

# Technical Specifications

## DFB Laser Replacements for LNSM7 Nodes

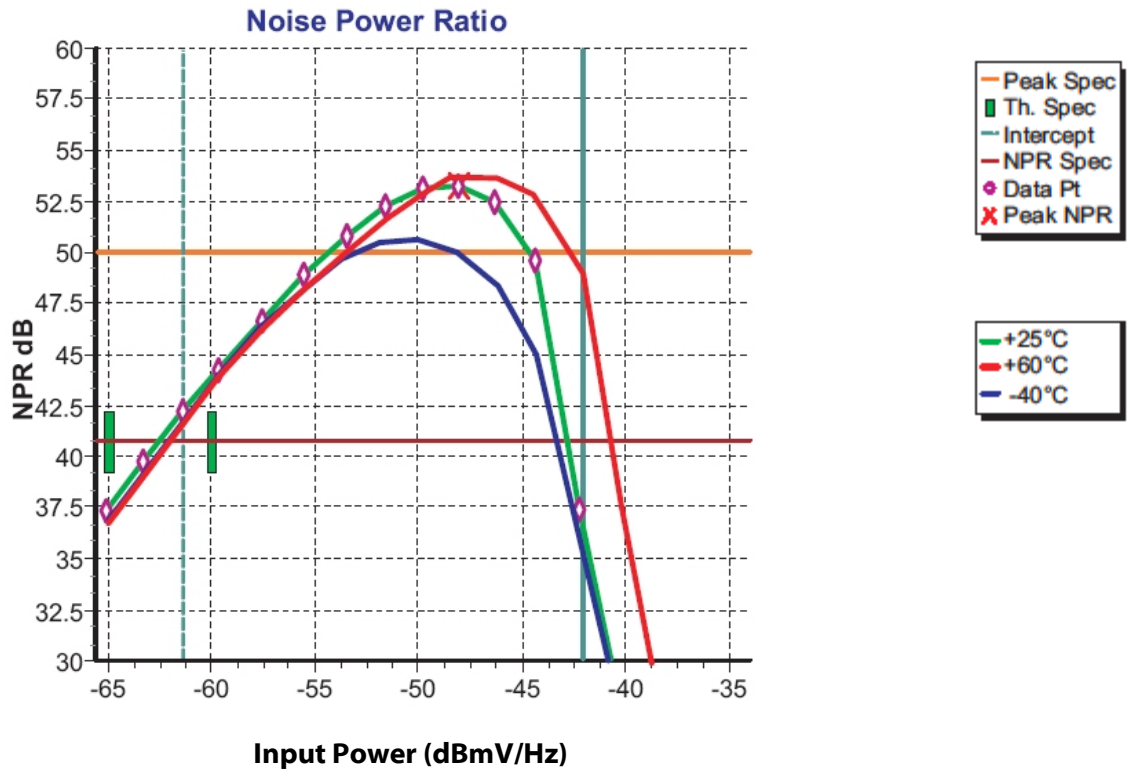
Technical Specifications for DFB Analog Return Path Transmitter Replacements for LNSM7 Nodes			
Specifications	1310 DFB	1550 DFB	1471-1611nm - 8 CWDM Channels – 20nm Spaced
<b>Optical</b>			
Output Power, mW <sup>1</sup>	2.0	2.0	2.5
Return Loss	>60 dB with APC connector	>60 dB with APC connector	>60 dB with APC connector
Laser Type, Isolated Uncooled	DFB	DFB	DFB
Transmitted Wavelength, nm	1310 ± 20	1550 ± 25	CWDM ITU Channel ± 7.5
Optical Power Voltage Testpoint	1 mW/V	1 mW/V	1 mW/V
<b>RF</b>			
Impedance, Ω	75	75	75
RF Bandpass, MHz	5 to 220	5 to 220	5 to 220
Return Loss, dB	16	16	16
<b>Performance</b>			
NPR, dB <sup>2</sup>	>15 dB over 41 dB NPR	>15 dB over 41 dB NPR	>15 dB over 41 dB NPR
<b>Powering</b>			
Supply Voltage, V <sub>DC</sub>	24 ± 0.5	24 ± 0.5	24 ± 0.5
Current Draw, mA, typ.	65	65	65
<b>Physical</b>			
Laser On Indicator	LED	LED	LED
Input Level Control	Pad	Pad	Pad
Optical Connector Types	SC/APC, FC/APC, SC/UPC, FC/UPC		
Operating Temperature, °C <sup>3</sup>	-40 to 60	-40 to 60	-40 to 55
H x W x D, in. (cm)	6.3 x 4.7 x 10.1 (16.0 x 11.9 x 25.65)	6.3 x 4.7 x 10.1 (16.0 x 11.9 x 25.65)	6.3 x 4.7 x 10.1 (16.0 x 11.9 x 25.65)
Weight, packaged, lbs (kg)	1.44 (0.65)	1.44 (0.65)	1.44 (0.65)

