

CHP Max Headend Optics Platform

CHP-RDF0

Dual Density Return Path Transmitters

FEATURES

- Dual Density 1550 nm ITU DWDM return path transmitters
- High density allows 20 modules per chassis and 400 per 40RU rack
- Simplified installation and management with graphical user interface
- Universal management through Craft interface and SNMP with HMS



PRODUCT OVERVIEW

ARRIS CHP Max5000® Dual Density Return Transmitters are an integral part of return path system applications allowing for more efficient use of optical headend rack space. Advanced two-way services—such as high speed Internet access and telephony—require superior return path delivery capacity and performance. CHP Max5000 Converged Headend Platform can help you meet these demands.

The 2RU CHP Max5000 chassis can accommodate up to 10 dual density return transmitters (up to 400 transmitters in one standard 6-foot rack) to relieve the pressure on precious headend space as you expand offering of advanced two-way services.

CHP Max5000 Dual Density Return Transmitters are available for 16 DWDM ITU channels in the 1550 nm spectrum—all of which transmit in the 5 to 300 MHz spectrum and offer 60 dB of isolation between transmitters.



Longer distances can be achieved when using the CHP 1550 ITU Return Transmitter with the CHP Max5000® EDFA series modules, which simplifies applications by providing low noise, integrated element management capability, reduced rack space, and power requirements providing both CAPEX and OPEX savings.

CHP Max5000 Dual Density Return Path Transmitters offer hot-swapping and integrated monitoring and configuration control through a Craft graphical user interface with local or remote access. Remote management is accessible through the SNMP HMS-compliant interface for external connection to an element manager. Energy efficient internal components and effective thermal design keep lasers cool to ensure for effective, reliable performance.

Features

- High density return path solution with reduced heating, cooling, and power costs
- High 60 dB isolation between transmitters
- Front-panel RF test point for convenient monitoring
- Local or remote monitoring and configuration control using the Craft GUI
- Downloadable firmware upgrades

RELATED PRODUCTS

CHP Chassis	Optical Patch Cords
Power Supplies	Optical Passives
Management Module	Installation Services

SPECIFICATIONS

Optical		CHP-RDF0 Series
Wavelength	1531.9 to 1560.61 nm, specific channels in configurator	
Wavelength Drift, max.	0.15 nm	
Output Power	10 ± 0.25 dBm	
RF		
Bandwidth	5 to 300 MHz	
Input Impedance	75Ω	
Frequency Flatness, 25°C (77°F), typ.	± 0.5 dB	
Input Return Loss	16 dB	
RF Input Test Point, 25°C (77°F) ¹	-20 ± 0.75 dB	
Port-to-Port Isolation	> 60 dB	
Unit-to-Unit Isolation	> 65 dB	
Port-to-Port Gain Variation, max.	± 1.0 dB	
Powering		
Power Consumption, max.	18 W	
Performance		
Total Input RF Power, nominal	9 to 12 dBmV (OMI=6% at input power of 0 dBmV/ch)	
Noise-Power Ratio (NPR)/Dynamic Range	40/12 dB (35 km fiber with -7 dBm into RX), with 5 – 65 MHz loading 40/11 dB (35 km fiber with -7 dBm into RX) with 5 – 85 MHz loading 40/8 dB (35 km fiber with -7 dBm into RX) with 5 – 200 MHz loading	
PIN Attenuation Range	4 dB	
Mechanical		
Optical Connector	SC/APC	
RF Connector	F-type	
Dimensions (W x H x D) in (cm) ²	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)	
Environmental		
Operational Temperature ³	0 to 50°C (32 to 122°F)	
Storage Temperature	-40 to 70°C (-40 to 158°F)	
Humidity, max. noncondensing	85%	

Notes:

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

ORDERING INFORMATION

CHP-RDF0 Dual Density Return Path Transmitters

				1	2	3	4		5	6	7	8		9	10		11
C	H	P	-	R	D	F	O	-	x	x	x	x	-	z	z	-	c

1	Description																
R	Return TX																
2	Description																
D	Dual Density																
3	Description																
F	Front Fiber																
W	Rear Fiber																
4	Description																
O	Fixed output/Fixed Wavelength																
5	6	7	8	Description													
Y	y	y	y	ITU Grid channel number pairings as listed below.													
				Laser 1 Channel							Laser 2 Channel						
21		23		21							23						
25		27		25							27						
29		31		29							31						
33		35		33							35						
43		45		43							45						
47		49		47							49						
51		53		51							53						
55		57		55							57						
9	10	Description															
1	0	10 dB Laser Output Power															
11	Description																
S	SC/APC Connector (Front Only Option)																
L	LC/APC Connector (Rear Only Option)																

Wavelengths Supported	
First	Second
21	23
25	27
29	31
33	35
43	45
47	49
51	53
55	57

Note: Specifications are subject to change without notice.

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Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656