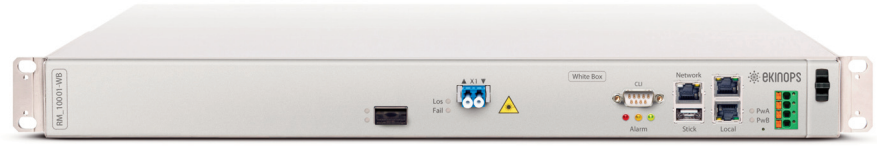


EKINOPS RM 10001-WB

100G Ultra-Long Haul Transponder

DATA SHEET 12|2018

KEY FEATURES & BENEFITS

- Transports 1x100GbE services over 100G coherent tunable optical line
- Provides ultra-long haul capability, up to 6000 km
- Uses 65% less power
- Pluggable QSFP28 client optics with performance monitoring
- Support for up to 80 100G channels
- Small form factor, with 100G in 1RU

APPLICATIONS

- Alien wavelength capacity upgrade to existing long haul, ultra-long haul and submarine line system

OVERVIEW

In an environment where bandwidth demand continues to grow at increasing rates, the ability to deploy additional capacity quickly, at low cost and without disruption to the existing network allows service providers to address their most important business issue, customer demand.

Designed to provide a high capacity solution to wavelength exhaust scenarios, Ekinops RM 10001-WB operates over most existing line systems, including ROADMs, with ultra-long reach up to 6000 km. With support for 100GbE clients, the RM 10001-WB has the ability to address even the largest customers' connectivity requirements without disrupting the service providers' operational models, or their budgets. Its ultra-long reach can be used to provide additional capacity on terrestrial and submarine networks alike giving the RM 10001-WB a wide range of applications over which it can be used.

The Ekinops RM 10001-WB is a single shelf that includes its own management card, fans, and redundant power supplies in addition to a QSFP28-based client interface and Ekinops integrated 100G coherent line optics. Multiple shelves can be stacked together and treated as a single unit for management purposes with a single IP address to help simplify network operations. This 1 RU offering is ideal for space constrained applications such as co-location facilities and cable landing stations and, because it has been re-architected using on the latest available hardware, the Ekinops RM 10001-WB uses 65% less power than our previous generation RM 100G transponder shelf making it deployable even in locations where power is scarce.

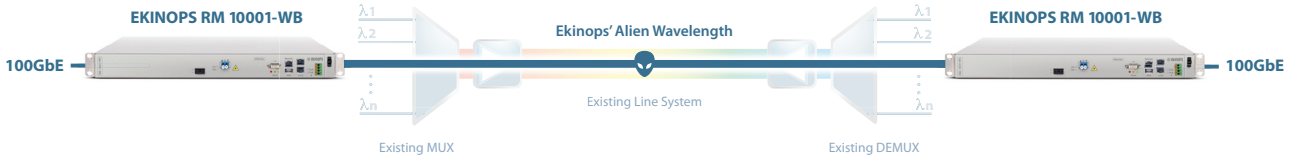


Figure 1: Ekinops RM 10001-WB in alien wavelength application

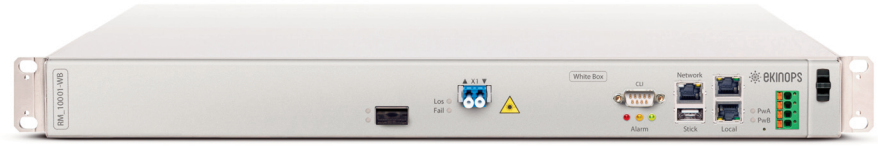
MANAGEMENT

The EKINOPS RM 10001-WB can be managed through SNMP or via the Ekinops standard element level management interfaces, which include a Command Line Interface *(CLI)* and an Ekinops Graphical User Interface *(GUI)*. The CLI is accessible via Secure Socket Shell *(SSH)* and Telnet remotely or via a local serial port on the management board.

Complete performance monitoring and management are provided, including laser shutoff and local and remote loopback, useful for maintenance and fault isolation.

Digital Diagnostics Management *(DDM)* is supported for QSFP28 interfaces. This includes link status, transmit *(TX)* and receive *(RX)* signal power monitoring, and operational temperature, as well as manufacturer and transceiver model information essential for inventory management. A 10 Mbps in-band Data Communications Channel *(DCC)* is embedded in the line side for remote management.

The EKINOPS RM 10001-WB is also supported by Celestis **NMS**, the Ekinops advanced Network Management System.



EKINOPS RM 10001-WB

100G Ultra-Long Haul Transponder

TECHNICAL SPECIFICATIONS

• CLIENT INTERFACES

Protocols	100GbE
Optical interface	QSFP28
Number of Ports	1

• LINE INTERFACES

Protocol	100G Coherent
Optical interfaces	Included on the shelf
Number of Ports	1

• SPECIFICATIONS

Max. distance	6000 km
OSNR	12 dB
Transmit Power	-1 dBm
Receive Power (min.)	-25 dBm

• MANAGEMENT

MIB	SNMP V2c Private MIB
Remote Management	10 Mb Ethernet DCC

• PHYSICAL SPECIFICATIONS

Module size	1RU
Operating Temp	0°C to +50°C /+32°F to +122°F
Storage Temp	-20°C to +85°C /-4°F to +185°F

• INDICATORS

Status	HW ready, SW ready
Alarm	Port down *(Client and Line)*

• PERFORMANCE

Optical Spacing	50GHz, also compatible with 100GHz
Power	70W *(includes client optics)*

• REFERENCE STANDARDS

ITU-T G707 12/2003 edition; ITU-T G709; IEEE 802.3-2002; IEEE 803.3ae-2002; IEEE 802.3ba

ORDERING INFORMATION

RACK MOUNTABLE UNIT (RM)

PRODUCT CODE	DESCRIPTION
RM_10001-WB	1 RU Rack Mountable, 100G coherent transponder, on board line interface and QSFP28 Client Interface *(not included)*

CONTACT

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