



# High Power 1550nm EDFA with WDM

## Key Features

- Er Yb Co-doped double-clad fiber technology
- Output ports: 4, 8, 12, 16 or 18 port options
- Internal WDM port configurations for GPON
- 110-240VAC 50/60Hz power. 48VDC power is optional
- Optical output power: total output up to 35.5dB (optional)
- Low noise figure: <5dB when input is 0dBm
- Advanced 32 bit processor, with automatic monitoring circuitry. Accurately monitors and controls the optical output power and various parameters of the pump laser, ensures stable optical output power and can effectively extend the working life of the pump laser
- Front panel LCD display shows all status parameters and provides ability to set parameters on the EDFA
- 2RU standard 19" rackmount cabinet, equipped with standard IEEE802.3 10Base-T Ethernet interface and RS232 interface, for network management monitoring and control console



## Description

The Multicom High Power 1550nm EDFA with built-in CWDM is a low noise high-performance Er Yb co-doped fiber amplifier. Each output includes a built-in CWDM (1310/1490/1550) wavelength division multiplexer. It multiplexes the data stream of the OLT and ONUs to the fiber amplifier output using 1310nm and 1490nm optical connectors. This configuration reduces the equipment and connections needed, improving the system loss budget and reliability. It is ideal for FTTH networks, providing a flexible and low cost solution for the integration of these networks and FTTH.

## MUL-EDFA-V-X-Y-WDM

Total Output Power (dBm)  
# of Ports (4, 8, 12, 16, 18)

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## Technical Specifications

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Item	Unit	Technical Parameter	Notes
CATV pass-through wavelength	nm	1545 - 1565	
PON pass-through wavelength	nm	1260 - 1360, 1480 - 1500	
PON insertion loss	dB	<0.8	
Isolation	dB	>15	
CATV optical input power range	dBm	-5 - +10	
Maximum optical output power	dBm	35.5	depending on selected power option
Output power stability	dBm	±0.5	
Noise figure	dB	≤6.0	Optical input power 0dBm, λ=1550nm
Return loss - Input port	dB	≥ 45	
Return loss - Output port	dB	≥ 45	
Optical connector type		SC/APC	and/or LC/APC, LC/UFC
Power supply voltage	V	110V - 240VAC (50/60 Hz) or 48VDC (optional)	Hot pluggable, redundant power
Consumption	W	≤70	
Operating temperature range	°C	-10 - +42	14 - 108°F
Max operating/storage relative humidity	%	95	No condensation
Storage temperature range	°C	-30 ~ +70	-22 - 158°F
Dimensions	mm	483 (L) x 440 (W) x 88 (H)	19in L x 17.3in W x 3.5in H

Model #	Total Output Power (dBm)	Output Ports	Output Power per Port (dBm)
MUL-EDFA-V-4 -25.5 -WDM	25.5	4	18
MUL-EDFA-V-4 -26.5 -WDM	26.5	4	19
MUL-EDFA-V-4 -27.5 -WDM	27.5	4	20
MUL-EDFA-V-4 -28.5 -WDM	28.5	4	21
MUL-EDFA-V-4 -29.5 -WDM	29.5	4	22
MUL-EDFA-V-4 -30.5 -WDM	30.5	4	23
MUL-EDFA-V-4 -31.5 -WDM	31.5	4	24
MUL-EDFA-V-8 -26.5 -WDM	26.5	8	15
MUL-EDFA-V-8 -27.5 -WDM	27.5	8	16
MUL-EDFA-V-8 -28.5 -WDM	28.5	8	17
MUL-EDFA-V-8 -29.5 -WDM	29.5	8	18
MUL-EDFA-V-8 -30.5 -WDM	30.5	8	19
MUL-EDFA-V-8 -31.5 -WDM	31.5	8	20
MUL-EDFA-V-8 -32.5 -WDM	32.5	8	21
MUL-EDFA-V-8 -33.5 -WDM	33.5	8	22
MUL-EDFA-V-8 -34.5 -WDM	34.5	8	23
MUL-EDFA-V-8 -35.5 -WDM	*35.5 Ultra-high power output	8	24
MUL-EDFA-V-12 -32 -WDM	32	12	19
MUL-EDFA-V-16 -29.5 -WDM	29.5	16	15
MUL-EDFA-V-16 -30.5 -WDM	30.5	16	16
MUL-EDFA-V-16 -31.5 -WDM	31.5	16	17
MUL-EDFA-V-16 -32.5 -WDM	32.5	16	18
MUL-EDFA-V-16 -33.5 -WDM	33.5	16	19
MUL-EDFA-V-16 -34.5 -WDM	34.5	16	20
MUL-EDFA-V-16 -35.5 -WDM	*35.5 Ultra-high power output	16	21
MUL-EDFA-V-18 -35 -WDM	*35 Ultra-high power output	18	20
MUL-EDFA-V-18 -35.5 -WDM	*35.5 Ultra-high power output	18	20.5

**MUL-EDFA-V-X-Y-WDM**

┌ Total Output Power (dBm)  
└ # of Ports (4, 8, 12, 16, 18)

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