

Managed L-Band Combining Amplifiers



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

Products

DEV 2242	8:1 Managed Combining Amplifier; 800...2450 MHz
DEV 2243	2*8:1 Managed Combining Amplifier; 800...2450 MHz
DEV 2245	16:1 Managed Combining Amplifier; 800...2450 MHz

Features

- L-Band Combining Amplifiers in a 19" 1 RU Chassis
- Impedance 50 Ohm or 75 Ohm or mixed Impedances for Input Ports and Output Port available
- DC blocked Input Ports
- Variable Gain
- Variable Slope
- RF Sensing
- SNMP Support
- DEV Web Interface
- Signal Recording Option
- Redundant Power Supplies

Technical Data

DEV 2242	8:1 Managed Combining Amplifier; 800...2450 MHz
DEV 2243	2*8:1 Managed Combining Amplifier; 800...2450 MHz
DEV 2245	16:1 Managed Combining 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 2242: 8	DEV 2243: 2*8	DEV 2245: 16
Number of Output Ports	DEV 2242: 1	DEV 2243: 2*1	DEV 2245: 1

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 (aggregated Power)		
Return Loss	>14 dB		
Amplifier Gain Variation	DEV 2242: -15...11±0.5 dB	DEV 2243: -15...11±0.5 dB	DEV 2245: -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 Input Ports	>25 dB		
Intermodulation Distortion	<-40 dBc (two Tones @ -13 dBm)		
Group Delay Distortion	<0.5 ns (in any 36 MHz Interval)		
Noise Figure	DEV 2242: <25 dB	DEV 2243: <25 dB	DEV 2245: <29 dB
Monitoring Port(s)			
Impedance, Connector	50 Ohm, SMA (f)		
Return Loss	>14 dB		
Frequency Response	DEV 2242: = Input Level -35±3 dB	DEV 2243: = Input Level -35±3 dB	DEV 2245: = Input Level -39±3 dB

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

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 2242	8:1	Managed Combining Amplifier; 800...2450 MHz
DEV 2243	2*8:1	Managed Combining Amplifier; 800...2450 MHz
DEV 2245	16:1	Managed Combining 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 8 combiner input ports and

b) one of the following options per combiner output port

a) Combiner Input Ports Options

Option vCin50	Eight Combiner Input Ports 50 Ohm, SMA (f)
Option vCin50B	Eight Combiner Input Ports 50 Ohm, BNC (f)
Option vCin75	Eight Combiner Input Ports 75 Ohm, F (f)
Option vCin75B	Eight Combiner Input Ports 75 Ohm, BNC (f)

b) Combiner Output Port Options

Option vCout50	One Combiner Output Port 50 Ohm, SMA (f)
Option vCout50B	One Combiner Output Port 50 Ohm, BNC (f)
Option vCout75	One Combiner Output Port 75 Ohm, F (f)
Option vCout75B	One Combiner Output Port 75 Ohm, BNC (f)

Other Options

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

Order Examples

DEV 2242 with all ports in 75 Ohm, F (f)

- 1 × DEV 2242
- 1 × Option vCin75
- 1 × Option vCout75

DEV 2243 with all ports of the first combiner in 75 Ohm, F (f) and with all ports of the second combiner in 50 Ohm, SMA (f)

- 1 × DEV 2243
- 1 × Option vCin75
- 1 × Option vCout75
- 1 × Option vCin50
- 1 × Option vCout50

DEV 2245 with 8 combiner input ports in 50 Ohm, SMA (f), with 8 combiner input ports in 75 Ohm, BNC (f), and with the output port in 50 Ohm, BNC (f)

- 1 × DEV 2245
- 1 × Option vCin50
- 1 × Option vCin75B
- 1 × Option vCout50B

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. 03-Sep-2025

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.