



Small Form-factor Pluggable (SFP) for Digital Processing Module of the 2:1 Digital Return Transmitter Technical Specification

Opti Max3100 & Opti Max4100 SFP Technical Specifications

Characteristic	Specification ¹		
	Min.	Typ.	Max.
DWDM (120km) SFP Specifications			
Input Differential Impedance, ohm	80	100	120
Data Rate, Gbps		3.2	
Transmitter Differential Input Voltage, mV	500	—	2400
Transmitter Output Power, dBm	0	—	4
Transmitter Extinction Ratio, dB	8.2	—	—
Transmitter Jitter, peak to peak, mUI	—	—	75
Center Wavelength Spacing, GHz	100 (approximately 0.8nm)		
Transmitter Center Wavelength — Start of Life, pm	ITU-25	ITU	ITU+25
Transmitter Center Wavelength — End of Life, pm	ITU-100	ITU	ITU+100
Spectral Width (-20dB), nm	—	0.2	0.3
Side Mode Suppression Ratio (SMSR), dB	35	—	—
Relative Intensity Noise (RIN), dB/Hz	—	—	-120
CWDM (60km) SFP Specifications			
Input Differential Impedance, ohm	80	100	120
Receiver Sensitivity, dBm			-20
Data Rate, Gbps		3.2	
Transmitter Differential Input Voltage, mV	500	—	2400
Transmitter Output Power, dBm	0	—	5
Transmitter Extinction Ratio, dB	8.2	—	—
Transmitter Jitter, peak to peak, mUI	—	—	75
Center Wavelength Spacing, nm	—	20	—
Spectral Width (-20dB), nm	—	0.2	0.3
Side Mode Suppression Ratio (SMSR), dB	35	—	—
Relative Intensity Noise (RIN), dB/Hz	—	—	-120
Environmental			
Case Operating Temperature, °C (°F)	-40 to 92 (-40 to 197.6°F)		
Storage Temperature, °C (°F)	-40 to 85 (-40 to 185°F)		
Storage Relative Humidity, %	5		95

1. ARRIS guarantees digital return link performance specification only when using an ARRIS supplied SFP.

Opti Max3100 & Opti Max4100 Small Form-factor Pluggable (SFP) Optical Transceiver/ Transmitter

Part Number	Description
DWDM SFP Transmitters (120km)¹	
1505605-0015	SFP Environment Hardened 92°C, 120km, 1565.50nm LC/PC DWDM Transmitter
1505605-0016	SFP Environment Hardened 92°C, 120km, 1564.68nm LC/PC DWDM Transmitter
1505605-0017	SFP Environment Hardened 92°C, 120km, 1563.86nm LC/PC DWDM Transmitter
1505605-0018	SFP Environment Hardened 92°C, 120km, 1563.05nm LC/PC DWDM Transmitter
1505605-0019	SFP Environment Hardened 92°C, 120km, 1562.23nm LC/PC DWDM Transmitter
1505605-0020	SFP Environment Hardened 92°C, 120km, 1561.42nm LC/PC DWDM Transmitter
1505605-0021	SFP Environment Hardened 92°C, 120km, 1560.61nm LC/PC DWDM Transmitter
1505605-0022	SFP Environment Hardened 92°C, 120km, 1559.79nmLC/PC DWDM Transmitter
1505605-0023	SFP Environment Hardened 92°C, 120km, 1558.98nm LC/PC DWDM Transmitter
1505605-0024	SFP Environment Hardened 92°C, 120km, 1558.17nm LC/PC DWDM Transmitter
1505605-0025	SFP Environment Hardened 92°C, 120km, 1557.36nm LC/PC DWDM Transmitter
1505605-0026	SFP Environment Hardened 92°C, 120km, 1556.56nm LC/PC DWDM Transmitter
1505605-0027	SFP Environment Hardened 92°C, 120km, 1555.75nm LC/PC DWDM Transmitter
1505605-0028	SFP Environment Hardened 92°C, 120km, 1554.94nm LC/PC DWDM Transmitter
1505605-0029	SFP Environment Hardened 92°C, 120km, 1554.13nm LC/PC DWDM Transmitter
1505605-0030	SFP Environment Hardened 92°C, 120km, 1553.33nm LC/PC DWDM Transmitter
1505605-0031	SFP Environment Hardened 92°C, 120km, 1552.52nm LC/PCDWDM Transmitter
1505605-0032	SFP Environment Hardened 92°C, 120km, 1551.72nm LC/PC DWDM Transmitter
1505605-0033	SFP Environment Hardened 92°C, 120km, 1550.92nm LC/PC DWDM Transmitter
1505605-0034	SFP Environment Hardened 92°C, 120km, 1550.12nm LC/PC DWDM Transmitter
1505605-0035	SFP Environment Hardened 92°C, 120km, 1549.32nmLC/PC DWDM Transmitter
1505605-0036	SFP Environment Hardened 92°C, 120km, 1548.51nm LC/PC DWDM Transmitter\
1505605-0037	SFP Environment Hardened 92°C, 120km, 1547.72nm LC/PC DWDM Transmitter
1505605-0038	SFP Environment Hardened 92°C, 120km, 1546.92nm LC/PC DWDM Transmitter
1505605-0039	SFP Environment Hardened 92°C, 120km, 1546.12nm LC/PC DWDM Transmitter
1505605-0040	SFP Environment Hardened 92°C, 120km, 1545.32nm LC/PC DWDM Transmitter
1505605-0041	SFP Environment Hardened 92°C, 120km, 1544.53nm LC/PC DWDM Transmitter
1505605-0042	SFP Environment Hardened 92°C, 120km, 1543.73nm LC/PC DWDM Transmitter
1505605-0043	SFP Environment Hardened 92°C, 120km, 1542.94nm LC/PC DWDM Transmitter
1505605-0044	SFP Environment Hardened 92°C, 120km, 1542.14nm LC/PC DWDM Transmitter
1505605-0045	SFP Environment Hardened 92°C, 120km, 1541.35nm LC/PC DWDM Transmitter
1505605-0046	SFP Environment Hardened 92°C, 120km, 1540.56nmLC/PC DWDM Transmitter
1505605-0047	SFP Environment Hardened 92°C, 120km, 1539.77nm LC/PC DWDM Transmitter
1505605-0048	SFP Environment Hardened 92°C, 120km, 1538.98nm LC/PC DWDM Transmitter
1505605-0049	SFP Environment Hardened 92°C, 120km, 1538.19nm LC/PC DWDM Transmitter

