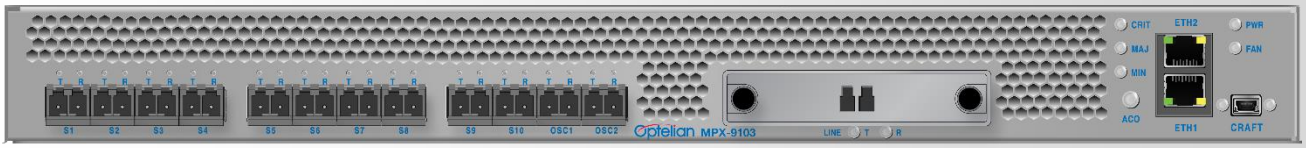
DATA SHEET

CircuitFLEX

MPX-9103

Extended Temperature 100G OTN Muxponder Platform

Optelian's MPX-9103 is a multi-protocol, Layer 1 aggregation and transport solution for extended temperature range applications. With its ability to accommodate all types of SFP+ client optics and CFP uplink optics, it is an ideal solution for high-bandwidth 4G/5G in outdoor environments. It provides full client- and line-side performance monitoring for service demarcation, fault localization, and SLA assurance.



Features

- Compact 1RU platform
- Fully-integrated cooling and management
- Extended temperature range

Line Interface

- 100G OTU4
- CFP-SR10, CFP-LR4, CFP-DCO
- GFEC, HGFEC, SDFEC
- Performance monitoring

Client Interfaces

- 10 SFP+ ports
- Gray, CWDM, DWDM, Tunable
- 10 GbE, OTU2(e), 8G/10G FC, OC-192
- Performance monitoring

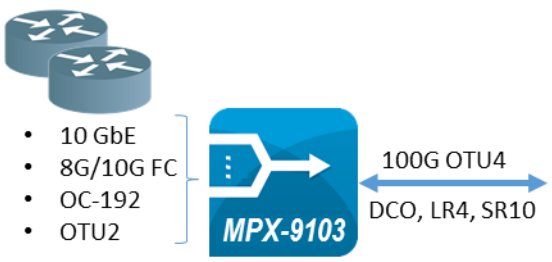
Compliance

- GR-3108-CORE, Class 2
- GR-63-CORE
- GR-1089-CORE

Overview

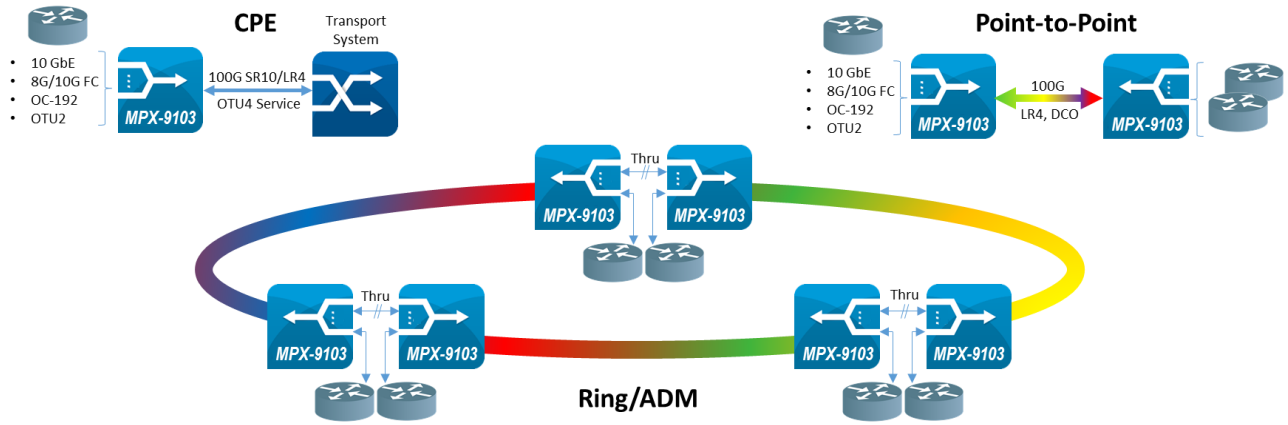
The MPX-9103 provides efficient multi-protocol muxponding of 10G services onto a 100G OTU4 uplink. It uses advanced thermal design, making it the first 100G product of its kind to deliver extended life and high reliability in extended temperature range applications. With support for a 100G SR10, 100G LR4, and coherent DCO CFP uplink with different FEC modes, it offers much flexibility in reach, spectral efficiency and interoperability.

Any combination of 10G client protocols can be muxponded onto a 100G uplink, with full performance monitoring and service demarcation for the uplink and client-side optics. Unlike Layer 2 aggregation platforms, the MPX-9103 uses Layer 1 ODU multiplexing, providing 100% deterministic full bandwidth and low latency for each client connection.



Applications

The MPX-9103 can be used as a Layer 1 CPE aggregator and NID, providing a standardized OTU4 service handoff to any third-party transport network. It can also be used in a bookended configuration for point-to-point transport over dark fiber, or an Optelian DWDM line or ROADM system. The MPX-9103 can also be used in pairs to realize protected east-west ADM functionality, including the resiliency of complete east-west separation for powered equipment. In an ADM application, pass-through circuits can be OTU4 encapsulated, regardless of the ingress client protocol, providing additional fault isolation and resiliency.



Specifications

Parameter	Value
Platform	Stand-alone 1RU
Dimensions (H x W x D)	4.4 x 44 x 27.5 cm (1.72 x 17.3 x 11 in.)
Client interfaces	10 SFP+: 850/1310/1550 nm, CWDM, DWDM, Tunable
Client protocols	10 GbE, OTU2(e), 8G/10G FC, OC-192
Uplink interface	CFP-DCO/LR4/SR10
Uplink protocol	OTU4
FEC modes	GFEC, HGFEC, SDFEC
Performance monitoring	RMON, OC-192, OTU2, OTU4, pre-FEC

Parameter	Value
Management	ONM, OSM, CLI/SSH, SNMP, Syslog
Management interface	RJ-45 Ethernet (two), USB, In-band GCC
Airflow	Front-to-back
Integrated fan unit	Field replaceable, six fans
Power supply	-48V DC, dual A/B
Power consumption	180 Watts maximum
Operating temperature	-40°C to 65°C (-40°F to 149°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)

Ordering Information

Model Number	Part Number	Description
MPX-9103	1017-5003	MPX-9103, ETR 100G OTN Muxponder