

Features

- ▶ Transparent Transport and very low delay
- ▶ 3R function (Regeneration, Reshaping, Re-timing)
- ▶ Support hot plugging, full state led display, easy installation
- ▶ Support ITUT prescribed DWDM/CWDM wavelength, and can also display it's DDM function
- ▶ Support Loop-back and Jumbo Frame
- ▶ DIP Switch supports 1.25G/10G fiber data rate switching
- ▶ Can be as 1G Ethernet Media Converter if using Ethernet
- ▶ IP40 Aluminum Case
- ▶ Supports DIN-Rail/Wall-Mount installation
- ▶ -40°C to 80°C (-40°F to 176°F) operating temperature



Overview

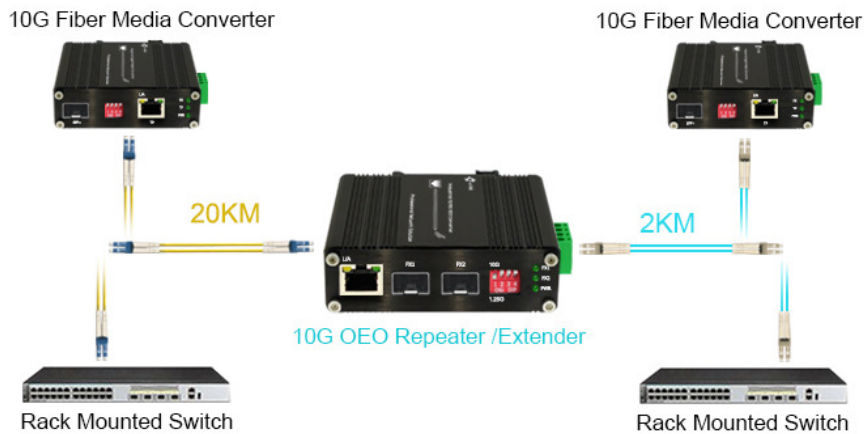
Industrial 10G OEO Converter is a connection between fiber to fiber 10Gbps equipment function as fiber media converter, or as fiber repeater for long distance transmission in harsh environment at operating temperature -40~ 80°C.

It is for network backbone (SAN, LAN, MAN) application. Support SDH/SONET STM-64/OC-192, 10G fiber channel, 10G Ethernet, which can be applied in R&D laboratory, data center, telecommunication room. It supports optical wavelength conversion 1310nm/1550nm/CWDM/DWDM with Loop-back.

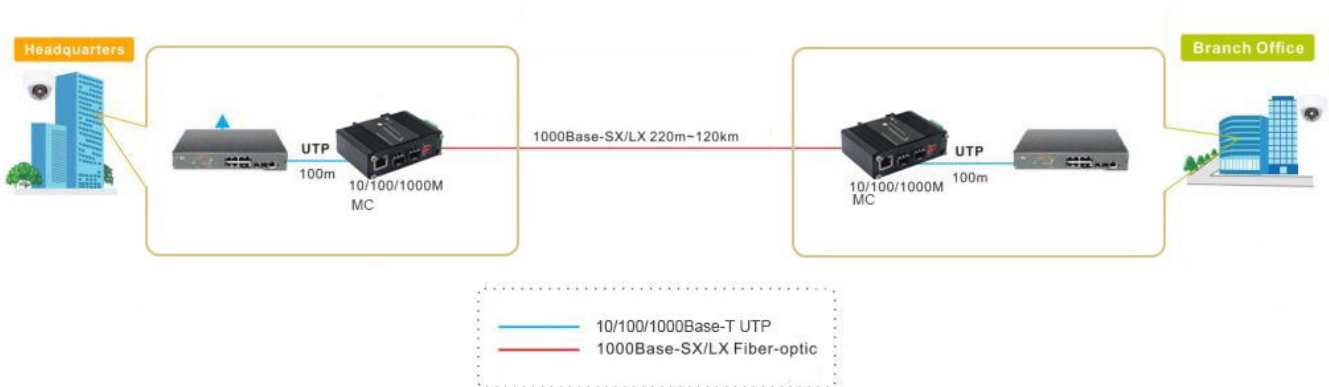
When only connecting the copper and fiber port, it can be connection between fiber to copper 1Gbps Ethernet equipment function as fiber-to-copper media converter for long distance transmission up to 120km.

