FRDA

Fiber Receiver & Distribution Amplifier

The FRDA is a fiber optic receiver module integrated with a broadband distribution amplifier (BIDA). The FRDA is used as a launch amplifier in a coaxial distribution sub-system fed from a single mode broadband fiber network. The FRDA's optical receiver section provides exceptional CNR performance at low optical input levels. This feature is also a cost saving one, since it permits the use of lower power optical transmitters. The FRDA has two RF bandwidths available, 860 MHz and 1000 MHz, and features power doubling hybrid amplifier technology for high RF output levels and low distortion. The FRDA operates with the FIBT Series of transmitters as well as those from other leading manufacturers.

Optical Input
1310/1550 nm

CATV
45-860/1000 MHz

Bandwidth Increase 1GHz !

Features

- 860 MHz and 1000 MHz (1 GHz) power doubling hybrid models
- LED for optical input status
- Gain and slope controls
- Exceptional CNR performance at low optical input levels
- Optical input power jack scaled 1V/mW provides precise measurement capability using DC voltmeter

Ordering Information

Rev: 022717 (651219900C)

Model	Stock #	Description
FRDA-S4A-860-FA	7400P84B	Fiber Optic Receiver/RF Distribution Amplifier, Single-mode, 860 MHz, 1310/1550 nm, FC/APC Conn.
FRDA-S4A-860-SA	7400P84BS	Fiber Optic Receiver/RF Distribution Amplifier, Single-mode, 860 MHz, 1310/1550 nm, SC/APC Conn.
FRDA-S4A-1000-FA	7400P14	Fiber Optic Receiver/RF Distribution Amplifier, Single-mode, 1000 MHz, 1310/1550 nm, FC/APC Conn.
FRDA-S4A-1000-SA	7400P14S	Fiber Optic Receiver/RF Distribution Amplifier, Single-mode, 1000 MHz, 1310/1550 nm, SC/APC Conn.

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Call Us: 954.427.5711
Toll Free: 888.293.5856

Specifications

Optical Receiver

Bandwidth:	45 to 1000 MHz
Bandpass Flatness:	1 dB P/V
Operating Wavelength:	1310/1550 nm
Optical Input Range:	-3 to +3.0 dBm
Carrier Noise Ratio(CNR):	
-1 dBm input, 40 Channel Load:	54 dB
-1 dBm input, 79 Channel Load:	53 dB
-1 dBm input, 110 Channel Load:	52 dB

Distribution Amplifier

Impedance (All Ports):	75 Ω
Return Loss Input:	16 dB
Return Loss Output:	16 dB
Test Port Level:	-30, ±2 dB
Gain Control Range:	10 dB
Slope Control Range:	8 dB
Channel Loading:	110
Flatness:	±0.75 dB
Output Level:	34/42 dBmV
Composite Triple Beat (CTB):	-60 dB
Composite Second Order (CSO):	-58 dB
Hum Modulation:	-70 dB

General

Dimensions (W x H x D):	7.25" x 3.25" x 10.25" (184mm x 83mm x 260mm)
Weight:	5.75 lbs. (2.61 kg)
Operating Temperature Range:	-20 to +45 °C
Number Of Hybrids:	2
Hybrid Technology:	Power Doubling

Power

Power Supply Requirements:	117 VAC, 60 Hz, 28 W

Connectors

Optical Input:	FC/APC or SC/APC (Model dependent)
RF Output and Test Ports:	"F" Female

Indicators

Power:	LED, Green
Optical Input Alarm:	LED, Tri-colored

	Optical Input dBm	Optical Input mW		
	-10	0.10		
	-9	0.13	Increase Optical Input Power Orange Optical LED Indication	
	-8	0.16		
	-7	0.20		
	-6	0.25	0 dB	
	-5	0.32	2 dB	
	-4	0.40	4 dB	
GREEN LED	-3	0.50	6 dB	Recommended Attenuator Plug-in Value (9320-xx)
	-2	0.63	8 dB	
	-1	0.79	10 dB	
	0	1.00	12 dB	
	1	1.26	14 dB	
	2	1.58	16 dB	
	3	2.00	18 dB	
	4	2.51	Decrease Optical Input Power Red Optical LED Indication	
	5	3.16		

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