

## Model: OR2201

### CATV Home Optical Receiver

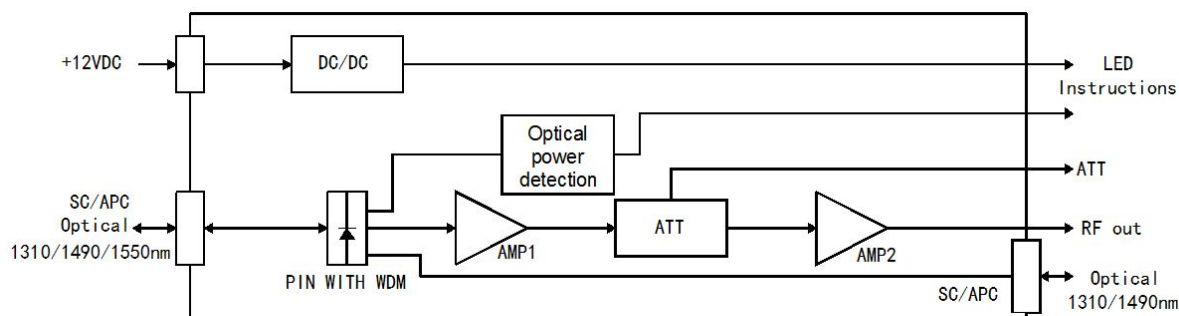


## 1. Overview

Desktop type home optical receiver is specially designed for FTTH application scene. It adopts MMIC amplifying circuit to ensure excellent CTB, CSO and C/N, when the input optical power is between -8 ~ 0dB. Mainly used in CATV system HFC, Converting the received CATV RF optical signal to electric signal.

## 2. CATV Home optical receiver functional block diagram: Drawing 1

This optical receiver is with integrated 1310/1490/1550nm WDM module, supporting external ONU device.



## 3. Panel Interface

No.	Panel printing	Interface definition	Description
1	Opt In	Optical input	<ul style="list-style-type: none"> <li>external electric signal input interface, connect ODN.</li> <li>Green SC/APC interface, with dust plug.</li> </ul>
2	Opt Out	Optical output	<ul style="list-style-type: none"> <li>external electric signal input interface, connect ODN.</li> <li>Green SC/APC interface, with dust plug.</li> </ul>
3	RF Out	Coaxial interface	<ul style="list-style-type: none"> <li>external Cable RF signal output interface</li> <li>Imperial F female head, with dust plug.</li> </ul>
4	ATT ADJ.	Manual attenuation adjustment knob	<ul style="list-style-type: none"> <li>output level attenuation adjustment knob</li> <li>Knob adjustable, Knob even with the panel.</li> </ul>
5	PWR DC 12V	External power adapter interface	<ul style="list-style-type: none"> <li>external +12VDC power input interface</li> <li>international standard 5.5mm round interface (inner-input positive, outer-input negative).</li> </ul>

## 4. Indicator

No.	Panel printing	Color	Indicating	Indicating stage
1	PWR	Green	Often bright	Normally power supply
			Turn off	System didn't supply power
2	ALARM	Red and Green	Green often bright	Input optical power is within receiving range.
			Red often bright	Input optical power is lower than receiving bottom limit.

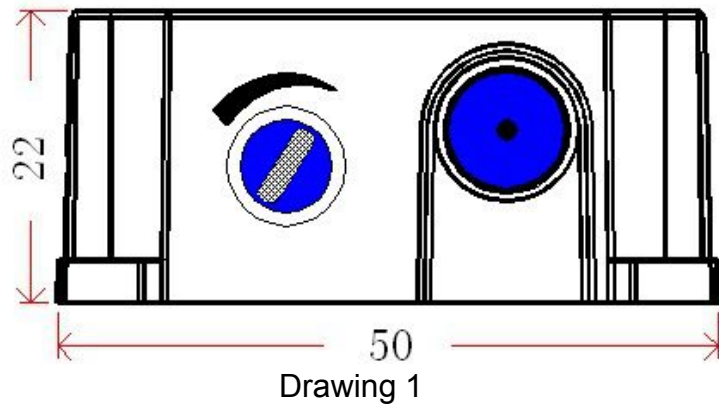
## 5. Specification

No.	Item	Description
<b>Optical part</b>		
1	Input optical wave length	1290±1600nm
2	Output optical wave length	1310±20nm/1490±20nm
3	Isolation	1490nm to 1550nm RX ≥40dB 1310nm to 1550nm RX ≥40dB
4	Insertion loss(between input and output)	≤1.5dB@1310nm&1490nm
5	Receiving responsibility	≥0.9A/W@1550nm
6	Input optical power	≥-8dBm~0dBm@1550nm
7	Optical interface reflection loss	≥45dB
<b>RF part</b>		
8	RF bandwidth cover range	47~1000MHz
9	RF output resistance	75Ω
10	Flatness	±1.5dB
11	Output reflection loss	≥13dB(47~1000MHz)
12	Maximum output level	82±2dBuV@-6dBm
13	Nominal output level	75dBuV@-6dBm
14	MER	≥32dB@-6dBm (60 64QAM signal)
15	CNR (Note1)	≥45dB@-6dBm
16	CTB (Note1)	≥65dB@-6dBm
17	CSO (Note1)	≥65dB@-6dBm
18	Input power	+12VDC±3%
19	Power consumption	≤5W
20	O-ALM state indicate LED	Green often bright: Input optical power is within receiving range (-6dBm±0.5dB~0dBm) Red often bright: Input optical power is lower than receiving bottom limit (-8.5dBm±0.5)
21	PWR state indicate LED	Green often bright: the inner power supply circuit of the receiver is normal. Turn off: The inner power supply circuit is abnormal or without external input.
22	Manual gain adjustment range	≤-20dB~0dB
23	Dimension	113×50×22mm

