L-Band Distribution Amplifier

The final product may vary from the above image depending on the options selected.

THE ART OF ENGINEERING

Product	
DEV 2194/75	Distribution Amplifier 1:16 or 2 * 1:8; 700...2300 MHz; inputs 75 Ohm, F (f); outputs 75 Ohm, BNC (f)

Features

- L-Band Distribution Amplifier in a small 19" 1 RU Chassis
- Integrated 1:2 Splitter for selecting 2 * 1:8 or 1:16 Operation Mode
- Monitoring Output Ports in 50 Ohm and 75 Ohm
- LNB Power with supply Current Monitoring, switchable 13/18 V and 22 kHz Tone
- RF Sensing with adjustable Threshold
- Variable Gain for both Distribution Amplifiers
- Variable Slope Control for both Distribution Amplifiers
- SNMP Support
- DEV Web Interface
- Signal Recording and Data Backup Feature

Technical Data

DEV 2194/75 L-Band Distribution Amplifier

Capacity	
Number of Input Ports	2 (or 1 if cascaded to 1:16 Operation Mode)
Number of Output Ports	2 * 8 (or 16 if cascaded to 1:16 Operation Mode)
RF Specifications	
Frequency Range	700…2300 MHz
Impedance, Connectors	75 Ohm, precision F (f) (for all Input Ports) 75 Ohm, BNC (f) (for all Output Ports)
Damage Level	+10 dBm @ 50 Ohm / 120 dBµV @ 75 Ohm
Nominal Input Level	–10 dBm @ 50 Ohm / 85 dBµV @ 75 Ohm
Return Loss	>14 dB
Amplifier Gain Variation	0…31 dB
Variable Slope	0…8 dB
Flatness	±1.0 dB (over entire Band, optimum Slope) ±0.3 dB (in any 36 MHz Interval)
Intermodulation Distortion (two Tones separated 5 MHz)	<-40 dBc @ -10 dBm aggregated Power
Isolation between Output Ports	>25 dB
Group Delay	<1 ns
Noise Figure	<10 dB (for 1:8 Distribution Amplifier) <15 dB (for 1:16 Distribution Amplifier)
Monitoring Ports 50 Ohm	
Impedance, Connector	50 Ohm, SMA (f)
Return Loss	>16 dB
Frequency Response	= Input Level -20±3 dB (for 1:8 Distribution Amplifier) = Input Level -24±3 dB (for 1:16 Distribution Amplifier)
Monitoring Ports 75 Ohm	
Impedance, Connector	75 Ohm, F (f)
Return Loss	>16 dB
Frequency Response	= Output Level +13±3 dB
LNB Power & Current Monitoring	
Voltage and Tone Control	13 V, 18 V and 0 Hz, 22 kHz
LNB Power	Max. 350 mA per Input
Adjustable Level Setting:	
• Upper Alarm Level	• max. 330 mA
• Lower Alarm Level	• min. 50 mA
RF Sensing	
Adjustable Threshold Level	0 dBm > Threshold Level > -50 dBm
Threshold Level Accuracy	±3 dB
Threshold Repeatability	<0.5 dB
Remote Communication	
Interface (Connector)	• Ethernet (RJ-45)
Remote Control & Surveillance (Interface)	• via Web Interface (Ethernet) • via SNMP (Ethernet)
Power Supply	
Supply Voltage	100…240 V AC
Power Consumption	<40 VA
General Specifications	
Size	19" (483 mm) Width, 1 RU (44 mm) Height, ~285 mm Depth
Weight	~6 kg
Environmental Conditions	ETS 300019 Part 1-3 Class 3.1E

Technical Data (cont.)

Option 01	**50 Ohm, BNC (f) instead of 75 Ohm, F (f) Connectors**	
RF Specifications		
Impedance, Connectors	50 Ohm, BNC (f)	(for all Ports)
Return Loss	>10 dB	
Monitoring Ports 50 Ohm		
Impedance, Connector	50 Ohm, SMA (f) and 50 Ohm, BNC (f)	
Return Loss	>16 dB	
Frequency Response	= Input Level -20±3 dB (for 1:8 Distribution Amplifier, SMA Ports) = Input Level -24±3 dB (for 1:16 Distribution Amplifier, SMA Ports) = Output Level +10±3 dB (BNC Monitoring Ports)	

Order Information

Product	
DEV 2194/75	Distribution Amplifier 2 * 1:8 or 1:16; 700…2300 MHz; inputs 75 Ohm, F (f); outputs 75 Ohm, BNC (f)
Option 01	50 Ohm, BNC (f) instead of 75 Ohm, F (f) Connectors

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