

# COMMSCOPE AR3002E

## ANALOG FORWARD RECEIVER 1218MHZ

The AR3002E analog receiver supports a forward path passband from 46 to 1218 MHz. Its compact design (single-width module) supports high density and allows the operator to install up to 14 receivers in one 3RU chassis. The output power levels of the AR3002E receiver allow passive RF splitting, saving rack space and increasing reliability.

Alternate network fiber routing is supported via use of two AR3002E receivers and a user-programmable A/B switch that occupies one half-depth slot in the chassis.

- Supports bandwidth up to 1218 MHz
- High RF output with excellent distortion performance (28 dBmV/ch at 0 dBm input, 4% OMI)
- Demultiplexing back plates available for DWDM applications (up to four receivers per cascable back plate)
- Configurable output attenuator, up to 15 dB
- High packaging density (up to 14 receivers per chassis)
- Front access –20 dB output test point
- 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)	Passband	46–1218 MHz
		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	±0.75 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	11 W		

OPTICAL		DISTORTIONS		
Wavelength	1110 nm – 1650 nm	AR3002E (nominal output level +28 dBmV/Ch)		
Input return loss	45 dB	77 CW		
Optical power input range	P <sub>IN</sub> (1310/1550 nm), typ: –6 to +3 dBm Max P <sub>IN</sub> : +6 dBm (damage level)		Min	Typ
		C/CSO (dB)	72	74
		C/CTB (dB)	82	84
		C/XMOD (dB)	70	76
Responsivity (1310/1550 nm), nominal	0.85 / 0.95 A/W			

## ORDERING INFORMATION



### Back Plate Options for AR3002E FPR

When ordering an AR3002E FPR the back plate (optical input interconnect to the chassis mid-plane) must be ordered separately. 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 S

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