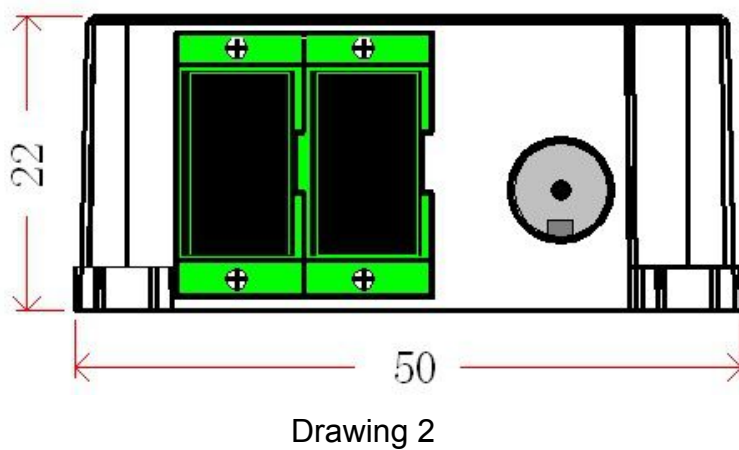
Note1:60 CH (PAL-DK), Pin -6dBm, Nominal output level 75dBuV,3 EDFA with noise figure 5dB, 65Km, Composite OMI 18.9%.

## 6. Outlook and Dimension

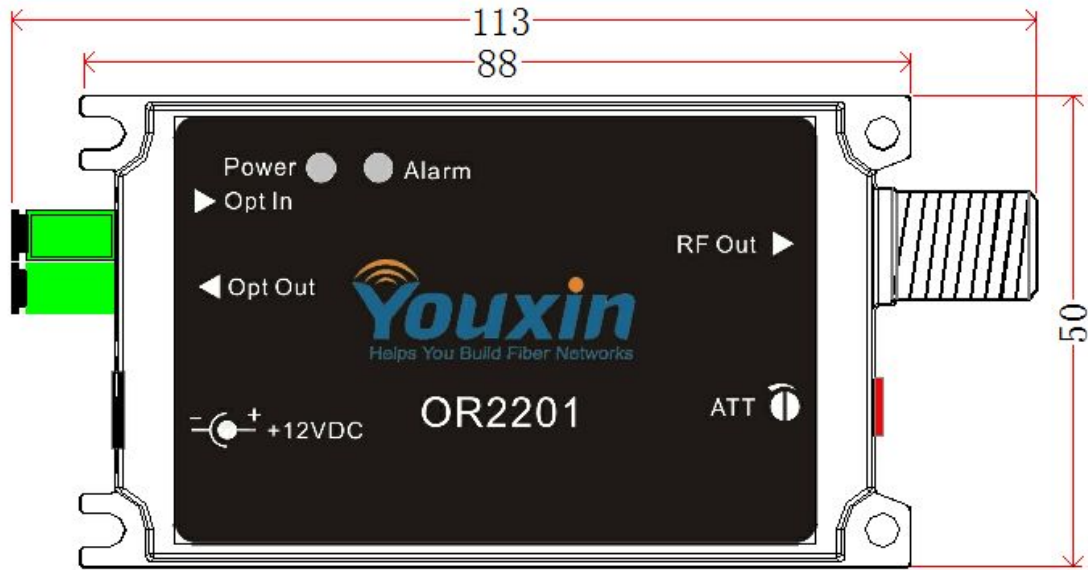
### 6.1 Right View: Drawing 1



### 6.2 Left View : Drawing 2



### 6.3 Top View: Drawing 3



Drawing 3

### 7. System / equipment requirements

No.	Item	Description
1	Working temperature	0°C~50°C
2	Storage temperature	-20°C~70°C
3	Relative humidity	0% to 95% no condensation
4	Atmospheric Pressure	The device could work in the atmospheric pressure environment in 86kPa~106kPa

### 8. Safety and Environmental protection

No.	Item	Description
1	Security requirement	Comply to the relative provisions in GB4943 - 2001 《Information Technology equipment safety》
2	RoHS	Comply to ROHS requirements

### 9. Accessories

No.	Item	Quantity
1	1.5m Coaxial cable	1
2	Power adaptor	1
3	User manual	1



[www.youfibercable.com](http://www.youfibercable.com)

E-mail: [youfibercable@youfibercable.com](mailto:youfibercable@youfibercable.com)

**Skype:** [aaron.youxin](https://www.skype.com/people/aaron.youxin)