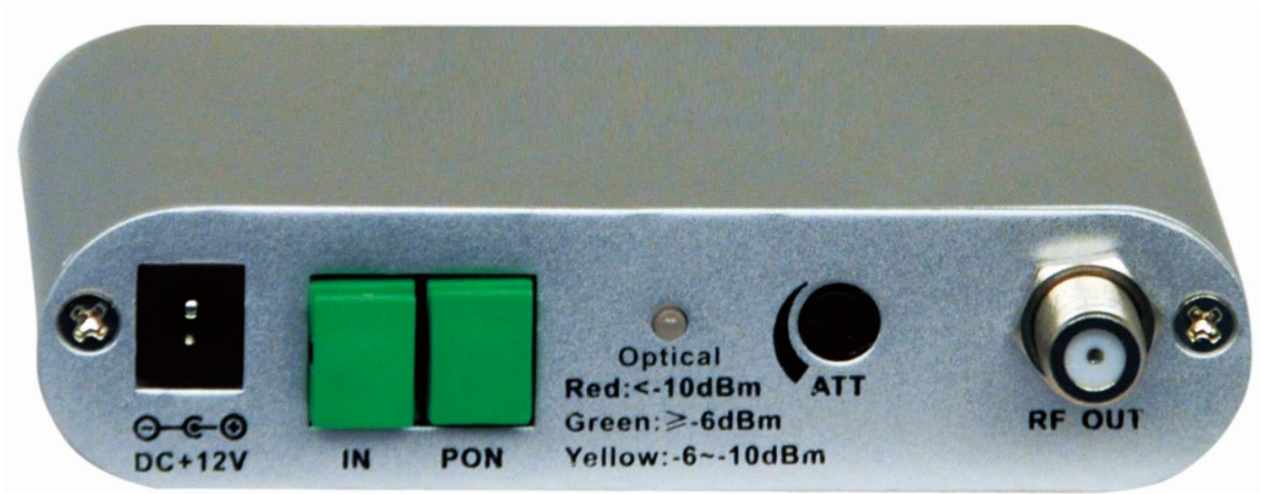


**TNHFC-Micro Node
Optical Receiver
Operation and Maintenance Manual**



1. Product Summary

TNHFC-MicroN-RCV series optical receiver is a featured product which is specially designed for FTTH—Fiber to the Home network structure. With small housing, compact and reasonable internal circuit structure and excellent performance indicators. It is the first choice for residential area and home fiber optic network. It is with features to wide range of optical receiving, high output level and low power consumption.

There are three models optional:

TNHFC-MicroN-RCV-NC: The RFTV operating wavelength is 1100 ~ 1620nm.

TNHFC-MicroN-RCV-WF: Built-in optical signal filter, the RFTV operating wavelength is 1550nm.

TNHFC-MicroN-RCV-WD: Built-in CWDM, RFTV operating wavelength is 1550nm. Pass 1310/1490nm wavelength. Can be connected with EPON, GPON and ONU.

2. Performance Characteristics

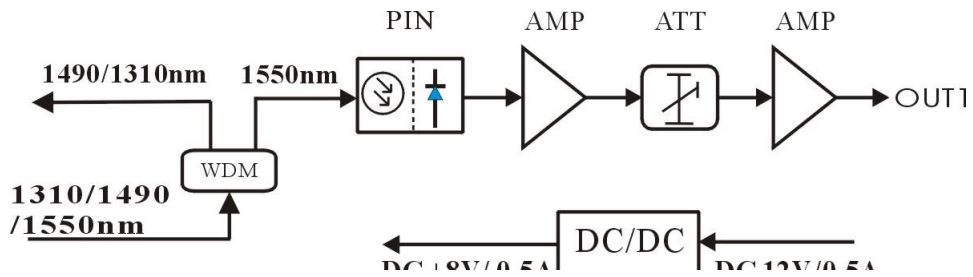
- The forward path RF independent output, 75Ω impedance.
- Adopts GaAs amplification device.
- High reliability, low consumption and external 12V switching power supply.
- The output level can be adjusted manually.
- Compact housing and easy to install.

