

OTS 9175

1550nm EDFA with PON port



The standard rack-mounted OTS 9175 series 1550nm EDFAs are designed to meet the high performance of fiber networks in CATV or digital systems applications. The OTS 9175 series products has WDM devices integrated for combining IP signals of wavelengths 1310nm & 1490nm with 1550nm CATV signal in the same fiber, and providing 15~24dBm output power with a noise figure of less than 6dB from 1545 to 1565nm. The OTS 9175 series products have an embedded advanced MCU circuit embedded to monitor and control full status parameters and alarms. All parameters can be accessed through front panel LCD or RS232 interface located on the rear panel of the transmitter. The OTS 9175 series products also employ a manual key switch for safety consideration during operation.

Applications

□ CATV

□ FTTX

□ Data

Features

- Output ports : 4-8 optional
- Built-in optical switch, backup optical source
- Low noise figure : less than 6dB at 0dBm input
- Optical output power : total output up to 2W
- Double power supply high performance hot-swap : Mix 220VAC and -48VDC
- Network management Agent hot-swap support Telnet and SNMP
- Perfect network interface : Ethernet-RJ45 and RS232
- Intelligent temperature control system : power consumption and hot radiation reduce 30% than common products
- Compatible with Bellcore GR-1312-CORE

Specifications

Parameter		Unit	Specification	Remark
Optical Switch				
Operating bandwidth		nm	1545 - 1565	
Optical input power range		dBm	-5 - +10	
Optical Switching time		ms	≤ 10	
Insertion loss		dB	≤1.5	
EDFA Performance				
CATV Optical Wavelength		nm	1545 ~ 1565	
Maximum optical output power		dBm	32	
Output power stability		dBm	±0.5	
Noise figure		dB	≤ 6.0	Optical input power 0dBm, λ=1550nm
PON Performance				
PON Optical Wavelength		nm	1260 ~ 1360	Pass through
			1480 ~ 1500	Pass through
PON insertion loss		dB	<1.0	
Isolation		dB	>15	
RF Performance				
Return loss	Input	dB	≥ 45	
	Output		≥ 45	
Optical Connector Type			SC/APC	
C/N		dB	≥ 50	Test condition according to GT/T 184-2002.
C/CTB			≥ 63	
C/CSO		dB	≥ 63	
Structure Performance				
Power supply voltage		V	A: AC100V ~ 250V (50/60 Hz) B: DC48V	
Operating Temperature Range		°C	-10 - +42	
Maximum operating relative humidity		%	Max 95% No Condensation	
Storage Temperature Range		°C	-30 - +70	
Maximum storage relative humidity		%	Max 95% No Condensation	
Dimension		mm	483(L)× 475(W)×44(H)	1U

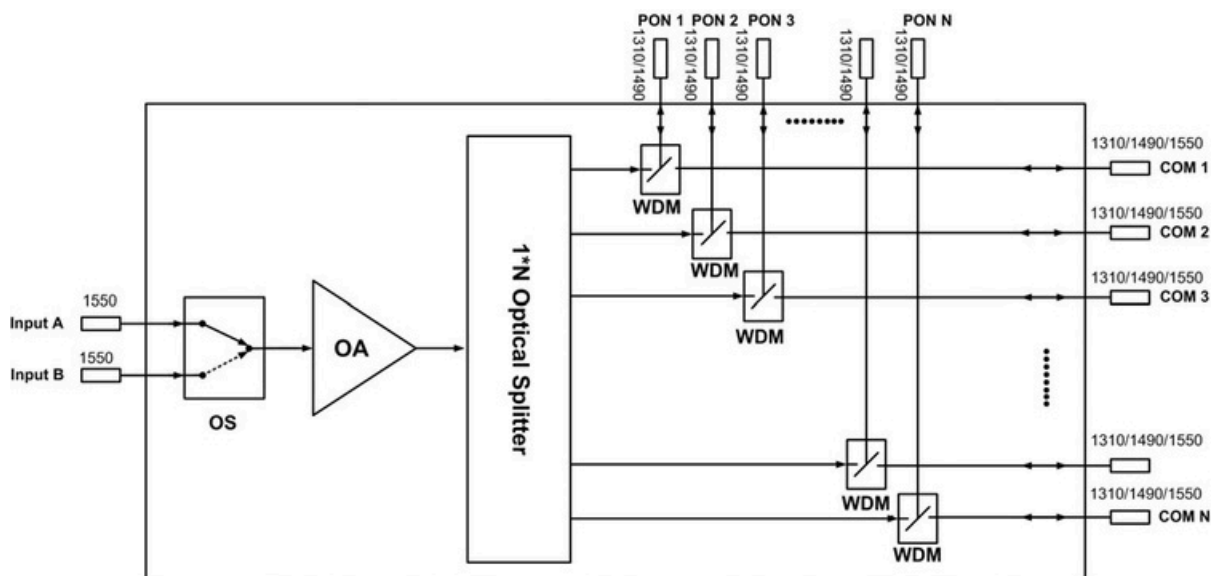
Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device. These are absolute stress ratings only. Functional operation of the device is not implied at these conditions. Exposure to absolute maximum ratings for extended periods can adversely affect device reliability.

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	Tw	-5	-----	60	°C
Storage Temperature	Ts	-40	-----	80	°C
Humidity	-----	10	-----	85	%

(3) : No condensation

Block Diagram



Ordering Information

OTS 9175	--	XX	--	XX	-	X	-	XXX	-	X
		Output Port : 04 : Max Power 24 dBm 08 : Max Power 20 dBm		Output Power : 15 = 15 dBm 16 = 16 dBm 17 = 17 dBm 18 = 18 dBm 19 = 19 dBm 20 = 20 dBm 21 = 21 dBm 22 = 22 dBm 23 = 23 dBm 24 = 24 dBm	-	Power Supply : 1 : 110/220 VAC 2 : Dual 100/220 VAC 3 : -48 VDC 4 : Dual -48 VDC 5 : 110/220 VAC and -48 VDC		Connector : SCA = SC/APC FCA = FC/APC LCA = LC/APC	-	SNMP : 0 : w/o 1 : SNMP