

# ARRIS DR3421

### **DUAL RETURN CHANNEL DIGITAL RECEIVER (5-65 MHZ PASSBAND)**

The DR3421 Dual Return Channel Digital Receiver utilizes state-of-the-art technology for digital return path applications, and its capabilities allow deployment of compact and robust high-speed digital broadband systems. The advanced design provides simultaneous conversion of digital return path traffic from two RF return segments to two discrete RF output ports. Used in combination with DT4232N Digital Transceivers in optical nodes or DT3515C Digital Transmitters, the DR3421 allows quick and cost effective doubling of the amount of return bandwidth available from any node in the network. These dual-segment digital return receiver modules are primarily used in traditional HFC systems, where larger node sizes are the norm.

- Dual D-A conversion provides discrete RF signals from two return segments per optical input
- High RF output (-33 dBmV/Hz typical)
- Superior noise performance
- RF output level independent of optical input power provides output level stability in alternate routing applications
- Front access -20 dB test points for each return path
- Hot plug-in/out
- · Local and remote status monitoring
- Occupies one full-depth slot



## SPECIFICATIONS

PHYSICAL			ENVIRONMENTAL	
Dimensions	13.0" D x	4.3" H x 1.0" W (3RU)	Operating temperature range	-20° to +65°C (-4° to 149°F)
	(33 cm x 11 cm x 2.5 cm)		Storage temperature range	-40° to +85°C (-40° to 185°F)
Weight	1.6 lbs(0.72 kg)		Humidity	5% to 95% non-condensing
OPTICAL INTERFACE			ELECTRICAL (RF PATH – EACH CHANNEL)	
Optical connectors	LC/UPC inRR40x0-00-PI SFPs (on BP3100C-00 Back Plate)		Passband	5-65 MHz
		Frequency response	± 0.5 dB	
		Nominal output level	-33 dBmV/Hz with 5-65 MHz loading	
			Output RF level adjustment range	0-58 dB (1 dB increments)
ELECTRICAL INTERFACE			Output return loss	18 dB min
Main RF outputs (each channel)	F-type female connector (on Back Plate BP3100C-00)		Isolation between RF channels	-60 dB
Output test points (each channel)	G-type female connector (front panel, -20 dB)		Level stability	± 0.5 dB
GENERAL			Level repeatability	± 1.0 dB
Hot plug_lp/Out			OPTICAL	
Manual gain alignment External RF A/B switch support (Model AB02S1S)			See the RR40x0-00-PI data sheet for details	
POWER REQUIREMENTS				
Input voltage		12 VDC (provided via chassis mid-plane connection)		
Power consumption		17 W (excluding power feed to BP3100C-00)		

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#### **ORDERING INFORMATION**



#### Module Back Plate (Back plate must be ordered separately.)



Module Back Plate



Each back plate accommodates up to four DR3421 receiver modules.

Model BP3100C-00