3. Technical Parameter

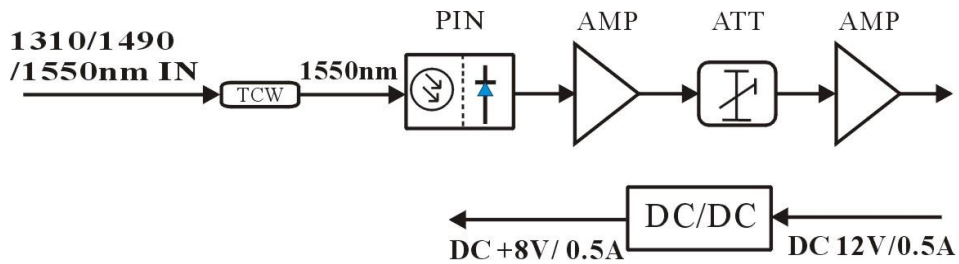
Item	Unit	Technical Parameter	
Optical Parameters			
Optical Receiving Power	dBm	-10 ~ 0	
Optical Return Loss	dB	> 45	
Optical Receiving Wavelength	nm	1100 ~ 1600 or 1530 ~ 1620	
Optical Connector Type		SC/APC, SC/UPC	
Fiber Type		Single Mode	
Link Performance			
C/N	dB	≥ 46	@ Pin= -6dBm
C/CTB	dB	≥ 62	
C/CSO	dB	≥ 62	
RF Parameters			
Frequency Range	MHz	45~1003	
Flatness in Band	dB	±0.75	
Rated Output Level	dBμV	≥ 78 @-6dBm	
Output Return Loss	dB	≥ 14	
Output Impedance	Ω	75	
Consumption	W	< 3	
Operating Temperature	°C	-20—+55	
Dimension	mm	109 (L) * 80 (W) * 26 (H)	

4. Block diagram

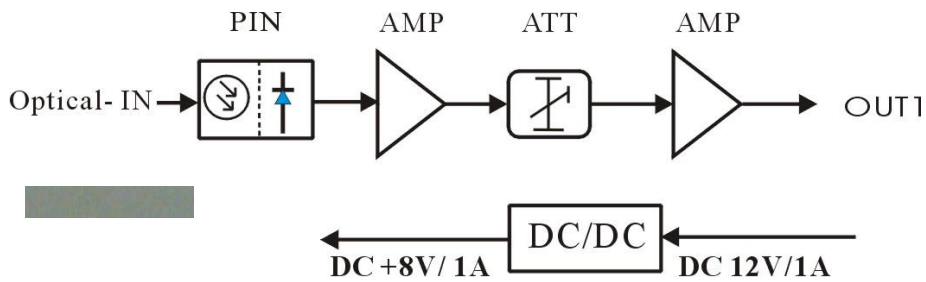
TNHFC-MicroN-RCV-WD Block diagram



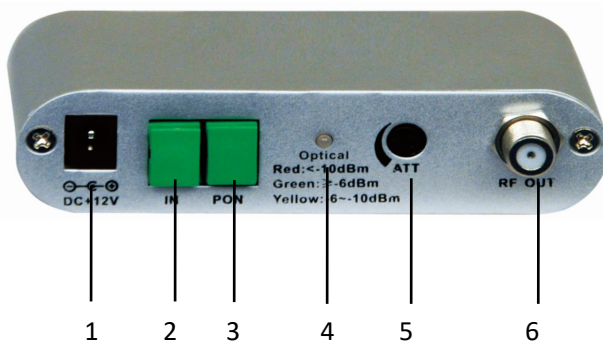
TNHFC-MicroN-RCV-WF Block diagram



TNHFC-MicroN-RCV-NC Block diagram



5. Structure



No.	Descriptions	Notes
1	DC12V power input port	
2	Optical signal input port	Optional
3	Optical signal output port	Optional
4	The input optical power indicator	
5	ATT	20dB
6	RF output port	Male or female