



CHP Max5000™ Front Fiber Single Return Path Receivers (CHP-1RRX) Technical Specification

CHP-1RRX Specifications

	CHP-1RRX-S
Optical Specifications	
Input Wavelength Range	1200 to 1620nm
Optical Input Range	-20 to 3 dBm
RF Specifications	
RF Output Bandwidth	5 to 200MHz
RF Output Power Level, min., per channel ^{1,2}	40dBmV, with -9 dBm input and 7% OMI from return TX
Frequency Response Flatness, peak-to-valley	±0.75 dB
Frequency Response Slope, highest frequency to lowest	±1.0 dB
RF Gain Adjustment Range	0 to 31.5 in 0.5 dB steps
Return Loss, min.	16 dB with RF output enabled; 14 dB with RF output disabled
RF Testpoint	-20 ± 0.5 dB
Performance Specifications	
Equivalent Noise Input, max.	7 pA/Hz ^{0.5}
Second Order Distortion, max. ^{1,3}	-60 dBc
Third Order Distortion, max. ^{1,3}	-60 dBc
Bit Error Rate (link) ⁴	for link: < 1 x 10 ⁻⁸
Noise-Power Ratio (NPR)/Dynamic Range (link) ^{5,6}	40/15 dB
Power Consumption	3.4W
Mechanical Specifications	
Dimensions (W x H x D)	1.25 x 3.44 x 18.5 in. (3.18 x 8.74 x 46.99 cm)
Environmental Specifications	
Operational Temperature Range	32 to 122°F (0 to 50°C)

1. Measured with CW carriers.
2. Tested with a C-COR NRT-WB2HP return transmitter with 8 dBmV/channel at transmitter testpoint.
3. Two laser test, 40% OMI, 0.5 mW per laser.
4. When tested with 16-QAM modulation and a C-COR NRT-WB2HP return transmitter with 8 dBmV/channel at transmitter testpoint over an operational input range of -9 to 0 dBm optical input. The CHP Max5000 receiver should have no contribution to link BER.
5. NPR of >40 dB with a BER of < 1 x 10⁻⁶.
6. No contribution to link NPR when tested with a C-COR NRT-WB2HP return transmitter over an operational input range of -9 to 0 dB.

Ordering Information

Standard Single Channel Return Path Receiver

				1						2
C	H	P	-	1	R	R	X	-	S	

1	Number of Receivers
1	Single receiver

2	Connector Type
S	SC/APC

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