

Signal Distribution with Perfection



Products:

DEV 2811 -	1:8	C-Band Distribution Amplifier
DEV 2812 -	2 * 1:8	C-Band Distribution Amplifier
DEV 2813 -	1:16	C-Band Distribution Amplifier

Features:

- /// Frequency Range 3,2...4,2 GHz
- /// 50 Ohm Input(s) and Outputs
- /// SMA Connectors
- /// Three different Configurations available

Application Areas:

- /// Satellite Ground Stations
- /// Cable Head End Stations
- /// Non-commercial Applications

*Front DEV 2811**Rear DEV 2811*

The Situation

There are various applications in the RF world which do require the distribution of incoming high frequency signals to several sinks. For signals ranging in the CATV-Band or L-Band this task is addressed by a large number of models within the portfolio of DEV-Systemtechnik.

For higher frequency ranges, e.g. within the C-Band, amplification and distribution of this kind of signals is far more demanding.

DEV worked out a Solution

DEV Systemtechnik has developed a series of C-Band distribution amplifiers for professional users. All instruments of this series are able to distribute input signal(s) to 8 (or more) equal output signals with a very high isolation and an almost perfect frequency response.

The Technical Concept

The base of the technical concept is the application of high performance amplifiers and splitters, which results in a very good VSWR of the inputs and the outputs.

The C-Band Distribution Amplifier is available as a 1:8 splitter in two models, as a single channel or dual channel version.

For a higher number of output signals, i.e. to avoid cascading, a 1:16 splitter is available in addition.

All instruments of this series are delivered in a 1 RU housing.

Technical Data

DEV 2811 / DEV 2812 / DEV 2813 C-Band Distribution Amplifiers

RF Specifications

Frequency range	3,2...4,2 GHz	
Number of inputs	1	(DEV 2811, DEV 2813)
	2	(DEV 2812)
Number of outputs	8	(DEV 2811)
	2 * 8	(DEV 2812)
	16	(DEV 2813)
Impedance, connectors	50 Ohm, SMA (f)	
Damage level	+15 dBm	
Nominal input level	-15 dBm	
Return loss	>18 dB	
Insertion loss	0±3 dB	
Frequency response	±0,5 dB	(in any 500 MHz interval)
	±0,25 dB	(in any 40 MHz interval)
Isolation between output ports	>28 dB	
Intermodulation distortion	<-40 dBc	(two tones @ -23 dBm)
Group delay	<5 ns	
Noise figure	<6 dB	

Alarms

Two stage alarm signalisation for power line failure	Potential free contacts
Alarm connector	Sub-D-9 (m)
Contact load	60 V; 0,3 A
B-Alarm	One power supply unit does not deliver any secondary power.
A-Alarm	Both power supply units do not deliver any secondary power.

Redundant Power Supply

Redundant power supplies	100...260 V AC supplied by two different lines or -36...-60 V DC supplied by two different lines (Option 14)
Power consumption	<40 VA

General Specifications

Housing	19" (483 mm), 1 RU (44 mm), 260 mm depth
Weight	~5 kg
Environmental conditions	ETS 300019 Part 1-3 Class 3.1

Order Information

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DEV 2813	1:16	C-Band Distribution Amplifier
Option 14	-36...-60V	DC supply voltage

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