

## Features

- Dynamic optical input range –12 to +1 dBm at 1550 nm and –10 to +2 dBm at 1310 nm
- High RF output ( $-31 \text{ dBmV/Hz typ}$ )
- RF output gain control with local or remote status monitoring
- High packaging density (up to 28 receivers per chassis)
- Front access –20dB output test points
- Hot plug-in/out
- Local and remote status monitor capability
- Occupies one full-depth slot

# Analog Dual Return Receiver (225 MHz)



The AR3001 is a dual analog return path receiver (RPR). Its compact design (single-width module) makes it the highest density packaging in the market. It allows the operator to install up to 28 return path receivers in one 3RU chassis.

The high output power of the AR3001 allows passive RF splitting, saving rack space and increasing reliability.

This compact design minimizes rack space requirements in the headend and hubs, and enhances deployment of traditional HFC, passive HFC and fiber to the home (FTTH) networks.

**Physical:**

- Dimensions:  
13.0" D x 4.3" H x 1.0" W (3RU) (33 cm x 11 cm x 2.5 cm)
- Weight:  
1.6 lbs (0.72 kg)

**Environmental:**

- Operating temperature range: -20° to +65°C (-4° to 149°F)
- Storage temperature range: -40° to +85°C (-40° to 185°F)
- Humidity: 5% to 95% non-condensing

**RF and Optical Interface:**

- 2 RF outputs:  
F-type (female connectors at Back Plate BP-A2)
- 2 RF output test points:  
G-type (male connectors at front panel, -20 dB)
- Optical connector:  
SC/APC (at Back Plate BP-A2)

**Power Requirements:**

- Input voltage: 12 V<sub>DC</sub>
- Power consumption: 12 W

**Electrical:**

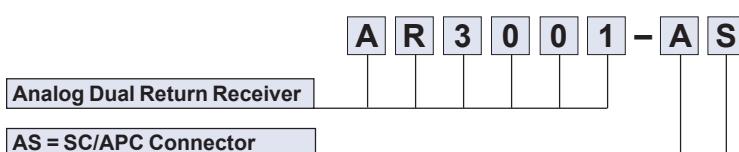
- Pass band: 5–225 MHz
- Frequency response: ±0.25 dB / 50 MHz (5 – 200 MHz)
- Nominal output level: -31 dBmV/Hz (45 dBmV total)
- Output return loss: Minimum 18 dB
- Level stability: ±0.5 dB
- Gain control range: 26 dB minimum
- Gain control step: 1.0 dB nominal

**Optical:**

- Wavelength: 1260–1620nm
- Input return loss: 45 dB
- Optical power input range:  
 $P_{IN}$  min 1310/1550 nm : -10/-12 dBm  
 $P_{IN}$  max 1310/1550 nm: 2/1 dBm

**General:**

- Hot plug-in/out
- Manual gain alignment

**Ordering Information**

**Required Module Back Plate**  
(Back Plate is included with ordered module.)

**B P - A 2**



**Corporate Headquarters**  
5400 Betsy Ross Drive  
Santa Clara, CA 95054  
Tel 408.235.7000  
Fax 408.845.9045