

# HEADEND OPTICS PLATFORM (CH3000)

## BP3400C Quad Digital Receiver Back Plate



### FEATURES

- Four-module-wide back plate for up to four DR3450N Quad Digital Receivers in CH3000 chassis
- Optical-to-electrical conversion with plug-in Dual Receiver SFP modules
- Simplifies installation and reduces rack space requirements
- Hot plug-in/out



### PRODUCT OVERVIEW

ARRIS' BP3400C-00 Optical Receiver Back Plate converts optical signals to electrical signals and passes them through high-speed connectors to up to four DR3450N Quad Digital Receiver modules to which it is mated in the CH3000 Chassis. Model RR40xx-00-PI series dual-channel optical receiver SFPs are used to receive the optical signals from nodes in the network.

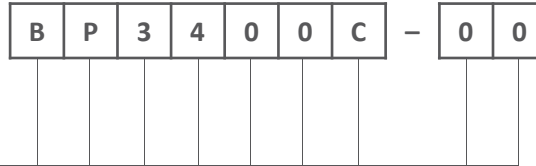
Eight such SFPs are used (as shown in the photo) when the back plate is mated to four DR3450N modules using 1-fer mode. Each DR3450N module provides four separate receivers in each chassis slot (i.e. each receiver having a discrete optical input and RF output).

When the back plate is mated to four DR3450N units in “2-fer” mode, only four RR40xx-00-PI series SFPs are required to be installed in the back plate. In this configuration each receiver module utilizes two inputs each containing two data streams from different network segments - (hence “2-fer”). To achieve this, two optical inputs from nodes are connected to the two receive ports contained in one dual receiver SFP for each DR3450N. The two outputs from the SFPs (and back plate) are routed to the digital receiver where the 4 separate, individual RF signals are recovered.

Additionally, management traffic from the digital receivers may be converted to optical transmission by using a TR4000-PI plug-in transceiver module (as shown in the photo) for transport to a model NI3000 Network Interface Module.

SPECIFICATIONS	
Characteristics	Specification
<b>Physical</b>	
Dimensions	7.5" D x 5.0" H (3RU) x 4.25" W (19 cm x 13 cm x 11 cm) (no chassis slot required)
Weight	2 lbs (0.9 kg)
<b>Environmental</b>	
Operating Temperature Range	-20°C to +65°C (-4°F to 149°F)
Storage Temperature Range	-40°C to +85°C (-40°F to 185°F)
Humidity	5% to 95% non-condensing
<b>Power Requirements</b>	
Power consumption	12 W max, including SFPs
<b>General</b>	
	Hot plug-in/out
<b>RF and Optical Interfaces</b>	
RF output connectors (16)	F-type
	Sockets for installation of up to eight (8) model RR40xx-00-PI plug-in dual-channel receiver SFPs
	<b>NOTE:</b> 8 SFPs provide 16 LC/UPC connections for operation in “1-fer” mode. 4 SFPs provide 8 LC/UPC connections for operation in “2-fer” mode. Reference data sheet for RR40xx-00-PI SFPs for optical input power levels, LOS assert levels and other information.
	Socket for installation of one optional model TR4000-PI plug-in SFP
<b>Line Speed</b>	
Receive on SFP ports	2.125 Gbps, or (future) 4.25 Gbps
Tx/Rx Ethernet/Monitoring data (optional SFP), max	2.125 Gbps
<b>Status Indicator LEDs</b>	
Optical Input Ports:	
LOS	Red indicates loss of signal
TR4000-PI plug-in transceiver port:	
TX	Red indicates transceiver present but transmitter laser failure
RX	Red indicates transceiver present but input signal is out-of-range at the transceiver input port or failed receiver
2-fer:	
Green	Indicates that the DR3450N in the respective slot (A, B, C, D) is configured in a “2-fer” mode
Off	Indicates that the DR3450N in the respective slot is in the “1-fer” mode

ORDERING INFORMATION



Optical Receiver Back Plate

RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
CH3000 Receivers	Optical Passives
Management Module	Installation Services

**Note:** Specifications are subject to change without notice.

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