

Features

- High RF output with excellent distortion performance (28 dBmV with AR3002) at 0 dBm input, 4% OMI)
- Demultiplexing back plates available for DWDM applications (up to four receivers per cascadable back plate)
- High packaging density (up to 14 receivers per chassis)
- Front access –20dB output test point
- Hot plug-in/out
- Local and remote status monitor capability
- Occupies one full-depth slot

Analog Forward Receivers (1002 MHz)



The AR3002G analog receiver supports a forward path passband from 46 to 1002 MHz. Its compact design (single-width module) makes it the highest density packaging FPR in the market, and allows the operator to install up to 14 receivers in one 3RU chassis.

The output power levels of the AR3002G receiver allow passive RF splitting, saving rack space and increasing reliability.

Alternate network fiber routing is supported via use of two AR3002G receivers and a user-programmable A/B switch (the Model AB32S1G-0-00 Alternate Routing Switch that also occupies one half-depth slot in the chassis).

For DWDM applications, the receiver can be used with integrated demultiplexing back plates, providing a dramatic reduction in rack space and fiber jumper requirements. Each Model BP-35D4x back plate provides a common DWDM optical input with individual RF outputs for up to four adjacent receivers in the chassis, and DWDM optical output ports permit cascading of additional back plates.

The compact design of the AR3002G receiver minimizes rack space requirements and enhances deployment of traditional HFC, passive HFC and fiber to the home (FTTH) networks.

AR3002G

Product Specifications

Physical:

- Dimensions:
13.0" D x 4.3" H x 1.0" W (3RU) (33 cm x 11 cm x 2.5 cm)
- Weight:
1.5 lbs (0.68 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:

- RF output:
F-type (female connector at Back Plate)
- RF output test point:
G-type (male connector at front panel, -20 dB)
- Optical connector:
SC/APC (connector at mid-plane mates to BP-A5 or BP-35D4x, see *Notes in Ordering Information*)

Power Requirements:

- Input voltage:
12 V_{DC}
- Power consumption:
10 W

General:

- Hot plug-in/out

Optical:

- Wavelength: 1260nm – 1620nm
- Input return loss: 45 dB
- Optical power input range:
P_{IN} (1310/1550 nm), typ: -6 to +2 dBm
Max P_{IN}: +6 dBm (*damage level*)
- Responsivity (1310/1550 nm), nominal: 0.85 / 0.95 A/W

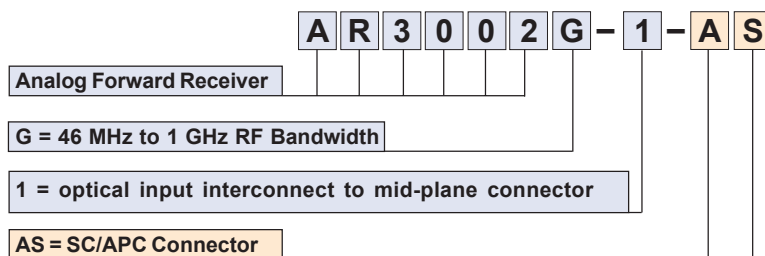
Electrical:

- Passband: 46–1002 MHz
- Frequency response: ±0.75 dB
- Nominal output level:
28 dBmV (@ 0 dBm input, 4% OMI, 1310 nm)
- Output return loss, min: 18 dB
- Level stability: ±0.25 dB
- Level repeatability: ±0.5 dB

Distortions (at nominal output level):

	AR3002G (nominal output level +28 dBmV)	
	77 CW	
	min	typ
C/CSO (dB)	71	76
C/CTB (dB)	78	82
C/XMOD (dB)	74	81

Ordering Information



Notes

Back Plate Options for AR3002G FPR

When ordering an AR3002G FPR (optical input interconnect to the chassis mid-plane), the back plate must be separately ordered. Two different styles of back plate are available in this case, depending on the application. One style provides connection for a single receiver. This single-width back plate may be ordered as:

BP - A 5

The second style provides connections for a group of four receivers installed in adjacent chassis slots. These 4-channel demux back plates (for which the DWDM inputs can be cascaded from one back plate to another) may be ordered for various channel groups as specified on the associated data sheets:

BP - 3 5 D 4 * - * - 0 0 - A S



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