

MSM10G-U

10Gbps Multirate, Multiprotocol Converter/Transponder



- Managed Universal Fiber Converter/Extender/Transponders
- The module is a R2 conversion device and protocol independent
- : Selective Fault Propagation for enhanced resiliency
- Local Loop-Back per port testing capability
- CWDM/DWDM applications
- Data Rate supported: 1Gbps to 10Gbps
- Extensive diagnostics

The MSM10G-U is the highest capacity module of the MSMxxxU series of protocol transparent converter/transponder for the **MetroStar** System. It provides the network designer with a flexible and cost effective device for MM/SM to SM conversion and network extension.

With data rates scaling up to 10Gbps, it becomes a cornerstone of FibroLAN WDM systems, serving as a CWDM/DWDM transponder. The module covers distances of up to 80Km (for DWDM 10GE) and supports data rate of 1Gbps to 10Gbps.

Universal Fiber Converter/ Transponders

The module is equipped with two Small Form-factor Pluggable slots supporting SFP, SFP+ optical transceivers for ease of deployment, maintenance and logistics.

Module's deployment is easy and does not require any settings or measurements.

The MSM10G-U is a 2R device, protocol independent for the specified transmission rates and efficiently supports Gigabit Ethernet, 10G Ethernet, 1/2/4/8/10G FC, OC48/STM16 and OC192/STM64. The module can be used as a multirate transponder in WDM applications.

All **MetroStar** modules are hot swappable and equipped with two self-clinching screws for easy and safe module insertion and removal.

Key Features

- Data Rate: 1Gbps to 10Gbps
- Network Extension: up to 120Km for GBE
- Universal protocol transparent device, 2R conversion
- Multirate & multiprotocol WDM transponder
- Resilience (selective Fault Propagation)
- Local Firmware upgrade
- Local Loopback per port
- Status and Diagnostic LEDs
- SFP management: inventory and monitoring
- Managed module

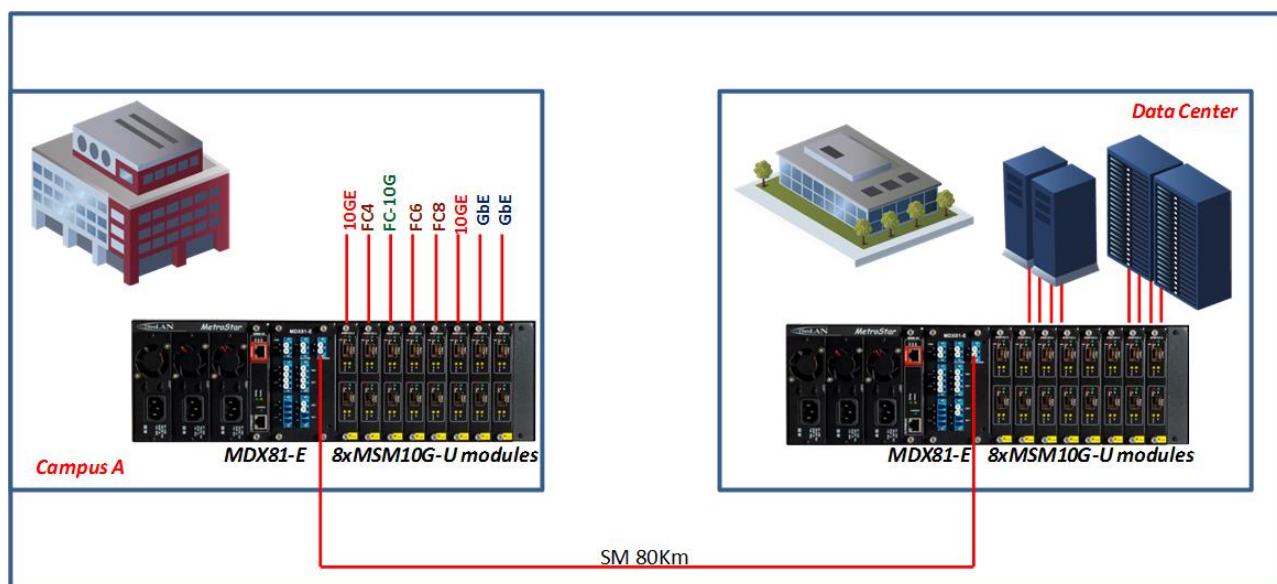
General Specifications

- **Interfaces:**
2 slots for optical SFP or SFP+modules
- **Diagnostic LEDs:**
Power On/Off
Signal Detect per port
TX-Low per port
FP per direction (P1>P2, P2>P1)
Local Loopback per port
- **DIP switches (on board)**
FP (Fault Propagation) x 2
LB (Loopback) x 2
Enable/Disable SFP port x2
- **Conversion Method:**
Multi Rate, Protocol Transparent, 2R
- **Standard Compliance:**
Gigabit Ethernet, 10GE, 1/2/4/8/10G FC, OC48/STM16, OC192/STM64
- **Management:**
SNMP managed via **MetroStar** (CLI,Telnet,SSH) or Web management
- Management overrides DIP Switches settings

