



4 Channel Multi-Mode Fiber Industrial class Junction Box MSU-M4I

Product Description:

MSU-M4I is an 12-Core MPO to 4 x Double LC Multi-Mode Fiber Optical Junction Box. Unit has a 12-Core MPO/MTP Male connector and the unit splits MPO/MTP signal into 4x Double LC ports. Typical use case for MSU-M4I Optical Junction Box is to split 100G/40G 850nm Multi-Mode signal into 4x25G or 4x10G, for example using [40G-QSFP-150](#) or [100G-QSFP28-100](#) Multi-Mode optical modules in the main site and [25G-SFP28-100I](#) or [10G-SFP-300I](#) on the far end site. MSU-M4I unit is for harsh outdoor environments supporting IP65 water, dust resistance, -40 to 85C industrial temperature, telecom pole or wall installation options and comes with ODVA MPO/MTP and Double LC connectors for easy fiber connection. Unit is small in size, light in weight, is simple to install, requires zero configuration or maintenance and is fully passive - no power supply or cooling required. MSU-M4I added Insertion Loss to the connection is ≤ 0.8 dB.

Typical use case for MSU-M4I Optical Junction Box is 5G/4G Mobile Fronthaul Network Baseband Unit (BBU) and Remote Radio Head (RRH) inter-connection (CPRI/eCPRI protocol), Enterprise Network 100G/40G to 4x25G/10G Ethernet links or Datacenter Fiber Channel connections.

Key Highlights:

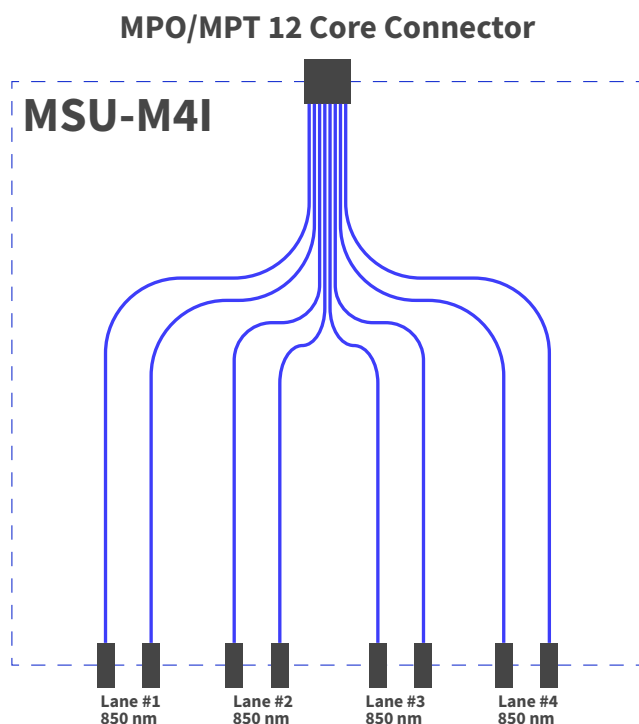
- Split 100G/40G to 4x25G or 4x10G
- Multi-Mode Fiber (850nm)
- Outdoor ODVA MPO/MTP to 4xDual LC connectors
- A side connect to 100G-QSFP28-100 or 40G-QSFP-150
- B side connect to 25G-SFP28-100I or 10G-SFP-300I
- IP65 Water, Dust resistant
- Telecom Pole or Wall installation
- Small size and light weight
- Low Insertion Loss: ≤ 0.8 dB
- Industrial Temperature: -45°C – +85°C
- Fully passive (No Power Supply or Cooling)
- Zero configuration or maintenance
- Protocol & Data Rate neutral
- MTBF: 100+ Years
- 5 Year Warranty



Product Specification:

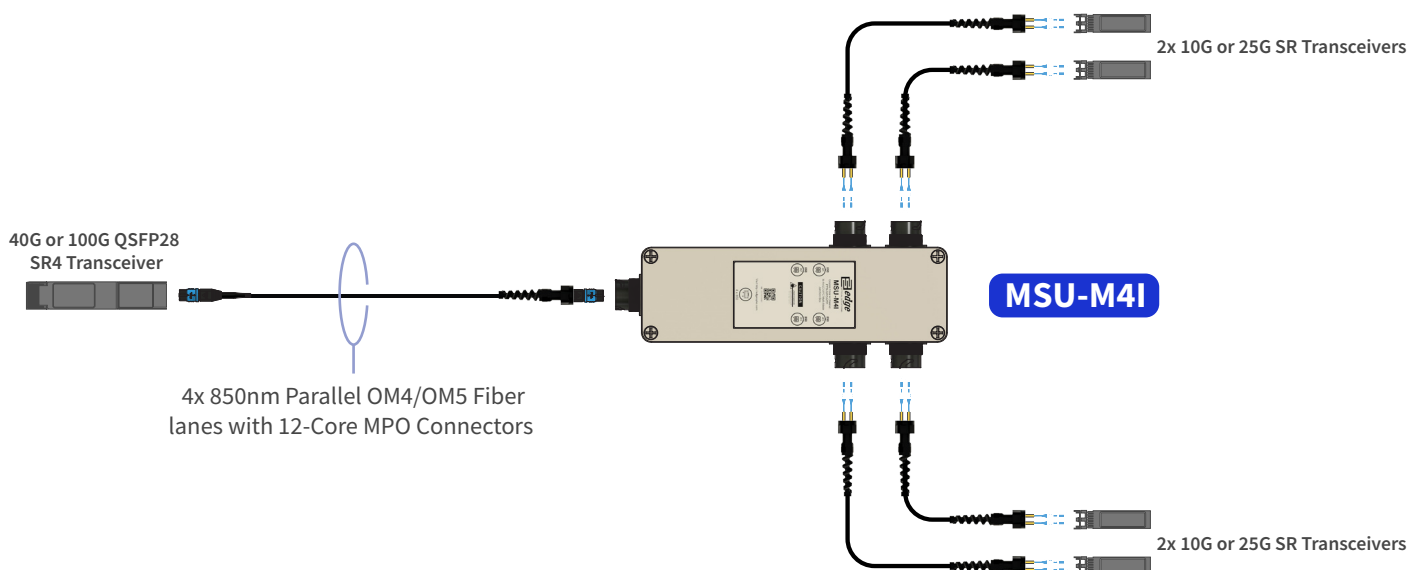
Parameter		Unit	Value
Product Type:			Multi-Mode Fiber Junction Box
Number of Data Channels:			4
Transport Media:			Double Fiber Multi Mode Fiber (MMF)
Operating Wavelength:	center	nm	850 nm
Insertion Loss <small>Passband:</small>	Max	dB	≤ 0.8 dB
Connectors:			4 x ODVA Connectors with LC Adapters for use with ODVA Connectors and TIA/EIA 604-10 compliant LC UPC Connectors and ODVA Connector with MPO/MTP-12 Male
Operating Temperature:		(°C)	-40~+85 (°C)
Storage Temperature:		(°C)	-40~+85 (°C)
Dimensions (W x H x D):		mm	77 x 250 x 72
Protection Class:		%	IP65 - Water, Dust resistant
Compliance:			ITU-T G.694.2, CE, RoHS, IP65

