

Optical Node Series

TR4440B-xxxx-PI

CWDM Optical Transceiver Module (SFP)

FEATURES

- Interconnects ARRIS digital transport devices
- Media converter access products for links up to 60 km
- Selected node-based Digital Transceivers (models DT4xxxN and DT4250N) for links up to 60 km
- Enables Ethernet drops from fiber node platforms
- For 1 Gbps and 2.125 Gbps data throughput
- Pluggable SFP MSA footprint
- Duplex LC connector
- Very low jitter
- Metal enclosure for lower EMI
- 3.3 V power supply with low power dissipation
- Extended operating temperature range



PRODUCT OVERVIEW

ARRIS TR4440B series CWDM Optical Transceiver Modules feature high-speed communications functionality required for selected ARRIS digital networking products such as media converter access products, legacy DT4xxxN Digital Transceivers, DT5000 transceivers, and the DT4250N Universal Digital Transceiver. These modules are functionally identical to various transceivers already built into many of ARRIS's products, but provide a flexible, plug-in means of enabling additional optional secondary ports in several of those products.

Conforming to the Small Form Factor Pluggable (SFP) Multisource Agreement, these state-of-the-art components are designed expressly for high-speed bi-directional communication applications that require rates from 1 Gbps to 2.125 Gbps, with the laser transmission portion of the device operating at one of 15 available ITU-compliant (G.694.2) CWDM wavelengths.

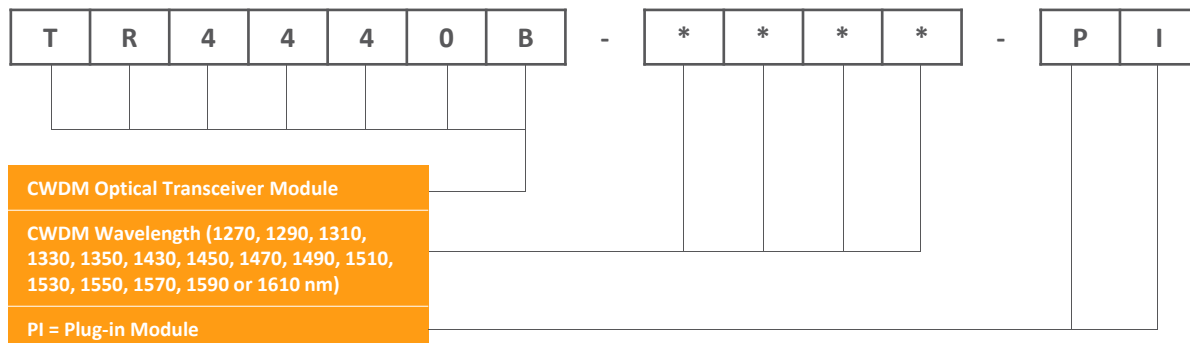
TR4440B series modules feature a very low jitter contribution, resulting in extremely clean, high-quality eye patterns. And the modules' metal enclosure not only makes them sturdier, but also improves their FCC test margins. This emission and ESD control is particularly important in applications with sensitive multiport hubs and switches. The modules, which dissipate less than 1.75 W, are supplied with a duplex LC connector.

TR4440B series modules can be ordered as an optional plug-in transceiver module to activate the primary or secondary ring capabilities of transceiver units in NC4000 series nodes. TR4440B series modules may also be used to populate the DS4004 Optical Ethernet Multiplexer module for NC4000 series nodes as well as a variety of other products from ARRIS (e.g., GE4132M, GT3410A, and MC2710B).

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	2.2" L x 0.4" H x 0.5" W (5.6 cm x 1.0 cm x 1.3 cm)
Weight	0.1 lbs (0.05 kg)
Environmental	
Application temperature range	-40°C to +85°C (-40°F to +185°F)
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)
Humidity	5% to 95% non-condensing
Optical Interface	
Optical connectors	Duplex LC
Power Requirements	
Input voltage	3.3 V _{DC}
Power consumption	1.75 W max
General	
Supported link length	60 km (on SMF-28 or equivalent) Note: This is strictly a dispersion limitation. Actual transmission distance is also dictated by the power budget of each transmission link.
Data rate	From 1 Gbps to 2.125 Gb/s
Hot plug	in/out
Optical Interface	
Transmitter:	
Transmitter type	Uncooled CWDM DFB
CWDM optical wavelengths	15 (five in the range 1270, 1290, ..., 1350, and ten in the range 1430, 1450, . . . , 1610 nm)
Optical output power	-1 dBm min
Optical extinction ratio (ER)	9 dB min
Receiver:	
Receiver sensitivity at 2X FC	-21 dBm max (measured with a PRBS of 2 ⁷ -1 at 1x10 ⁻¹² BER and 9.0 dB extinction ratio)
Maximum input power	-3 dBm
Optical center wavelength	1260 nm min, 1620 nm max
Regulatory	Class 1 devices per FDA/CDRH and IEC-825-1 laser safety regulations

ORDERING INFORMATION



RELATED PRODUCTS

Digital Return Transmitter	Optical Patch Cords
Optical Nodes	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.

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.