



# FTTH Mini Optical Receiver With WDM

**SY-FWDM-NA**

## Overview:

The Syrotech SY-FWDM-NA is a mini in-door optical receiver build in WDM, design for FTTP/FTTH transmission applications. It delivers excellent frequency and distortion responses with low noise, high RF output, and low power consumption. The Syrotech SY-FWDM-NA package is single mode fiber-pigtailed and is available with various connector options.

## Interface:

No.	Interface	Description
1	RF OUT	RF OUT1 F connector
2	PWR	Power adaptor port
3	PON	1490/1310nm data interface SC/PC
4	Optical Input	1550/1490/1310nm Optical input SC/APC

## Interface:

- ✦ 1GHz operating bandwidth
- ✦ Made for FTTH and FTTB Network
- ✦ In-Built WDM
- ✦ Lower input optical range: +2 ~ -18dBm
- ✦ Output level up to 76dBuV (@-15dBm Power Input)
- ✦ Low Power consumption < 1.0W

## Specification:

Item	Description	Value	Unit	Conditions/Notes
<b>Optical Specifications (Forward Path)</b>				
1	Wavelength	1550/1490/1310	nm	Com port
		1490/1310	nm	For ONT
2	Optical Power Input Range	-18 ~ +2	dBm	
3	AGC Range	-2 ~ +12	dBm	
4	Optical Input Return Loss	≥45	dB	
<b>RF Specifications (Forward Path)</b>				
5	Bandwidth	47~1003	MHz	
6	Flatness	±1.0	dB	47~1003MHz, At 25 C
7	Slope	0~2.0	dB	47~1003MHz, At 25 C
8	Temperature Stability	±1.5	dB	In the operating temperature range (-25~+65 C)
9	Output Level	75±2	dBuV	-15dBm input optical power, The analog channel, per channel modulation 4.0%, in the 860MHz point test, at 25C
10	Impedance	75	Ohm	
11	Return Loss (47~ 1000MHz)	≥12	dB	At 25 C
12	MER	≥30	dB	-15 ~ -5dBm input optical power
		≥24	dB	-20~ -16, input optical power
13	Power	<1.0	W	
<b>Environmental Parameters</b>				
14	Operating Temperature	-25 ~ -65	C	
15	Storage Temperature	-40 ~ -70	C	
16	Storage Humidity	≤95	%	Non-condensation
<b>User Interface</b>				
17	Optical Connector Type	SC/APC in, SC/PC out		
18	Power supply	DC5V/0.5A		External adapter, See the figure 3
19	Housing	90×85×25	mm	
20	Weight	0.15	kg	