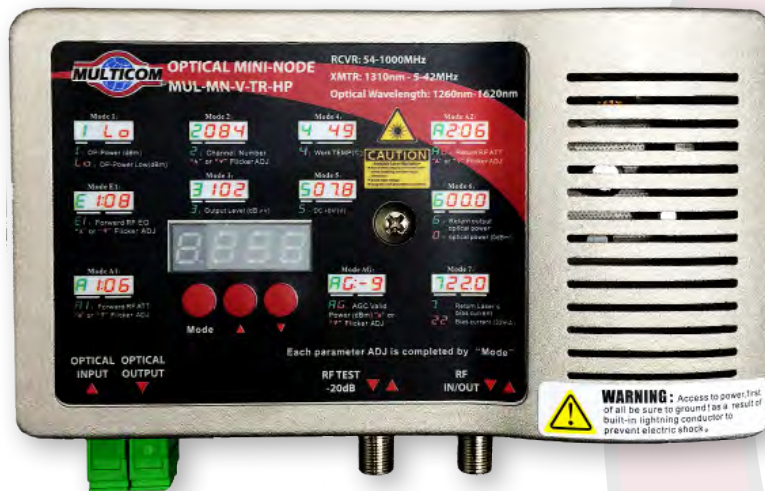




# High Power Optical Micro-Node

## Key Features

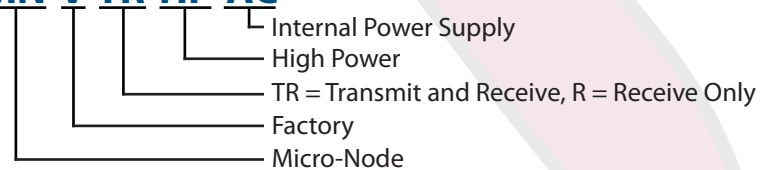
- » Uses an advanced optical AGC circuit design, with an optical AGC control range of: +2dBm ~ -9/-8/-7/-6/-5/-4dBm adjustable
- » Features the high quality, high reliability DFB laser
- » Forward operating frequency up to 1GHz, RF amplifier uses a high performance low power consumption GaAs amplifier, maximum output level up to 52dBmV
- » EQ and ATT both use an advanced electric control circuit for setting the operating parameters, making the setup easier and more accurate
- » Internal Power Supply



## Description

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

### MUL-MN-V-TR-HP-AC



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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	1260 ~ 1620
Optical Connector Type		SC/APC
Fiber Type		Single Mode
Link Performance		
C/N	dB	≥ 51
C/CTB	dB	≥ 60
C/CSO	dB	≥ 60
RF Parameters		
Frequency Range	MHz	54 ~ 1000
Flatness in Band	dB	± 0.75
Test Port	dB	-20
Rated Output Level	dBmV	≥ 108 dBμV (≥ +48 dBmV)
Max Output Level	dBmV	+49 (≥ 109 dBμV) (when input optical power -9 ~ +2dBm)
		+52 (≥ 112 dBμV) (when input optical power -7 ~ +2dBm)
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
Laser Type		DFB
Optical Output Power	mW	1 ± 0.5
Optical Connector Type		SC/APC
RF Parameters		
Frequency Range	MHz	5 ~ 42
Flatness in Band	dB	±1
Input Level	dBmV	+15 ~ +25 (75 ~ 85 dBμV)
Output Impedance	Ω	75
NPR Dynamic Range	dB	≥15 (NPR ≥30 dB) Using DFB Laser
General Statistics		
Power Voltage	V	12VDC, Internal
Operating Temperature	°C	-30 ~ +60 (-22 ~ +140°F)
Storage Temperature	°C	-40 ~ +65 (-40 ~ +150°F)
Relative Humidity	%	Max 95% no condensation
Consumption	W	≤ 9
Dimensions	mm	190 (L) x 110 (W) x 52 (H) (7.5in x 4.3in x 2in)

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

- Internal Power Supply
- High Power
- TR = Transmit and Receive, R = Receive Only
- Factory
- Micro-Node

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