Functional Diagram:

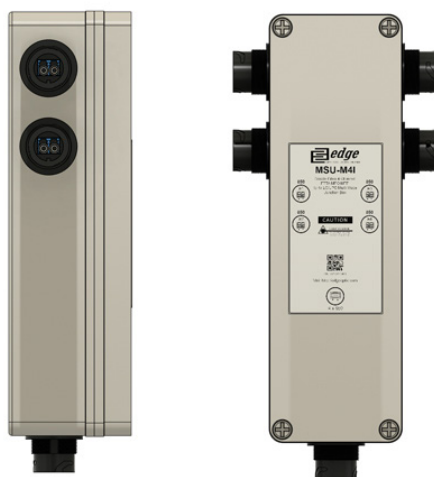


Network Diagram:

MSU-M4I is part of our Passive xWDM filter product line, which is designed with primary focus on wireless fronthaul applications - optimized to carry 25G services, however it is compatible with legacy 10G services as well. In order to create 4 x 25G services capacity over 12-core Multi-mode MTP/MPO cable, it's possible to use 100G or 40G 850nm (SR4) transceiver at one end and MSU-M4I Outdoor industrial Junction box at other end:



Front Panel:

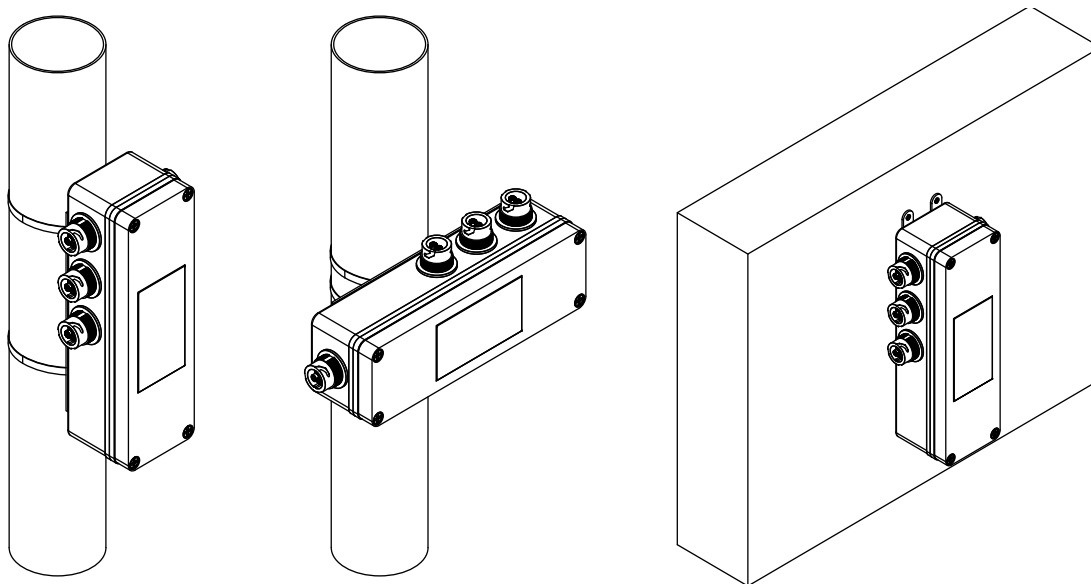


4 x 850: MTP/MPO-12 Male connector interfacing 4 x 850nm 40G or 100G SR4 Transceiver

850: Double LC for Interfacing 850nm SR Transceivers



Installation:



MSU-M4I is available for ordering with included pole mount kit, which allows easy install on any pole with diameter over 50mm vertically (recommended method) or horizontally. If necessary - MSU-M4I is also available with included wall installation kit.

Ordering Information:

PN	Description
DLMD-4I-P	4 Channel Multi-Mode Fiber Industrial class Junction Box with ODVA MPO-12 Male connector and 4 x ODVA LC/UPC Connectors for use with 850nm, IL below 0.8 dB, with Pole Mount kit
DLMD-4I-W	4 Channel Multi-Mode Fiber Industrial class Junction Box with ODVA MPO-12 Male connector and 4 x ODVA LC/UPC Connectors for use with 850nm, IL below 0.8 dB, with Wall Mount kit

Warranty:

EDGE Optic's provides a limited warranty for **sixty (60)** months from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship.

