

## Fiber Optical RF Unit (for U)

# Optical CATV Return Path Receiver



The **ORR-02-3C** series provides CATV distribution head-end operators with an extensive array of features that offer a low-cost solution to increase system performance. The **ORR-02-3C** series is a compact indoor CMTS receive delivering multiplexed CMTS signals in an HFC (hybrid fiber coax) or PON (passive optical network) broadband CATV environment. Additionally, the **ORR-02-3C** series ability to operate over a wide optical input range of -23 to -10dBm allows for a variety of system designs without degrading performance. The **ORR-02-3C** series exhibits excellent distortion performance with values above standards over the entire bandwidth and temperature specifications.

### Features

- 1100nm ~ 1650nm wavelength
- Perfect for CMTS applications.
- Wide Optical Input Window(-10dBm to -23dBm) @ 1310/1550nm
- Wide Gain Control Range
- Excellent distortion characteristics for high linearity
- Low noise and low power consumption
- Compact, Very Cost Effective
- LED display to monitor current operating status
- RF test port in the front panel for input RF signal monitoring
- Front panel buttons for convenient control/monitoring
- RoHS Compliant Products

### Applications

- Receiver module for optical CATV network in HFC and FTTx nodes
- Video overlay in passive optical networks (PON)

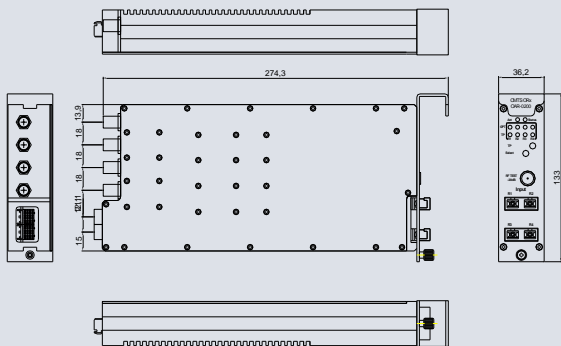
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## Mechanical Dimension

(The dimensions are in millimeters)

ORR-02-3C(36 X 282 X 133mm)



## Electrical / Optical characteristics

Parameter	Specifications	Unit
Input Optical Power	-23 ~ -10	dBm
Input Wavelength	1100 ~ 1650	nm
Responsivity @ 1550nm	≥ 0.9	dB
Optical Input Return Loss*	< -40	dB
Operating Temperature Range	0 ~ +50	°C
Supply Voltage	12±2	V <sub>DC</sub>
Power Consumption	< 10	W

\* Optical connector type : SC/APC connector

## RF Characteristics

Parameter	Specifications	Unit
Received Input Number	4 Port	
Bandwidth	5 ~ 200	MHz
Frequency Response	< 1	dBp-p
Output RF Signal level*	35	dBmV/ch
Output Impedance	75	Ohm
Output Return Loss	< -16	dB
RF Test Point	-21 ~ -19	dB
Operation Gain Control Range	-18~ +9	dB
IMD3* @ 35dBmV/ch RF output	≥ 60	dBc

\* 2-Tone channel, Optic Loss 21dB<sub>o</sub>, ONU 20dBmV input, RF Gain Control +4dB

## Ordering Information

<b>ORR</b>	-	<b>XX</b>	-	<b>XX</b>	-	<b>XX</b>
		Band Width		Package		Optical Connector
		02: 5~200MHz		3C:3U Card Type		SA:SC/APC FA:FC/APC

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