Management Functions

- Module status
- SFP module status (signal detect, mode, description)
- Loopback per port enable/disable
- Fault propagation (P1>P2, P2>P1) enable/disable
- Enable /Disable SFP port (P1and P2)
- SFP inventory (model, SN, range, WL, etc.)
- SFP diagnostics (per SFF-8472)
- Management implemented via the ***MetroStar*** management module (MMM-04)
- Web Management

Typical Application



Ordering Information

Part #	Model	Description
2555	MSM10G-U	Multi-rate, Universal (protocol transparent) extender/transponder <i>MetroStar</i> module, 1000Mbps to 10Gbps, 2 SFP/SFP+ slots

Related Product

SFP+ Transceivers		
Part #	Model	Description
3880	SFPP-85	SFP+ transceiver, multi-rate (1-10Gbps), MM, Duplex LC, 850nm, 300m
3881	SFPP-13-10	SFP+ transceiver, multi-rate (1-10Gbps), SM, Duplex LC, 1310nm/DFB, 10km, 8dB power budget
3882	SFPP-15-40	SFP+ transceiver, multi-rate (1-10Gbps), SM, Duplex LC, 1550nm/EML, 40km, 16dB power bu
3883	SFPP-15-80	SFP+ transceiver, multi-rate (1-10Gbps), SM, Duplex LC, 1550nm/EML/APD, 80km, 23dB power budget
3884	SFPP-S12-15	SFP+ transceiver, multi-rate (1-10Gbps), SM, single fiber, Simplex LC, Tx:1270nm/Rx:1330nm/DFB, 15km, 9dB power budget
3885	SFPP-S13-15	SFP+ transceiver, multi-rate (1-10Gbps), SM, single fiber, Simplex LC, Tx:1330nm/Rx:1270nm/DFB, 15km, 9dB power budget
3873	SFPP-S12-20	SFP+ transceiver, multi-rate (1-10Gbps), SM, single fiber, Simplex LC,Tx:1270nm/Rx:1330nm/DFB, 20km, 12dB power budget
3874	SFPP-S13-20	SFP+ transceiver, multi-rate (1-10Gbps), SM, single fiber, Simplex LC,Tx:1330nm/Rx:1270nm/DFB, 20km, 12dB power budget
3886	SFPP-S12-40	SFP+ transceiver, multi-rate (1-10Gbps), SM, single fiber, Simplex LC, Tx:1270nm/Rx:1330nm/DFB, 40km, 16dB power budget
3887	SFPP-S13-40	SFP+ transceiver, multi-rate (1-10Gbps), SM, single fiber, Simplex LC, Tx:1330nm/Rx:1270nm/DFB, 40km, 16dB power budget
3875	SFPP-S12-60	SFP+ transceiver, multi-rate (1-10Gbps), SM, single fiber, Simplex LC,Tx:1270nm/Rx:1330nm/DFB, 60km, 21dB power budget
3876	SFPP-S13-60	SFP+ transceiver, multi-rate (1-10Gbps), SM, single fiber, Simplex LC,Tx:1330nm/Rx:1270nm/DFB, 60km, 21dB power budget
3888-XX	SFPP-C8-XX	SFP+ transceiver, multi-rate (1-10Gbps), CWDM, Duplex LC, 1xx0nm (1270-1330nm)/EML, 8km, 10dB power budget
3889-XX	SFPP-C10-XX	SFP+ transceiver, multi-rate (1-10Gbps), CWDM, Duplex LC, 1xx0nm (1470-1610nm)/EML, 10km, 10dB power budget
3890-XX	SFPP-C30-XX	SFP+ transceiver, multi-rate (1-10Gbps), CWDM, Duplex LC, 1xx0nm (1470-1610nm)/EML, 30km, 14dB power budget
3891-XX	SFPP-C60-XX	SFP+ transceiver, multi-rate (1-10Gbps), CWDM, Duplex LC, 1xx0nm (1470-1610nm)/EML/APD, 60km, 23dB power budget
3892-XX	SFPP-D-40-xx	SFP+ transceiver, multi-rate (1-10Gbps), DWDM, Duplex LC, C-band/ITU channel xx/100GHz/EML, 40km, 14dB power budget
3893-XX	SFPP-D-80-xx	SFP+ transceiver, multi-rate (1-10Gbps), DWDM, Duplex LC, C-band/ITU channel xx/100GHz/EML, 80km, 24dB power budget

FibroLAN Ltd. (International)
*Hacarmel 2, Yoqneam-Ilit, 20692,
 Israel*
 Tel: +972 (4) 959 1717
 Fax: +972 (4) 959 1718
info@fibrolan.com

FibroLAN Inc. (North America)
*350 W Passaic St., Rochelle Park, NJ
 07662*
 Toll Free: (800) 406 6088
 Tel: (201) 843 1626
 Fax: (201) 843 1628
us-info@fibrolan.com

www.fibrolan.com

Fibrolan CEE GmbH. (Central/East Europe)
 Prof.Dr.Stephan Koren Straße 10
 A-2700 Wiener Neustadt Austria
 Tel: +43 2622 90 990 0
 Fax: +43 2622 90 990 99
office@fibrolan.at