<sup>1</sup>Measured at output of bulkhead connector

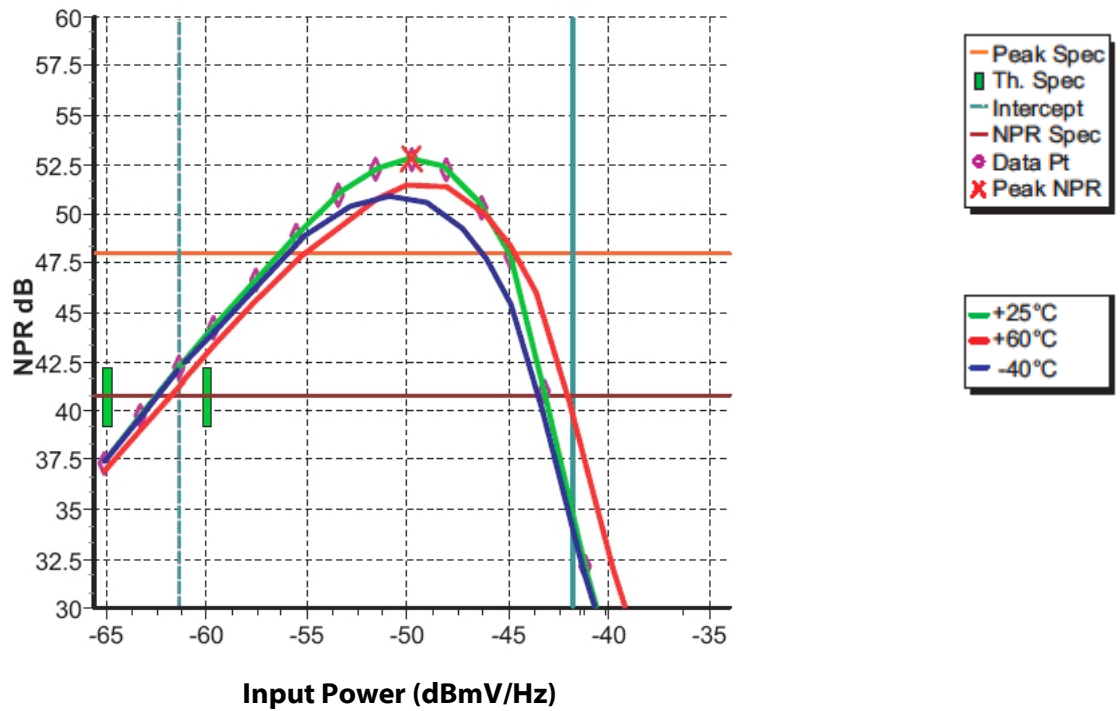
<sup>2</sup>Measured over 17 km fiber link using 35 MHz channel loading

<sup>3</sup>Node Operational temperature specification

## 1310 nm DFB - NPR Curve



## 1550 nm DFB/CWDM - NPR Curve



## Ordering Matrix for DFB Laser Replacements

1506019-001	1471 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/APC
1506019-002	1471 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/UPC
1506019-003	1471 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/APC
1506019-004	1471 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/UPC
1506020-001	1491 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/APC
1506020-002	1491 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/UPC
1506020-003	1491 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/APC
1506020-004	1491 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/UPC
1506021-001	1511 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/APC
1506021-002	1511 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/UPC
1506021-003	1511 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/APC
1506021-004	1511 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/UPC
1506023-001	1531 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/APC
1506023-002	1531 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/UPC
1506023-003	1531 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/APC
1506023-004	1531 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/UPC
1506024-001	1551 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/APC
1506024-002	1551 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/UPC
1506024-003	1551 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/APC
1506024-004	1551 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/UPC
1506025-001	1571 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/APC
1506025-002	1571 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/UPC
1506025-003	1571 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/APC
1506025-004	1571 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/UPC
1506026-001	1591 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/APC
1506026-002	1591 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/UPC
1506026-003	1591 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/APC
1506026-004	1591 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/UPC
1506027-001	1611 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/APC
1506027-002	1611 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW SC/UPC
1506027-003	1611 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/APC
1506027-004	1611 nm LEGACY LN-SM7 CWDM ANALOG RETURN TX 2.5mW FC/UPC
1504741-001	1310 nm DFB ANALOG RETURN TX 2.0mW SC/APC LN-SM7
1504741-002	1310 nm DFB ANALOG RETURN TX 2.0mW SC/UPC LN-SM7
1504741-003	1310 nm DFB ANALOG RETURN TX 2.0mW FC/APC LN-SM7
1504741-004	1310 nm DFB ANALOG RETURN TX 2.0mW FC/UPC LN-SM7
1504743-001	1550 nm DFB ANALOG RETURN TX 2.5mW SC/APC LN-SM7
1504743-002	1550 nm DFB ANALOG RETURN TX 2.5mW SC/UPC LN-SM7
1504743-003	1550 nm DFB ANALOG RETURN TX 2.5mW FC/APC LN-SM7
1504743-004	1550 nm DFB ANALOG RETURN TX 2.5mW FC/UPC LN-SM7