

Optical Node Series (NC)

AR4x03G

1 GHz Forward Analog Receivers

FEATURES

- Forward path receivers for NC4000 and NC2000 series Optical Nodes
- Passband options:
54–1002, 70–1002, 51–1002, 85–1002, and 104–1002 MHz
- Optical and RF test points
- LED optical level indicator
- RF pad and EQ plug-ins
- Hot plug in/out
- Local and remote status monitoring capability



PRODUCT OVERVIEW

The AR4x03G series Analog Forward Path Receivers (FPRs) are designed as plug-in modules for ARRIS's NC4000 and NC2000 series Optical Nodes. Forward path receivers convert incoming optical signals (from the Headend or hub) to RF signals that are sent to the RF amplifier tray. These receivers are available for 54–1002, 70–1002, 51–1002, 85–1002, or 104–1002 MHz passbands. One or more AR4x03G modules are shipped with each node—the exact model and quantity dependent on network architecture requirements.

The AR4x03G series receivers are each optimized for four very different applications: North American Fiber Deep Node (54–1002 MHz), Japanese Node (70–1002 MHz), North American Scalable Node (51–1002 MHz), and European Node (85–1002 MHz).

Following optical-to-electrical (O/E) conversion of the incoming optical signals, level and slope control of the RF signal can be adjusted with plug-in pads and equalizers (EQs).

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	4.0" D x 2.2" H x 2.2" W (10.2 cm x 5.6 cm x 5.6 cm)
Weight	0.6 lbs (0.27 kg)
Environmental	
Operating Temperature Range	-40° to +85°C (-40° to 185°F)
Storage Temperature Range	-40° to +85°C (-40° to 185°F)
Humidity	5% to 95% non-condensing
General	
O/E transmission path	
Manual level and slope control	
Hot plug-in/out	
RF and Optical Interface	
RF output	connector at base of module
Optical connectors	SC/APC
Power Requirements	
Input voltage	24 V _{DC}
Power consumption	12 W typical
Optical	
Wavelength	1260 nm – 1620 nm
Optical power input range	-3 to +3 dBm
Electrical	
Passbands	54–1002, 70–1002, 51–1002, 85–1002, or 104–1002 MHz
Frequency response	± 0.5 dB
Nominal output level	36 dBmV (-3 dBm, 3% OMI; EQ installed; 0 dB pad; any λ)
Output return loss	Minimum 16 dB
Level control range	0–12 dB (with plug-in pads)
EQ control range	0–12 dB (with EQ plug-in)
Local Test Facilities	
Optical input level test point	1 ± 0.2 V/mW (2.08 mm sockets)
RF test point	-20 ± 1 dB (F-male)
LED Indicators	
Optical input LED indicator	<ul style="list-style-type: none"> Green (input signal > -9 dBm) Red (input signal < -9 dBm)

ORDERING INFORMATION



Analog Forward Path Receiver for Optical Nodes
* = 0 (54–1002 MHz Passband) 1 (70–1002 MHz Passband) 2 (51–1002 MHz Passband) 4 (85–1002 MHz Passband) 5 (104–1002 MHz Passband)
AS = SC/APC Connector

RELATED PRODUCTS

NC4000 Optical Node	Optical Patch Cords
NC2000 Optical Node	Optical Passives
Fiber Service Cable	Installation Services

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

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