

# Optical Node Series (NC)

AR4503G

1 GHz Forward Analog Receiver  
104-1002 MHz

## FEATURES

- Forward path receiver for NC4000 and NC2000 series Optical Nodes
- Passband: 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



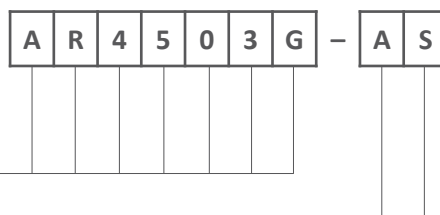
## PRODUCT OVERVIEW

The AR4503G series Analog Forward Path Receiver (FPR) is designed as a plug-in module 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. This receiver features a 104–1002 MHz passband. One or more AR4503G modules are shipped with each node—the exact model and quantity dependent on network architecture requirements.

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
<b>Physical</b>	
Dimensions	4.0" D x 1.4" H x 2.2" W (10.2 cm x 3.6 cm x 5.6 cm)
Weight	0.6 lbs (0.27 kg)
<b>Environmental</b>	
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
<b>General</b>	
O/E transmission path	
Manual level and slope control	
Hot plug-in/out	
<b>RF and Optical Interface</b>	
RF output	connector at base of module
Optical connector	SC/APC
<b>Power Requirements</b>	
Input voltage	24 V <sub>DC</sub>
Power consumption	12 W typical
<b>Optical</b>	
Wavelength	1260 nm – 1620 nm
Optical input power range	-3 to +3 dBm
<b>Electrical</b>	
Passband	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	via plug-in pad (0 to 12 dB)
EQ control	via EQ plug-in (0 to 12 dB)
<b>Local Test Facilities</b>	
Optical input level test point	1 ± 0.2 V/mW (2.08 mm sockets)
RF test point	-20 ± 1 dB (F-male)
<b>LED Indicators</b>	
ALARM: Optical input levels	<ul style="list-style-type: none"> <li>Green (input signal &gt; -9 dBm)</li> <li>Red (input signal &lt; -9 dBm)</li> </ul>

## ORDERING INFORMATION



## RELATED PRODUCTS

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