

Passive CATV-Band Splitter/Combiner



Products:

DEV 2404 -	4:1	CATV-Band Combiner, 75 Ohm
DEV 2408 -	8:1	CATV-Band Combiner, 75 Ohm
DEV 2416 -	16:1	CATV-Band Combiner, 75 Ohm
DEV 2428 -	2 * 8:1	CATV-Band Combiner, 75 Ohm
DEV 2443 -	4 * 1:8	CATV-Band Splitter, 75 Ohm
DEV 2444 -	2 * 1:16	CATV-Band Splitter, 75 Ohm
DEV 2462 -	8 * 4:1	CATV-Band Combiner, 75 Ohm
DEV 2463 -	4 * 8:1	CATV-Band Combiner, 75 Ohm

Features:

- Series of Passive CATV-Band Splitters and Combiners
- Impedance 75 Ohm with Precision F (f) Connectors
- Monitoring Port for Combiners (except DEV 246x)

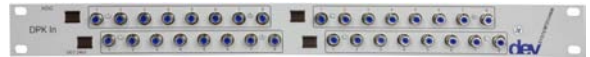
Application Areas:

- Cable Head End Stations

DEV 24xx CATV-Band Splitter/Combiner

dev

Front DEV 2444



Front DEV 2463

The Situation

In cable head end stations a lot of signals need to be combined to build the total transmission stream to the customer (subscriber). In addition, parts of the transmission stream are combined before they leave their subsystem e.g. QAM modulators. On the other hand, splitters are required to distribute the RF signals.

DEV worked out a Solution

For this purpose DEV developed the DEV 24xx series with high performance passive splitters and combiners for premium quality transmission.

The Technical Concept

All instruments of this series of passive CATV-Band splitters/combiners are delivered in a compact 1 RU chassis.

The passive CATV-Band combiners are available in the sizes 4:1, 8:1, 16:1, 2 * 8:1, 4 * 8:1, and 8 * 4:1.

Passive CATV-Band splitters are available in the configurations 2 * 1:16 and 4 * 1:8.

All RF ports are DC free and DC blocked.

A monitoring port at the rear side of the combiners DEV 2404 (4:1), DEV 2408 (8:1), DEV 2416 (16:1) and DEV 2428 (2 * 8:1) carries the output signal(s) at a 20 dB reduced level.

DEV 24xx CATV-Band Splitter/Combiner



Technical Data

DEV 2404 / DEV 2408 / DEV 2416 / DEV 2428 / DEV 2462 / DEV 2463 CATV-Band Combiners DEV 2443 / DEV 2444 CATV-Band Splitters

RF Specifications

Frequency range	47...862 MHz	(DEV 2404, DEV 2408, DEV 2416, DEV 2428)
	5...862 MHz	(DEV 2443, DEV 2444, DEV 2462, DEV 2463)
Number of inputs	2	(DEV 2444)
	4	(DEV 2404, DEV 2443)
	8	(DEV 2408)
	16	(DEV 2416)
	2 * 8	(DEV 2428)
	4 * 8	(DEV 2463)
	8 * 4	(DEV 2462)
Number of outputs	1	(DEV 2404, DEV 2408, DEV 2416)
	2	(DEV 2428)
	4	(DEV 2463)
	8	(DEV 2462)
	2 * 16	(DEV 2444)
	4 * 8	(DEV 2443)
Impedance, connectors	75 Ohm, Precision F (f)	
Damage level	+140 dB μ V	
Return loss	>16 dB, typ. 18 dB	
Insertion loss	7 \pm 1 dB	(DEV 2404, DEV 2462)
	11 \pm 1 dB	(DEV 2463, DEV 2443)
	14 \pm 1 dB	(DEV 2408, DEV 2428)
	15 \pm 1 dB	(DEV 2444)
	18 \pm 1 dB	(DEV 2416)
Frequency response	\pm 0,1 dB	(in any 8 MHz interval)
Isolation between equal ports	>24 dB	

Monitoring Port (DEV 2404, DEV 2408, DEV 2416, DEV 2428, only)

Insertion loss	-20 dB of output signal
Return loss	>16 dB

General Specifications

Housing	19" (483 mm), 1 RU (45 mm),	
	depth: 70 mm	(DEV 2443, DEV 2444, DEV 2462, DEV 2463)
	80 mm	(DEV 2404)
	280 mm	(DEV 2408, DEV 2416, DEV 2428)
Weight	~2 kg	(DEV 2404, DEV 2443, DEV 2444, DEV 2462, DEV 2463)
	~5 kg	(DEV 2408, DEV 2416, DEV 2428)
Environmental conditions	ETS 300019 Part 1-3 Class 3.1	

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DEV 2416	16:1	CATV-Band Combiner, 75 Ohm
DEV 2428	2 * 8:1	CATV-Band Combiner, 75 Ohm
DEV 2443	4 * 1:8	CATV-Band Splitter, 75 Ohm
DEV 2444	2 * 1:16	CATV-Band Splitter, 75 Ohm
DEV 2462	8 * 4:1	CATV-Band Combiner, 75 Ohm
DEV 2463	4 * 8:1	CATV-Band Combiner, 75 Ohm

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