



CHP Max5000™ Dual-Input Return Path Transmitters (CHP-RTX) Technical Specification

Specifications

	CHP-RTX3-10-S Series	CHP-RTX5-10-S-xx Series
Optical		
Wavelength	1310 ± 10nm	1529 to 1561 nm
Wavelength Drift, max.	0.15 nm	0.15 nm
Output Power	10 ± 0.25 dBm	10 ± 0.25 dBm
Laser Bias Current	5 to 120mA	5 to 120mA
Laser Current Limit	150mA	150mA
Laser Internal Temperature	15 to 35°C (59 to 95°F)	15 to 35°C (59 to 95°F)
RF		
Bandwidth	5 to 200MHz	5 to 200MHz
Input Impedance	75Ω	75Ω
Frequency Flatness, 25°C (77°F), typ.	± 0.5dB	± 0.5dB
Input Return Loss	16 dB	16 dB
RF Input Test Point, 25°C (77°F) (Note 1)	-20 ± 0.75 dB	-20 ± 0.75 dB
Port-to-Port Isolation	>60dB	>60dB
Unit-to-Unit Isolation	>65dB	>65dB
Port-to-Port Gain Variation, max.	± 1.0dB	± 1.0dB
Powering		
Power Consumption, max.	17.4W	17.4W
Performance		
Total Input RF Power, nominal	33 dBmV	33 dBmV
Noise-Power Ratio (NPR)/Dynamic Range	35/12 dB (50 km fiber with -12 dBm into RX)	35/12 dB (75 km fiber with -12 dBm into RX)
PIN Attenuation Range, min./typ.	8/9 dB	8/9 dB
Mechanical		
Optical Connector	SC/APC	SC/APC
RF Connector	F-type	F-type
Dimensions (W x H x D) in (cm) (Note 2)	1.25 x 3.4 x 18.5 in (3.2 x 8.7 x 47.0 cm)	1.25 x 3.4 x 18.5 in (3.2 x 8.7 x 47.0 cm)
Weight	2.75 lbs (1.24 kg)	2.75 lbs (1.24 kg)

Specifications (cont'd)

Environmental		
Operational Temperature (Note 3)	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)
Storage Temperature	-40 to 70°C (-40 to 158°F)	-40 to 70°C (-40 to 158°F)
Humidity, max. noncondensing	85%	85%

Notes:

1. Relative to main port with 0dB PAD.
2. Includes handles and connectors.
3. Temperature measured at transmitter's air inlet.

Ordering Information

				1	2	3	4		5	6		7		8	9
C	H	P	-	R	T	X	x	-	1	0	-	S	-	x	x

1-4 Wavelength	
RTX3	1310nm
RTX5	1550nm ITU
a) Leave blocks #8-9, ITU Channel , blank if ordering a 1310nm transmitter	

5-6 Output Power	
10	10dBm

7 Connector Type	
5	SC/APC

8-9 ITU Channel	
Blank	No ITU channel (1310nm)
21	ITU channel 21
23	ITU channel 23
25	ITU channel 25
27	ITU channel 27
29	ITU channel 29
31	ITU channel 31
33	ITU channel 33
35	ITU channel 35
37	ITU channel 37
39	ITU channel 39
41	ITU channel 41
43	ITU channel 43
45	ITU channel 45
47	ITU channel 47
49	ITU channel 49
51	ITU channel 51
a) Must select "RTX3" in #1-4 block, Wavelength .	
Contact ARRIS for other ITU wavelength choices	