

### Optical Input

Maximum Input: +2 dBm  
Minimum Input: -18 dBm

### RF Output

C/IM2': > 60 dB (+30° ±10° C)  
C/IM3': > 60 dB (+30° ±10° C)  
RF Output level:  
40 dBmV per channel at optical input of -10 dBm and  
16% OMI  
-58 dBmV per Hz at optical input of -10 dBm and 1% per  
MHz OMI  
Operational bandwidth: 5-300 MHz  
Flatness:  
5-10 MHz: ±1.5 dB  
10-300 MHz: ±0.75 dB  
RF attenuator adjustment range: 10 dB (variable)  
Impedance: 75  
Return loss: > 16 dB  
Connector type: Female F  
Isolation between receivers: 60 dB

### Optical Interface

Connector type:  
RPR 2210-US: SC/UPC  
RPR 2210-AS: SC/APC  
RPR 2210-AE: E2000  
RPR 2210-AF: FC/APC

### User Interface

Alarms (See manual for list of alarms.)  
Monitor point:  
Level: -20 dBc  
Accuracy: ±1 dB  
Return loss: -16 dB  
Flatness: ±1.5 dB  
Impedance: 75  
Connector type: Female F  
Control connector

### Element Management System - NETWatch™/HEM

Plug-in demodulator option  
HEM monitor port

### Power Requirements

Input voltage: +24 VDC  
Consumption: 5 W

### Environmental

Operating temperature range: 0° to 50°C (32° to 122° F)  
Storage temperature range: -20° to -70°C (-4° to 158° F)  
Relative humidity: Maximum 85% non-condensing

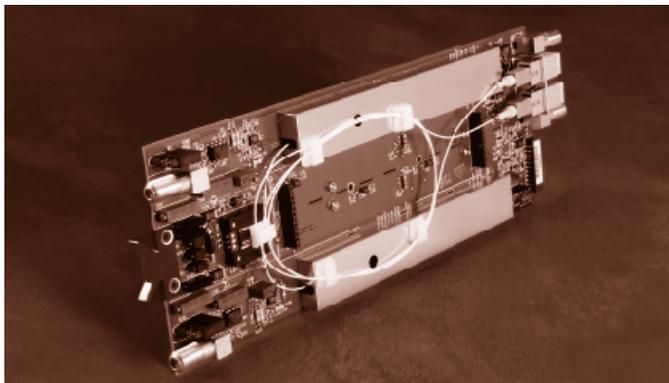
### Physical

Dimensions: 2.5" W x 1" H x 9" D  
Weight: 0.5 lbs.  
Mounting: HTR 2000D or above Chassis

### Notes:

1. At maximum gain.

## Return Path Receiver



## Product Description

Harmonic's RPR 2210 return path receiver allows operators to build complete, two-way, interactive broadband communication systems. The dual RPR 2210 module mounts in the HTR 2000D transceiver chassis and can be implemented for hot or cold standby, or as a complete, stand-alone configuration.

The RPR 2210 uses state-of-the-art technologies to provide many distinct features including high packaging density, flexible configurability and high RF output power. With the ultimate in packaging density, the RPR 2210 has two complete, independent RPRs on one board. Operators can pack 20 return path receivers (i.e. ten RPR 2210 modules) in three rack units. In addition, operators can configure the RPR 2210 in several ways. For example, modules can be configured in pairs that are located in different racks providing complete redundancy, or as stand-alone units. The RPR 2210 also offers hot swapping, allowing cards to be added or removed without disrupting service.

## Advantages

The use of the RPR 2210 in a network offers the operator several advantages for expanding network services and increasing system reliability:

- Ultra high package density (i.e. 20 RPRs in three rack units, 6.6 receivers per RU) provides better use of limited headend space, and lowers powering costs.
- Customizable protection options and easy upgrade to protection switching allow operators to easily adapt protection requirements without disrupting service.
- Enables operators to offer a complete, two-way interactive system for delivery of pay-per-view, video-on-demand, telephony and other personal communication services.
- Allows for different levels of monitoring, enabling operators to upgrade system as desired.
- Offers optional plug-in demodulator for integration of the NETWatch™ Element Management System for element monitoring and control.

## Applications

- Internet access
- Telephony
- Video-on-demand
- Network management
- Pay-per-view
- Data services
- Local origination
- I-net