

MODEL
HEADEND OPTICS
PLATFORM (CH3000)

AR3044L
QUAD STANDARD GAIN ANALOG
RETURN RECEIVER (300 MHz)



FEATURES

- Supports DOCSIS® 3.1 HFC architectures
- 5–300 MHz RF bandwidth
- High optical input range: –15 to 0 dBm
- High RF output level to support splitting/combining
- Manual gain control (MGC) and Automatic level control (ALC) RF gain control options
- High packaging density (up to 56 receivers per chassis)
- Front access –20 dB output test port
- Hot plug-in/out
- Local and remote status monitor capability
- Occupies one full-depth slot



PRODUCT OVERVIEW

The AR3044L provides four standard gain analog return path receivers in a single chassis module in support of HFC architectures. The high output power of the AR3044L allows passive RF splitting and increases system design flexibility.

The compact single-width module design of the AR3044L allows the operator to install up to 56 return path receivers in one 3RU chassis. This approach minimizes rack space requirements in the headend and hubs, and enhances deployment of HFC networks.

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions (without connectors)	13.0" D x 4.3" H x 1.0" W (3RU) (33 cm x 11 cm x 2.5 cm)
Weight	1.6 lbs (0.72 kg)
Environmental	
Operating Temperature Range	-20° to +65°C (-4° to 149°F)
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)
Humidity	5% to 95% non-condensing
RF and Optical Interface	
4 RF outputs	F-type (female connectors at Back Plate BP-A10)
RF output test point	Selectable for each input port. G-type (male connector at front panel, -20 dB)
Optical connectors	LC/APC (at Back Plate BP-A10)
Power Requirements	
Input voltage	12 V _{DC}
Current consumption	14.5 W
Electrical	
Pass band	5–300 MHz
Frequency response	± 0.5 dB
Recommended output level	44 dBmV with -15 dBm optical input; 30% OMI, MGC mode, RF attenuation = 24 dB
Nominal output level	54 dBmV with -15 dBm optical input; 30% OMI, MGC mode, RF attenuation = 14 dB
Output return loss	18 dB minimum
Level stability	± 1 dB
Gain control range	26 dB minimum
Gain control step	1.0 dB nominal
Optical	
Wavelength	1260–1620nm
Input return loss	45 dB
Optical power input range (P _{IN})	-15 to 0 dBm
General	
Hot plug-in/out	
Manual Gain Control (MGC) and Automatic Level Control (ALC) options	

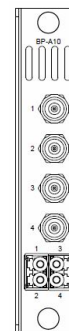
ORDERING INFORMATION

Part Number	Description
AR3044L-0-AL	Quad Standard Gain Analog Return Receiver (300 MHz). Requires BP-A10 Back Plate, which is included with the AR3044L-0-AL product.

RELATED PRODUCTS

CH3000 Chassis	Optical Passives
Installation Services	Optical Patch Cords

BP-A10
Back Plate



Note: Specifications are subject to change without notice.

Copyright Statement: ©ARRIS Enterprises, LLC, 2016. All rights reserved. No part of this publication may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from ARRIS Enterprises, LLC ("ARRIS"). ARRIS reserves the right to revise this publication and to make changes in content from time to time without obligation on the part of ARRIS to provide notification of such revision or change. ARRIS and the ARRIS logo are registered trademarks of ARRIS Enterprises, LLC. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks or the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.