



Legacy LN-SM7 Nodes

Replacement DFB Single Return Path Transmitter Modules



The ARRIS LN-SM7 1310 nm and 1550 nm DFB single return path transmitter modules are designed for the ARRIS legacy LN-SM7 nodes. The plug and play modules upgrade the node from an FP to a DFB laser, providing DOCSIS 3.0 capability on the return path without service interruption.

The LN-SM7 DFB single return path transmitter modules have low power consumption and good heat dissipation, increasing service life and reliability. A convenient DC test point provides an indicator of optical output power (1V/mW).

ARRIS solutions for 1 GHz upgrades include the Opti Max3100 2 x 2 segmentable node and Opti Max4100 4 x 4 segmentable node. Please contact your ARRIS sales representative for more information on these products.

Features

- 1310 nm optical power at 2 mW
- 1550nm optical power at 2.5 mW
- DC test point

Legacy LN-SM7 Nodes Replacement DFB Single Return Path Transmitter Modules

Specifications

Physical

Operating Temperature °F (°C) (ambient temperature around the node)	-38 °F to +140 °F (-40 °C to +60 °C)
--	--------------------------------------

RF Input and Performance Parameters

Frequency Response Range (± 1.0 dB)	5–220 MHz
NPR	>15 dB over 41 dB NPR*
Input return Loss	16 dB

Optical Output Parameters:

Optical Output (DFB)	2.0 mW at 1310 nm 2.5 mW at 1550 nm
Return Loss	>60 dB with APC Connector
Optical Connector	SC/APC, FC/APC, SC/UPC, FC/UPC

User Interface

Optical Output Level	1 V/mW
Laser On Indicator	LED
Input Level Control	SXP Pad

Powering

Single Transmitter Module	24 V, 65 mA
---------------------------	-------------

Ordering Information

LN-SM7—1310 nm DFB Analog Return Transmitter 2.0 mW

Base P/N	Connector Type
1504741-001	SC/APC
1504741-002	SC/UPC
1504741-003	FC/APC
1504741-004	FC/UPC

LN-SM7—1550 nm DFB Analog Return Transmitter 2.5 mW

Base P/N	Connector Type
1504743-001	SC/APC
1504743-002	SC/UPC
1504743-003	FC/APC
1504743-004	FC/UPC

The capabilities, system requirements, and/or compatibility with third-party products described herein are subject to change without notice. ARRIS, the ARRIS logo, C3™, C4™, CableEdge®, Cadant®, C-COR®, CHP Max®, Cornerstone®, CXM™, D5™, Digicon®, Flex Max®, Keystone™, MONARCH®, n5™, nABLE™, NSM™, nVision®, PLEXIS®, Regal®, ServAssure™, TeleWire Supply®, Touchstone®, VoiceAssure™, and WorkAssure™ are all trademarks of ARRIS Group, Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. © Copyright 2008 ARRIS Group, Inc. All rights reserved. Reproduction in any manner whatsoever without the express written permission of ARRIS Group, Inc., is strictly forbidden. For more information, contact ARRIS. 21 March 2008.

