



CHP Max® Return Receivers

CHP- D1RRX and -D2RRX Digital Return Receivers Single Slot Modules

Specifications	CHP-D1RRX	CHP-D2RRX-42-MQ/-MD
Optical		
Input Wavelength Range	1200 to 1620 nm	1200 to 1620 nm
Optical Power Input Range	-28 to -10 dBm	-22 to -0 dBm
Optical Connector	SC/APC (8 degrees)	SC/APC (8 degrees)
Optical Return Loss	≥55 dB	≥55 dB
RF		
RF Output Bandpass	5 to 42 MHz	5 to 42 MHz
Output and Testpoint Impedance	75Ω	75Ω
CW Output Level (For 12dBmV/6MHz at Tx input, 0dB attenuation; RX at max. gain), OM4100/OM3100	44/42 dBmV	44/42 dBmV
Gain Stability over Temperature	± 0.5 dB	± 0.5 dB
Quantizing Noise and Spurs (below 500MHz)	-50 dBc	-50 dBc
Flatness	±0.50 dB	±0.50 dB
Output and Testpoint Return Loss, min.	16 dB	16 dB
RF Testpoint	-20 dB ± 0.5 dB	-20 dB ± 0.5 dB
Redundancy and Attenuator		
Redundancy Switching Time	<50 ms	<50 ms
Programmable RF Attenuator Range	0 to 16.0 dB in 0.5 dB steps	0 to 30.0 dB in 1.0 dB steps
Programmable RF Attenuator Resolution	0.5 dB per step	1.0 dB per step
Programmable RF Attenuator Accuracy	±0.20 dB	±0.20 dB
Performance		
Noise-Power Ratio (NPR), typical/min.	50/48 dB	50/48 dB
Dynamic Range, typical @ ≥40 NPR, typical/min.	18/16 dB	18/16 dB
BER Dynamic Range, @ ≥10 ⁻⁶ BER	28 dB (64-QAM), 34 dB (16-QAM), 45 dB (QPSK)	28 dB (64-QAM), 34 dB (16-QAM), 45 dB (QPSK)
RF Link Gain, 0dB input attenuation at Tx, max. gain at Rx, 32 /30 dB OM4100/OM3100		32 /30 dB
Link Flatness, typical/min.	±0.75 dB/±1.0 dB	±0.75 dB/±1.0 dB
Power		
Power Consumption (typical/max.)	11.6/14.0 W	13.0/16.0 W

CHP- D1RRX and -D2RRX Digital Return Receivers

Specifications	CHP-D1RRX	CHP-D2RRX-42-MQ/-MD
Mechanical		
Dimensions (W x H x D)	3.18 x 8.74 x 46.99 cm (1.25 x 3.44 x 18.5 in)	3.18 x 8.74 x 46.99 cm (1.25 x 3.44 x 18.5 in)
Weight	1.35 kg (3.0 lbs)	1.35 kg (3.0 lbs)
Environmental		
Operational Temperature Range, °C (°F)	0 to 50(32 to 122)	0 to 50(32 to 122)
Storage Temperature Range, °C (°F)	-40 to 85 (-40 to 185)	-40 to 85 (-40 to 185)
Humidity, max., non-condensing	5 to 90%	5 to 90%

Ordering Information

To configure a product that meets your specific needs, or for any questions, please contact your ARRIS Sales Professional. You may also use our Product Wizard, located at support.arrisi.com (User ID and password required). If you do not have a user ID and password or have forgotten your password, please use the Sign In Help section indicated.

Specifications are subject to change without notice.

The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice. ARRIS, the ARRIS logo, Auspice®, C3™, C4®, C4c™, Cadant®, C-COR®, CHP Max5000®, ConvergeMedia™, Cornerstone®, CORWave™, CXM™, D5®, Digicon®, ENCORE®, Flex Max®, HEMI®, Keystone™, MONARCH®, MOXI®, n5®, nABLE®, nVision®, OpsLogic®, OpsLogic® Service Visibility Portal™, PLEXIS®, PowerSense™, QUARTET®, Regal®, ServAssure™, Service Visibility Portal™, TeleWire Supply®, TLX®, Touchstone®, VIPr™, VSM™, 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 2011 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.



www.arrisi.com