Opti Max3100 & Opti Max4100 Small Form-factor Pluggable (SFP) Optical Transceiver/ Transmitter (Continued)

Part Number	Description
1505605-0050	SFP Environment Hardened 92°C, 120km, 1537.40nm LC/PC DWDM Transmitter
1505605-0051	SFP Environment Hardened 92°C, 120km, 1536.61 nm LC/PC DWDM Transmitter
1505605-0052	SFP Environment Hardened 92°C, 120km, 1535.82nm LC/PC DWDM Transmitter
1505605-0053	SFP Environment Hardened 92°C, 120km, 1535.04nm LC/PC DWDM Transmitter
1505605-0054	SFP Environment Hardened 92°C, 120km, 1534.25nm LC/PC DWDM Transmitter
1505605-0055	SFP Environment Hardened 92°C, 120km, 1533.47nm LC/PC DWDM Transmitter
1505605-0056	SFP Environment Hardened 92°C, 120km, 1532.68nm LC/PC DWDM Transmitter
1505605-0057	SFP Environment Hardened 92°C, 120km, 1531.90nm LC/PC DWDM Transmitter
1505605-0058	SFP Environment Hardened 92°C, 120km, 1531.12nm LC/PC DWDM Transmitter
1505605-0059	SFP Environment Hardened 92°C, 120km, 1530.33nm LC/PC DWDM Transmitter
1505605-0060	SFP Environment Hardened 92°C, 120km, 1529.55nm LC/PC DWDM Transmitter
1505605-0061	SFP Environment Hardened 92°C, 120km, 1528.77nm LC/PC DWDM Transmitter
1505605-0062	SFP Environment Hardened 92°C, 120km, 1527.99nm LC/PC DWDM Transmitter

CWDM SFP Transceivers (40km)¹

1506017-0029	SFP Environment Hardened 92°C, 40km, 20dB, 1291 nm LC/PC CWDM Transceiver
1506017-0031	SFP Environment Hardened 92°C, 40km, 20dB, 1311 nm LC/PC TCWDM ransceiver
1506017-0033	SFP Environment Hardened 92°C, 40 km, 20dB, 1331 nm LC/PC CWDM Transceiver
1506017-0035	SFP Environment Hardened 92°C, 40 km, 20dB, 1351 nm LC/PC CWDM Transceiver
1506017-0037	SFP Environment Hardened 92°C, 40km, 20dB, 1371 nm LC/PC CWDM Transceiver
1506017-0039	SFP Environment Hardened 92°C, 40 km, 20dB, 1391 nm LC/PC CWDM Transceiver
1506017-0041	SFP Environment Hardened 92°C, 40 km, 20dB, 1411 nm LC/PC CWDM Transceiver
1506017-0043	SFP Environment Hardened 92°C, 40km, 20dB, 1431 nm LC/PC CWDM Transceiver
1506017-0045	SFP Environment Hardened 92°C, 40 km, 20dB, 1451 nm LC/PC CWDM Transceiver
1506017-0047	SFP Environment Hardened 92°C,40km, 20dB, 1471 nm LC/PC CWDM Transceiver
1506017-0049	SFP Environment Hardened 92°C, 40km, 20dB, 1491 nm LC/PC CWDM Transceiver
1506017-0051	SFP Environment Hardened 92°C, 40 km, 20dB, 1511 nm LC/PC CWDM Transceiver
1506017-0053	SFP Environment Hardened 92°C, 40 km, 20dB, 1531 nm LC/PC CWDM Transceiver
1506017-0055	SFP Environment Hardened 92°C, 40km, 20dB, 1551 nm LC/PC CWDM Transceiver
1506017-0057	SFP Environment Hardened 92°C, 40 km, 20dB, 1571 nm LC/PC CWDM Transceiver
1506017-0059	SFP Environment Hardened 92°C, 40 km, 20dB, 1591 nm LC/PC CWDM Transceiver
1506017-0061	SFP Environment Hardened 92°C, 40km, 20dB, 1611 nm LC/PC CWDM Transceiver

Fiber Optic Pigtailes with Bulkhead Connectors

1505887	Kit, Opti Max3100 LC/UPC TO SC/APC 1.6mm jacketed
1505888	Kit, Opti Max3100 LC/UPC TO SC/UPC 1.6mm jacketed
1505893	Kit, Opti Max3100 LC/UPC TO SC/APC 1.6mm buffered
1505894	Kit, Opti Max3100 LC/UPC TO SC/UPC 1.6mm buffered

1. Must order fiber optic pigtail with bulkhead connectors.

Refer to the Opti Max3100 Equipment Manual (P/N 1501843) and the Opti Max4100 Equipment Manual (P/N 1500349) for more information.

Ordering Information

To configure a product that meets your specific needs, or for any questions, please contact your ARRIS Sales Professional.

www.arrisi.com

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 Max™, 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®, EGT VIPr®, VoiceAssure™, 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 2010 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.