



Specification
of
3RU Return Path Receiver Module
for CATV Integrate system
PD-3RRX00001



Universal Microelectronics
Photonics Division
Catalog 2008~2009



3RU Return Path Receiver Module for CATV integrate system

Features

- Module design for 19" standard 3U rack
- Hot swap
- Four receiver design
- 1 test point for receiver
- Optical power input range 0~ -18dBm

Applications

- Cable TV integrate system

1. Introduction

The High Density Return Receiver accepts four independent optical inputs with a wavelength between 1200 and 1610nm and an optical power input range of -18 to 0dBm. It provides four independent RF outputs. RF outputs have a pass-band from 5 to 200MHz and can be attenuated between -20 and 0dB using the front panel knob controls.

2. Function

1. Hot swap plug-in module.
2. High density with four set in one module.
3. 1200 to 1610nm wavelength.
4. -18 to 0dBm optical input range.
5. 5 to 200MHz RF output pass-band.
6. 45dBmV RF output power per receiver.
7. RF attenuator can adjustable using front panel knob from -20 to 0dB.
8. Built in SPI interface to connection NMS module, HMS compatible with SCTE standard.
9. HMS SNMP variables are listed below.
 - heOpRxInputPower
 - heOpRxInputStatus
 - heOpRxOutputControl
 - heFanUnitAlarm
 - heFanStatusAlarm



3. Optical Specifications

Input Wavelength Range	1200 to 1610nm
Input Power Range	-18 to 0 dBm
Input Ports	4
Fiber Type	Single mode, 9/125um
Connector Type	SC/APC
Optical Return Loss	Min. 45dB

4. RF Specifications

Output Bandwidth	5 to 200MHz
Output Ports	4
Output Power Level (Note1)	45dBmV per channel (2 video channels)
IMD2 (Note2)	Min. 55dB
IMD3 (Note2)	Min. 60dB
Flatness	Max. ± 1 dB
Attenuator adjustment Range	-20 to 0dB
Return Loss	Min. 16dB
Impedance	75 Ω
Connector Type	F type, Female

Note1: Nominal RF output level assumes -7 dBm input, transmitter OMI of 16%, and 0dB attenuator setting.

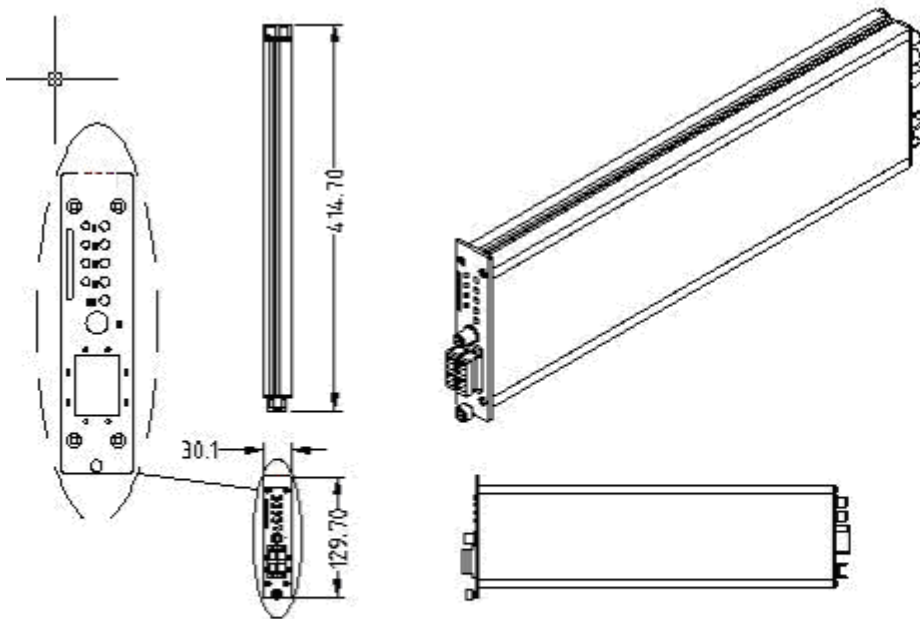
Note2: IMD2, IMD3 test condition in RF output power level 45dBmV (T8, T9 two video channels)

5. User Interface (Front Panel)

STATUS LED (1~4)	Green = Optical power in normal range Red = Optical input power is abnormal ($> +1$ to -19 dBm) Flash = RF test port number
RF ATT Adjustment Knob (1~4)	Attenuator adjustment range is -20 to 0dB
TP-SW Push Button	Select RF test port number
TP , RF Test Point	F type, -20 ± 1 dB



6. Drawing



7. Electrical/Environmental/Mechanical

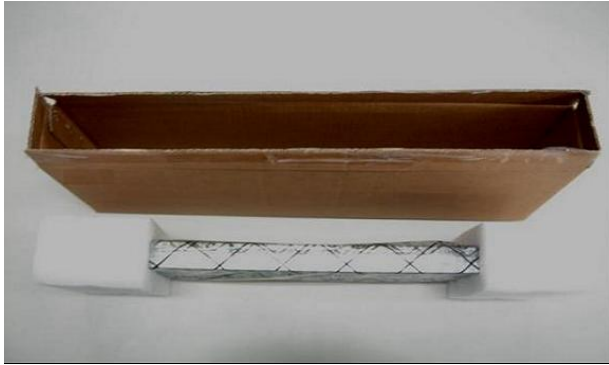
Power Consumption	12 Watt
Fan Function	DC12V/3pin, include monitor pin for fan alarm
Occupy 1 Slots	Any One Slot from Slot #2 to Slot #11
Operational Temperature Range	0 to 50°C (32 to 122°F)
Storage Temperature Range	-40 to 70°C (-40 to 158°F)
Relative Humidity	Max. 85% non-condensing
Dimensions	30.1mm W (x1 slot) x 129.7mm H x 414.7mm D
Weight	1.0 Kg

8. Packing List

Item	Name	QTY
1	PD-3RRX00001	1
2	Antistatic Bag	1
3	User Manual	1
4	Test Report	1



9. Package Picture



Package Dimensions, mm.	L:505 x W:90 x H:195
Package Weight, kg	1.4

ORDERING INFORMATION

P/N : PD-3RRX00001

Note :

Please contact with Sales Representative if you have any customized function or modification for this product.