

Managed L-Band Distribution Amplifiers



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

Products

DEV 2142	1:8 Managed Distribution Amplifier; 800...2450 MHz
DEV 2143	2*1:8 Managed Distribution Amplifier; 800...2450 MHz
DEV 2145	1:16 Managed Distribution Amplifier; 800...2450 MHz

Features

- ▀ L-Band Distribution Amplifiers in a 19" 1 RU Chassis
- ▀ Impedance 50 Ohm or 75 Ohm or mixed Impedances for Input Port and Output Ports available
- ▀ Variable Gain
- ▀ Variable Slope
- ▀ RF Sensing
- ▀ LNB Power with Current Monitoring, switchable 13/18 V and 22 kHz Tone
- ▀ SNMP Support
- ▀ DEV Web Interface
- ▀ Signal Recording Option
- ▀ Redundant Power Supplies

Technical Data

DEV 2142	1:8 Managed Distribution Amplifier; 800...2450 MHz
DEV 2143	2*1:8 Managed Distribution Amplifier; 800...2450 MHz
DEV 2145	1:16 Managed Distribution Amplifier; 800...2450 MHz

■ Note that it is mandatory to select product version options to specify the connector configuration of the product, please refer to the Order Information section

Capacity

Number of Input Ports	DEV 2142: 1	DEV 2143: 2*1	DEV 2145: 1
Number of Output Ports	DEV 2142: 8	DEV 2143: 2*8	DEV 2145: 16

RF Specifications

Frequency Range	800...2450 MHz		
Impedance, Connectors	for all 50 Ohm Ports: 50 Ohm, SMA (f) or 50 Ohm, BNC (f) for all 75 Ohm Ports: 75 Ohm, precision F (f) or 75 Ohm, BNC (f)		
Damage Level	+10 dBm		
Nominal Input Level	-10 dBm		
Return Loss	>14 dB		
Amplifier Gain Variation	DEV 2142: -15...11±0.5 dB	DEV 2143: -15...11±0.5 dB	DEV 2145: -15...7±0.5 dB
Variable Slope	0...5 dB		
Insertion Loss	0±1.5 dB		
Flatness	±1 dB (800...2450 MHz) ±0.25 dB (in any 36 MHz Interval)		
Isolation between Output Ports	>25 dB		
Intermodulation Distortion	<-40 dBc (two Tones @ -13 dBm)		
Group Delay Distortion	<0.5 ns (in any 36 MHz Interval)		
Noise Figure	<13 dB		

Monitoring Port(s)

Impedance, Connector	50 Ohm, SMA (f)
Return Loss	>14 dB
Frequency Response	= Input Level -20±3 dB

LNB Power & Current Monitoring

LNB Power	max. 450 mA (per Channel)
Voltage and Tone Control	13 V, 18 V and 0 Hz, 22 kHz
Adjustable Level Setting:	
• Upper Alarm Level	• max. 450 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)

Redundant Power Supply

Supply Voltage	100...240 V AC supplied by two different Lines
Power Consumption	<35 VA

General Specifications

Size	19" (483 mm) Width, 1 RU (44 mm) Height, ~260 mm Depth
Weight	~2 kg
Environmental Conditions	ETS 300019 Part 1-3 Class 3.1E

Technical Data (cont.)

Option 77 Signal Recording

With applied Option 77, the Web Interface additionally provides the Recording Window that permits the visualization and the external storage of amplifier signal data.

Order Information

Products

DEV 2142	1:8	Managed Distribution Amplifier; 800...2450 MHz
DEV 2143	2*1:8	Managed Distribution Amplifier; 800...2450 MHz
DEV 2145	1:16	Managed Distribution Amplifier; 800...2450 MHz

Product Version Options

■ The impedance and the RF connectors of the product can be configured very flexible.

Thus, for ordering a product, it is mandatory to specify

a) one of the following options per splitter input port and

b) one of the following options per 8 splitter output ports

a) Splitter Input Port Options

Option vSin50	One Splitter Input Port 50 Ohm, SMA (f)
Option vSin50B	One Splitter Input Port 50 Ohm, BNC (f)
Option vSin75	One Splitter Input Port 75 Ohm, F (f)
Option vSin75B	One Splitter Input Port 75 Ohm, BNC (f)

b) Splitter Output Ports Options

Option vSout50	Eight Splitter Output Ports 50 Ohm, SMA (f)
Option vSout50B	Eight Splitter Output Ports 50 Ohm, BNC (f)
Option vSout75	Eight Splitter Output Ports 75 Ohm, F (f)
Option vSout75B	Eight Splitter Output Ports 75 Ohm, BNC (f)

Other Options

Option 77	Signal Recording
-----------	------------------

Order Examples

DEV 2142 with all ports in 75 Ohm, F (f)

- 1 × DEV 2142
- 1 × Option vSin75
- 1 × Option vSout75

DEV 2143 with all ports of the first splitter in 75 Ohm, F (f) and with all ports of the second splitter in 50 Ohm, BNC (f)

- 1 × DEV 2143
- 1 × Option vSin75
- 1 × Option vSout75
- 1 × Option vSin50B
- 1 × Option vSout50B

DEV 2145 with the input port in 50 Ohm, SMA (f), with 8 splitter output ports in 75 Ohm, F (f), and with 8 splitter output ports in 75 Ohm, BNC (f)

- 1 × DEV 2145
- 1 × Option vSin50
- 1 × Option vSout75
- 1 × Option vSout75B

Contact

DEV Systemtechnik GmbH
Grüner Weg 4A
61169 Friedberg
GERMANY
Phone: +49 6031 6975 100
Fax: +49 6031 6975 114
info@dev-systemtechnik.com
www.dev-systemtechnik.com

Rev. 31-Jul-2024

Disclaimer

The information contained herein is believed to be reliable. DEV Systemtechnik makes no warranties regarding the information contained herein. DEV Systemtechnik assumes no responsibility or liability whatsoever for any of the information and for the use of the information contained herein. The information contained herein is provided "AS IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders.