

## OR20 FTTH mini Optical Node with WDM



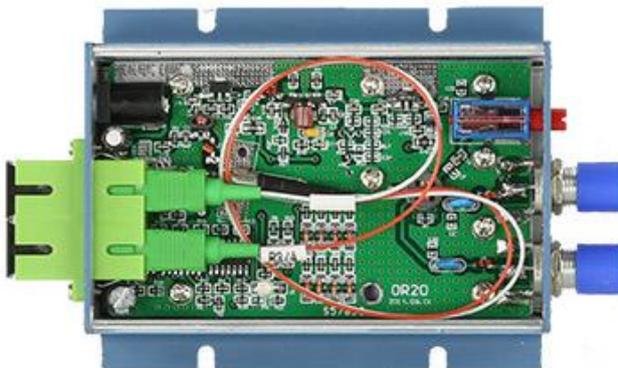
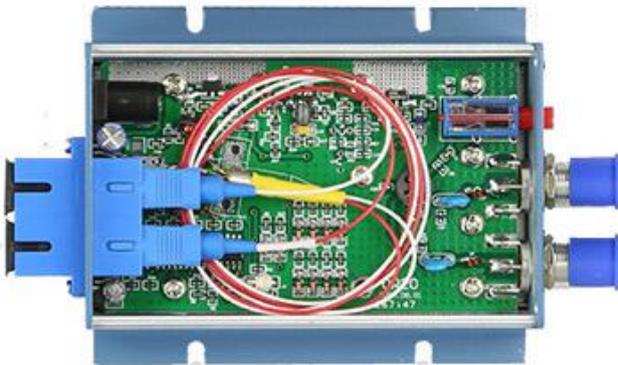
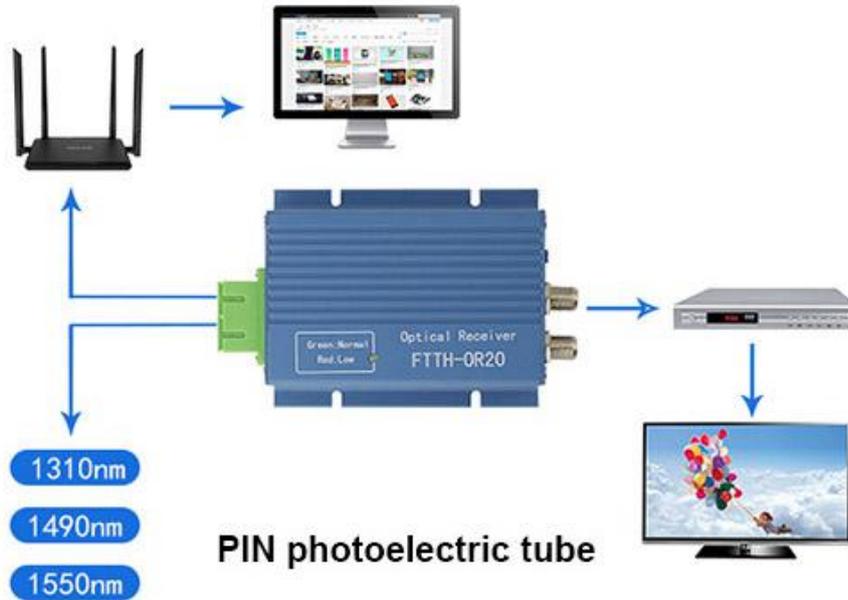
### 1. Product Application:

OR20x style FTTH optical node is home-based optical node catering to the ultimate Goal of development of optical access and suitable for FTTH (fiber to the home) optical fiber network users access to the end. Analog or digital to home can be used together the ONU or EOC achieving triple play.

It adopts low optical power detector, GaAs and optical control AGC technique which meet to the demands of FTTH CATV receiving. They are many kinds of different function which has a little difference to meet low cost. OR20J can bring user's economic application while OR20A with optical input 0~-9dBm (AGC range made according to user's demands). Output unchanged to supply convenience for user test. OR20 (WDM) style built-in WDM can only transmit 1550nm catv signal and output CATV+EPON signal of meet user's demands (1490/1310nm). OR20 (ISO) with isolator, only 1550nm optical is received and the others is filtered.

## 2. Product Display:

With WDM built in for CATV and internet together



01

With WDM built in for ONU

1): Optical input power range is  $-22 \sim +2\text{dBm}$

2): AGC optical control range  $-9 \sim 0\text{dBm}$ , output power unchanged.

3): With WDM built in, 1550nm will change to RF signal for the CATV, 1490nm&1310nm will be looped out for the ONU for internet

4) High reponse PIN photoelectric conversion tube, SC/APC -SC/APC, SC/UPC-SC/UPC or SC/APC-SC/UPC for optional

## Optical input power indicator

02

- 1): *Green-Optical input power range is within -15~+2dBm*
- 2): *Orange-Optical input power range is below -15dBm*
- 3): *Red-Optical input power range is higher than 2dBm*



03

## RF outputs

- 1) *RF connector type: Female or Male for optional*
- 2) *Two outputs power can be tap or splitter distribution*
- 3) *Also can do 1 RF output to get higher output power*

## ATT button

04

*The gain can be adjusted to -20dB lower according to your own demands*



05

## LOGO & model No.



*Your own logo and model no. can be printed here and let your logo shining everywhere!*

## Power adaptor

06

1): DC8V power supply voltage for the device

2): America standard or European standard power adaptor for optional



### 3. Performance Characteristics:

- ◆ Advanced aluminum house with good heat Dissipation
- ◆ Full-GaAs MMIC application with low noise. Digital signal is received -18dBm at lowest and analog signal -9dBm at lowest.
- ◆ AGC control range: 0~-9dBm, output level keep unchanged.
- ◆ Low power consumption, high-efficiency switch power can make sure the high reliability and stability of power supply. Power consumption less than 2W. It adopts optical detecting circuit.
- ◆ Multi-stage anti-thunder devices (TVS transient suppression diode), strictly anti-thunder system to ensure the safe operation of the equipment
- ◆ Built-in WDM, single-fiber to the home (1490/1310/1550nm) triple-play application can be realized.
- ◆ Built-in isolator can split the two optical waves (1490nm and 1310nm)
- ◆ Output gain adjustable (0~18dB), output level >80dBuV. It can realize the power supply of 8V input port feeding.
- ◆ One output or two outputs.

#### 4. Technical Specifications:

Item		Parameter	Supplement
Wavelength	(nm)	1260~1620	
		1540~1560	WF/WD
Optical output	(nm)	1310,1490	WD
Optical input range	(dBm)	+2~-10	Analog TV
		+2~-18	Digital TV
Return loss	(dB)	≥45	
Bandwidth	(MHz)	47~862	
Flatness	(dB)	±0.75	
AGC range		0~-9dBm	Pin:-7.0~+2.0dBm
AGC character	dB	≤±0.5	
Output level	(dBuv)	≥79	OR20A 1 port Pin:0~-9.0dBm
		≥75	OR20A 2 ports Pin:0~-9.0dBm
Output level control	(dB)	0-20	MGC
Return loss	(dB)	≥14	47-862MHz
Output impedance	(Ω)	75	
Output port		1/2	
CNR	(dB)	≥51	Pin=-2dBm
CTB	(dB)	≥61	Pin=-2dBm
CSO	(dB)	≥60	Pin=-2dBm
Supply voltage	(V)	+8VDC	
Consumption	(W)	≤3	+DC8V,250mA
Work temperature	(°C)	-20~+60	
Dimension	(mm)	79*98*25.5	(W)*(D)*(H)