data center fabric.

Key Product Features

Height	MTQ8400-HS2R
Long-haul ports	2
Long-haul port speed	2x 100Gb/s
Local ports	2
Local InfiniBand port speed	2x 100Gb/s
Total bidirectional throughput	400Gb/s
Maximum distance*	40km

* Can be extended depending on the reach of DWDM

Part Numbers and Descriptions

OPNs	Description
MTQ8400-HS2R	NVIDIA MetroX-3 XC long-haul 100Gb/s bandwidth, 1U system, ready for DWDM systems, 2x long-haul QSFP112 ports, secured boot, 2x power supplies (AC), standard depth, rail kit

Ready to Get Started?

To learn more about the NVIDIA InfiniBand Long Haul Systems, visit:
nvidia.com/en-us/networking/infiniband-long-haul-systems/