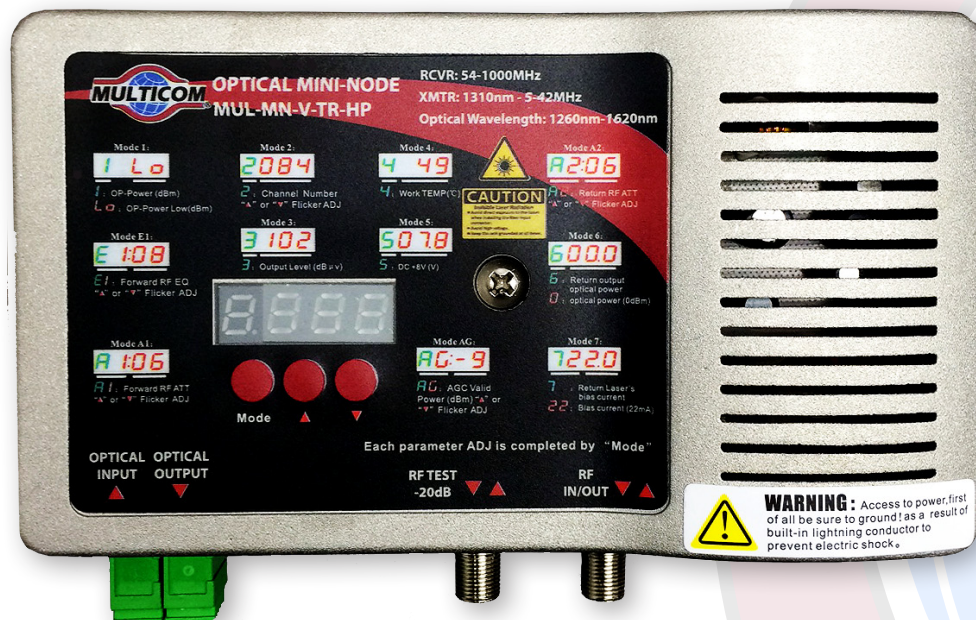




# High Power Optical Micro-Node

## Key Features

- » Uses an advanced optical AGC circuit design, with an optical AGC control range of: +2dBm ~ -9/-8/-7/-6/-5/-4dBm adjustable
- » Forward operating frequency up to 1GHz, RF amplifier uses a high performance low power consumption GaAs amplifier, maximum output level up to 112dB $\mu$ V (52dBmV)
- » EQ and ATT both use an advanced electric control circuit for setting the operating parameters, making the settings more accurate and convenient



## Description

The MUL-MN-V-TR-HP optical receiver is bidirectional equipment that was specially developed for HFC broadband networks, accommodates FTTH (Fiber to the Home) network topology, while addressing the issues of CATV bidirectional return channel noise and high reliability network security transmission requirements of modern CATV networks.

**MUL-MN-V-TR-HP**

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# High Power Optical Micro-Node

## Product Specifications

Item	Unit	Technical Parameter	
<b>Forward Optical Receiver</b>			
Optical Parameters			
Optical Receiving Power	dBm	-9 ~ +2	
Optical AGC Range	dBm	+2 ~ -9/-8/-7/-6/-5/-4 (adjustable)	
Optical Return Loss	dB	> 45	
Optical Receiving Wavelength	nm	1100 ~ 1600	
Optical Connector Type		SC/APC (or specified by user)	
Fiber Type		Single Mode	
Link Performance			
C/N	dB	≥ 51	Configure 59 PAL-D analog channel signals at the 550MHz frequency range. Transmit digital signals at the frequency range of 550~862/1003MHz. The digital signal level (in 8MHz bandwidth) is lower than analog signal carrier level. When the input optical power of the optical receiver is -1dBm, the output level is: 106dBμV, EQ: 8dB.
C/CTB	dB	≥ 60	
C/CSO	dB	≥ 60	
RF Parameters			
Frequency Range	MHz	45/87 ~ 862/1003	
Flatness in Band	dB	± 0.75	
		FZ120 output	
Rated Output Level	dBμV	≥ 108	
Max Output Level	dBμV	≥ 109 (-9 ~ +2dBm optical power receiving)	
		≥ 112 (-7 ~ +2dBm optical power receiving)	
Output Return Loss	dB	≥ 16	
Output Impedance	Ω	75	
Electrical Control EQ Range	dB	0 ~ 15	
Electrical Control ATT Range	dB	0 ~ 15	
<b>Return Optical Transmitter</b>			
Optical Parameters			
Optical Transmit Wavelength	nm	1310 ±10, 1550 ±10 (or as specified by user)	
Optical Output Power	mW	1 (or as specified by user)	
Optical Connector Type		SC/APC	
RF Parameters			
Frequency Range	MHz	5 ~ 65 (or as specified by user)	
Flatness in Band	dB	±1	
Input Level	dBμV	75 ~ 85 (Rated input level 79)	
Output Impedance	Ω	75	
NPR Dynamic Range	dB	≥15 (NPR ≥30 dB) Use DFB Laser, ≥10 (NPR ≥30 dB) Use FP Laser	
General Statistics			
Power Voltage	V	120 ~ 240VAC or +12VDC	
Operating Temperature	°C	-30 ~ +60	
Storage Temperature	°C	-40 ~ +65	
Relative Humidity	%	Max 95% No Condensation	
Consumption	VA	≤ 9	
Dimensions	mm	190 (L) x 110(W) x 52(H)	

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