



# Muxponder 10G OTN

**Part number: DMAMUXP010G082**

## DESCRIPTION

This is one of the telecommunication facilities in OTN level which provides the possibility of transporting the traffic in different capacities ranging 100Mb to 10Gb on the OTN frame. This system contains 8 input client ports for the recipient services (UNI) and two Uplink (NNI) ports. The NNI1 port serves as the Main Uplink and NNI2 is Protection Uplink. Due to the existence of two ports NNI supporting (the Protection Config function in SNCP brands in Ring networks and/or establishing double routes in the Chain Networks) the function of this system is in this manner; The UNI side consists of eight any-client multi-rate access ports, UNI1 and UNI2 support 100Mbps~11.1Gbps services, and the other six support 100Mbps~6.5Gbps services. The total usable bandwidth of the 8-channel is limited to 20Gbps. The NNI side has two OTU2 ports. As an OTN access device, DMAMUXP010G082 is used to aggregate STM-1/4/16/64 service, GE/10GE service, and arbitrary service rate between 125Mbps and 10.7 Gbps into OTU2 for OTN networking. The 8 UNI ports receive multi services in clients and as the Cross connect already defined in the system, (the system) contains the capability of supporting a combination of TDM and Base Packet services. In the frame, the OTU2 is transmitted to recipient via one of the NNI defined ports. In opposite side; too, the Muxponder 10G receives

the OTU2 frame from its NNI port and connects the received traffics to each UNI port of the relevant service client as per the defined CrossConnectConfig; and, the client receives this service.

## Specifications of the apparatus (front view) include:

- Eight service inputs (UNI)
- Two service outputs (NNI)
- The network port (NM)
- The Console ports
- The BITS port for adjusting the apparatus clock by an outside system
- The RST switch (for the hardware reset of the apparatus).

## Muxponder 10G with 322x482x45 (HxWxD) physical dimensions in mm scale

## Features

- G.709 defined OTN encapsulation, mapping, and overhead;
- Pluggable optical modules;
- Alarm detection;
- SNMP, CLI command line;
- Intelligent fan with controllable temperature and manual/automatic adjustable fan speed.

## Product Specifications

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Index		Performance Parameter		
Monitoring Interface	SNMP Interface	Connector Type	RJ-45	
		Rate	10/100M	
		Interface Protocols	SNMP Protocol	
	Console Interface	Connector Type	RJ-45	
		Baud Rate	115200; Data bit: 8; Stop bit: 1; No parity check	
		Electrical Specifications	RS-232	
	OUT Input Rn Parameter	Receiving sensitivity dBm	-21(PIN) <-28(APD)	
		Receiver Reflection	<-27	
		Overload power dBm	0(PIN) -9(APD)	
	OUT 1 interface	Input signal wavelength area-nm	Input signal wavelength area-nm	1280~1565
			Optical Spectral Properties	Maximum -20dB Spectrum width-nm Minimum side mode suppression ratio-dB
		OUT Output Sn parameters	Center frequency	Nominal center frequency-THz Center frequency offset
Average transmit power			Max-dBm Min-dBm	6 0
Minimum extinction Ratio				8.2 (SFP)
Dispersion accommodation value-ps/nm			3600 (DM SFP)	
Eye Frame			Meets ITUT.G957 or ITUT.G959.1	
OUT input Rn parameters		Rate – Gbit/s		9.953~11.318
		Receiving sensitivity dBm		-14(PIN) <-21 (APD)
		Receiver Reflection		<-27
	Overload power dBm		>0(PIN) >-9(APD)	
	Input signal wavelength area-nm		1280~1565	
OUT 2 interface	OUT output sn parameters	Optical spectral properties	Maximum -20dB spectrum width-nm Minimum side mode. / Suppression ratio-dB	<0.3(NRZ) >30
		Central frequency	Nominal center frequency-THz Center frequency offset	Meets ITU-T G.694.1 ≤ ±12.5(100 GHz)
	Average Transmit power dBm		-3 ~ 1	
	Minimum extinction Ratio dB		8.2	
	Dispersion accommodation value-ps/nm		-300 ~ 800	
	Eye Frame		Meets ITUT.G957 or ITUT.G959.1	
	Rate		155 Mbit/s	
Client-side optical interface	Stm-1 interface	Line pattern	Scramble NRZ	
		Optical interface	According to the selected SFP/SFP+ module	
	Connector	Standard	LC dual Fiber Bi-directional (SFP)	
		Optional/s	LC single Fiber Bi-directional (SFP)	

Stm-4 interface	Rate	622 Mbit/s
	Line pattern	Scramble NRZ
	Optical interface	According to the selected SFP/SFP+ module
	Connector	Standard Optional/s
Stm-16 interface	Rate	2.5 Gbit/s
	Line pattern	Scramble NRZ
	Optical interface	According to the selected SFP/SFP+ module
	Connector	Standard Optional/s
Stm-64 interface	Rate	10 Gbit/s
	Line pattern	Scramble NRZ
	Optical interface	According to the selected SFP/SFP+ module
	Connector	Standard Optional/s
FE ethernet interface	Rate	125 Mbit/s
	Optical interface	According to the selected SFP/SFP+ module
	Connector type	SFP
	Interface standard	IEEE 802.3
	Working mode	Auto negotiation, forced 100M full duplex
Client-side optical interface CE ethernet interface	Rate	1.25 Gbit/s
	Optical interface	According to the selected SFP/SFP+ module
	Connector type	SFP
	Interface standard	IEEE 802.3
	Working mode	Auto negotiation, forced 1000M full duplex
10G Ethernet interface	Rate	10Gbit/s
	Interface standard	IEEE 802.3
	Optical interface	According to the selected SFP/SFP+ module
	Connector type	SFP+
	Working mode	Full duplex
OUT1 interface	Transmission rate	2.5Gbit/s
	Line pattern	Scramble NRZ
	Optical interface	According to the selected SFP/SFP+ module
	connector	SFP
OUT2 interface	Transmission rate	10Gbit/s
	Line pattern	Scramble NRZ
	Optical interface	According to the selected SFP/SFP+ module
	connector	SFP+
External clock Input/output interface	rate	2048 Kbit/s or 2048 KHz
	Connector type	RJ45
voltage	voltage	AC~220v(AC 85v ~ 264v)
power	power	<28w
Environment	Operating temperature	0~50 centigrade
	Storage temperature	-25 ~ 60 centigrade
	Relative Humidity	10 ~ 90 % RH (non -condensing)
Physical Dimension H/D/W	Size-mm	44.180.360
Weight full load		< 2.1 Kg