

# ARRIS AR3002G

## FORWARD RECEIVER 1GHZ

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.

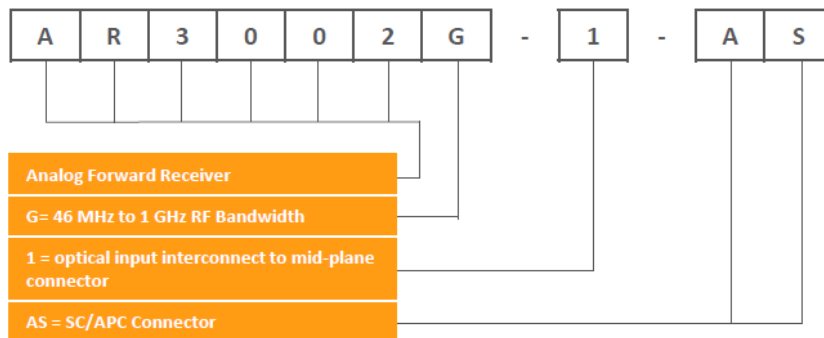
- High RF output with excellent distortion performance (28 dBmV at 0 dBm input, 4% OMI)
- Demultiplexing back plates available for DWDM applications (up to four receivers per cascable back plate)
- High packaging density (up to 14 receivers per chassis)
- Front access -20dB output test points
- Hot Plug-in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

## SPECIFICATIONS

PHYSICAL		ENVIRONMENTAL	
Dimensions	13.0" D x 4.3" H x 1.0" W (3RU) (33 cm x 11 cm x 2.5 cm)	Operating temperature range	-20° to +65°C (-4° to 149°F)
		Storage temperature range	-40° to +85°C (-40° to 185°F)
Weight	1.5 lbs (0.68 kg)	Humidity	5% to 95% non-condensing
RF AND OPTICAL INTERFACE		ELECTRICAL	
RF output	F-type (female connector at Back Plate)	46–1002 MHz	Passband
		Frequency response	±0.75 dB
		Nominal output level	28 dBmV (@ 0 dBm input, 4% OMI, 1310 nm)
		Output return loss, min	18 dB
RF output test point	G-type (male connector at front panel, -20 dB)	Level stability	±0.25 dB
Optical connector	SC/APC (connector at mid-plane mates to BP-A5 or BP-35D4x)	Level repeatability	±0.5 dB
POWER REQUIREMENTS		GENERAL	
Input voltage	12 VDC	Hot Plug-In / Out	
Power consumption	10 W		

OPTICAL		DISTORTIONS											
Wavelength	1260 nm – 1620 nm	<table><tr><td colspan="3">AR3002G (nominal output level +28 dBmV)</td></tr><tr><td colspan="3">77 CW</td></tr><tr><td></td><td>min</td><td>typ</td></tr></table>			AR3002G (nominal output level +28 dBmV)			77 CW				min	typ
AR3002G (nominal output level +28 dBmV)													
77 CW													
	min	typ											
Input return loss	45 dB												
Optical power input range	PIN (1310/1550 nm), typ: –6 to +2 dBm Max PIN: +6 dBm (damage level)												
Responsivity (1310/1550 nm), nominal	0.85 / 0.95 A/W												
		C/CSO (dB)	71	76									
		C/CTB (dB)	78	82									
		C/XMOD (dB)	74	81									

## ORDERING INFORMATION



### 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:

B	P	-	A	5
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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:

B	P	-	3	5	D	4	*	-	*	-	0	0	-	A	S
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