



# CHP Max5000™ Dual Return Path Receivers

## CHP-2RRX, CHP-R2RR, CHP-L2RR

### Technical Specifications

#### Technical Specifications

	Standard Dual Return Path Receiver (CHP-2RRX-S)	Redundant Dual Return Path Receiver (CHP-R2RR-S)	Low Noise Dual Return Path Receiver (CHP-L2RR-S)
<b>Optical Specifications</b>			
Input Wavelength Range	1260 to 1620 nm	1260 to 1620 nm	1260 to 1620 nm
Optical Input Range	-20 to 3 dBm	-13 to 3 dBm	-26 to -10 dBm
<b>RF Specifications</b>			
RF Output Bandwidth	5 to 200 MHz	5 to 200 MHz	5 to 100 MHz
RF Output Power Level, min., per channel (Notes 1 and 2)	40dBmV, with -9 dBm input and 7% OMI from return TX	38dBmV, with -13 dBm input and 7% OMI from return TX	28 dBmV, with -21 dBm input and 7% OMI from return TX
Frequency Response Flatness, peak-to-valley	±0.75 dB	±0.75 dB	±0.75 dB
Frequency Response Slope, highest frequency to lowest	±1.0 dB	±1.0 dB	±1.0 dB
RF Gain Adjustment Range	0 to -31.5 in 0.5 dB steps	0 to -31.5 in 0.5 dB steps (Note 3)	0 to -31.5 in 0.5 dB steps
Return Loss, min.	16 dB	16 dB	16 dB
RF Testpoint	-20 ± 0.5 dB	-20 ± 0.5 dB	-20 ± 0.5 dB
<b>Performance Specifications</b>			
Equivalent Noise Input, max.	7pA/Hz <sup>0.5</sup>	7pA/Hz <sup>0.5</sup>	<1.5 pA/Hz <sup>0.5</sup> (See Note 4)
Channel-to-Channel Isolation, RF Output Bandwidth	> 65dB	> 65dB	> 65dB
Power Consumption	7 W	7 W	16 W
<b>Mechanical Specifications</b>			
Dimensions (W x H x D)	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. (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)
<b>Environmental Specifications</b>			
Operational Temperature Range	32 to 122°F (0 to 50°C)	32 to 122°F (0 to 50°C)	32 to 122°F (0 to 50°C)

#### Notes:

1. Measured with CW carriers.
2. RF output for CHP-2RRX-S is based on 23 16-QAM channels with an optical input of -9 dBm at 7% OMI. RF output for CHP-R2RR-S is based on 23 16-QAM channels with an optical input of -13dBm at 7% OMI. Tested with a C-COR NRT-WB2HP return transmitter with 8dBmV/channel at transmitter testpoint. RF output for the CHP-L2RR is based on an optical input of -21 dBm and a transmitter OMI of 7%.
3. The attenuator for each channel may be adjusted in 0.5dB steps from 0 to 31.5dB. However, the RF output level stability specification may not be met at the attenuator setting of 30.5, 31.0, or 31.5dB over the operating temperature range.
4. <1.5 pA/Hz<sup>0.5</sup> from 5 to 100 MHz, <1.3 pA/Hz<sup>0.5</sup> from 5 to 42 MHz.

# CHP Max5000 Dual Return Path Receivers

## Ordering Information

### Standard Dual Return Path Receiver

				<b>1</b>						<b>2</b>
C	H	P	-	2	R	R	X	-		S

1 No. of Receivers
2 Dual receivers

2 Connector Type
S SC/APC

### Redundant Dual Return Path Receiver

				<b>1</b>	<b>2</b>					<b>3</b>
C	H	P	-	R	2	R	R	-		S

1 Receiver Type
R Redundant receivers

2 No. of Receivers
2 Dual receivers

3 Connector Type
S SC/APC

### Low Noise Dual Return Path Receiver

				<b>1</b>	<b>2</b>					<b>3</b>
C	H	P	-	L	2	R	R	-		S

1 Receiver Type
L Low noise

2 No. of Receivers
2 Dual receivers

3 Connector Type
S SC/APC

Note: Requires two modules for redundant operation. Must use CHP-RCL2-xx cable connected between modules for redundant operation.

### Redundancy Cable

										<b>1</b>	<b>2</b>
C	H	P	-	R	C	L	2	-	x	x	

1-2 Cable Length	
E0 Two-inch cable	a
01 One-foot cable	
05 Five-foot cable	
10 Ten-foot cable	
20 Twenty-foot cable	

a) European installation must only use CHP-RCL2-E0 cables

**Contact Customer Care**—For sales and product information via the ARRIS website (<http://www.arrisi.com>) or as indicated below:

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Specifications are subject to change without notice.

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