Application

Application I: 1G/10G OEO Converter (3R Repeater)



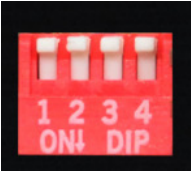
Application II: fiber to copper 1Gbps Ethernet equipment function as fiber-to-copper media converter



Technical Indexes

Performance Data	Technical Indexes
Equipment function	3R Repeater
Transmission Speed	10G: 8.5Gb/s-11.7Gb/s
Protocols	8.5G Fiber Channel SONET OC-192, SDH STM-64 (9.95Gbps) 10G WAN (10Gbps)

	10G LAN (10.31Gbps) OTN OTU-2 (G.709) (10.70Gbps) 10G LAN with 255/237 FEC coding (11.09Gbps) 10G Fiber Channel (11.32Gbps) 10G POS
Interface Type	SFP+ to SFP+
Transmission Distance	SFP+ module: up to 80km
Maximum Packet Forwarding Rate	14,880,950/S
Operating Temperature	-40°C to 80°C (-40°F to 176°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Relative Humidity	5% to 95% non-condensing
MTBF	> 200,000 hrs
Ethernet Media Converter Specifications	
Standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T IEEE 802.3z, 1000BASE-SX/LX IEEE 802.3x Full-duplex flow control
Work Mode	10/100/1000BASE-T to 1000BASE-SX/LX
Port Type	SFP to RJ45
Network Cables	Twisted-pair 10BASE-T: 2-pair UTP Cat. 3,4,5, up to 100m 100BASE-TX: 2-pair UTP Cat. 5, up to 100m 1000BASE-T: 4-pair STP Cat 5 up to 100m Fiber-optic Cable 1000BASE-SX: 50/125 μ m or 62.5/125 μ m multi-mode fiber cable, up to 220/550m/2km. 1000BASE-LX: 9/125 μ m single-mode cable, providing long distance for 10/20/40/80/120km (vary on SFP module)
Electrical and Mechanical	
Input Power	12~48VDC, Redundant Power (6-pin Terminal Block)
Power Consumption	8W Max
Protection	
Power Input Overload	Automatic Resettable
Reverse Polarity	Present
DIP Switch	

4-digit DIP switch function	DIP	Function	Settings	
		SW 1	1.25G/10G	ON - 1.25~8.5G
SW 2		Reserved	ON - Reserved	OFF - Reserved
SW 3		Reserved	ON - Reserved	OFF - Reserved
SW 4		Reserved	ON - Reserved	OFF - Reserved
LED Indicators:				
PWR	Power Status			
FX1	SFP Port-1			
FX2	SFP Port-2			
L/A	TP LINK/ACT			
Dimensions (WxDxH)	95 x 70 x 30 mm			
Weight	0.25Kg			
Casing	Aluminum Case			
Mounting Options:	DIN-Rail mount			
Regulatory Approvals				
ISO9001, CE, RoHS, FCC				
EN55022:2010+AC: 2011, Class A				
EN 61000-3-2: 2006+A1: 2009+A2: 2009				
EN 61000-3-3: 2013				
EN55024:2010				
IEC 61000-4-2: 2008 (ESD)				
IEC 61000-4-3: 2010 (RS)				
IEC 61000-4-4: 2012 (EFT)				
IEC 61000-4-5: 2014 (Surge)				
IEC 61000-4-6: 2013 (CS)				
IEC 61000-4-8: 2009 (PFMF)				

DIREKTRONIK

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