

## Passive CATV-Band Combiners/Splitters



### Products:

<b>DEV 2404</b> -	4:1 Passive CATV-Band Combiner, 75 Ohm
<b>DEV 2405</b> -	1:4 Passive CATV-Band Splitter, 75 Ohm
<b>DEV 2408</b> -	8:1 Passive CATV-Band Combiner, 75 Ohm
<b>DEV 2409</b> -	1:8 Passive CATV-Band Splitter, 75 Ohm
<b>DEV 2416</b> -	16:1 Passive CATV-Band Combiner, 75 Ohm
<b>DEV 2417</b> -	1:16 Passive CATV-Band Splitter, 75 Ohm
<b>DEV 2428</b> -	2 * 8:1 Passive CATV-Band Combiner, 75 Ohm
<b>DEV 2432</b> -	32:1 Passive CATV-Band Combiner, 75 Ohm
<b>DEV 2443</b> -	4 * 1:8 Passive CATV-Band Splitter, 75 Ohm
<b>DEV 2444</b> -	2 * 1:16 Passive CATV-Band Splitter, 75 Ohm
<b>DEV 2461</b> -	16 * 2:1 Passive CATV-Band Combiner, 75 Ohm
<b>DEV 2462</b> -	8 * 4:1 Passive CATV-Band Combiner, 75 Ohm
<b>DEV 2463</b> -	4 * 8:1 Passive CATV-Band Combiner, 75 Ohm

### Features:

- Series of Passive CATV-Band Combiners and Splitters
- Impedance 75 Ohm with Precision F (f) Connectors
- Monitoring Port for Combiners (except DEV 246x) and Splitters (except DEV 244x)

### Application Areas:

- Cable Head End Stations

**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.

On the other hand, splitters are required to distribute the RF signals.

**Introducing the DEV Solution**

DEV Systemtechnik has developed the DEV 24xx series with high performance passive combiners and splitters for premium quality transmission.

**The Technical Concept**

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

The passive CATV-Band combiners are available in the sizes 4:1, 8:1, 16:1, 32:1, 2 \* 8:1, 4 \* 8:1, 8 \* 4:1, and 16 \* 2:1.

Passive CATV-Band splitters are available in the configurations 1:4, 1:8, 1:16, 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, DEV 2408, DEV 2416, and DEV 2428 and of the splitters DEV 2405, DEV 2409, and DEV 2417 provides the common signal at a reduced level.

## Technical Data

**CATV-Band Combiners** DEV 2404 / DEV 2408 / DEV 2416 / DEV 2428 / DEV 2432 / DEV 2461 / DEV 2462 / DEV 2463

**CATV-Band Splitters** DEV 2405 / DEV 2409 / DEV 2417 / DEV 2443 / DEV 2444

### RF Specifications

Frequency range	47...862 MHz	(DEV 2404, DEV 2405, DEV 2408, DEV 2409, DEV 2416, DEV 2417, DEV 2428, DEV 2432)
	5...862 MHz	(DEV 2443, DEV 2444, DEV 2461, DEV 2462, DEV 2463)
Number of inputs : outputs	4:1	(DEV 2404)
	8:1	(DEV 2408)
	16:1	(DEV 2416)
	2 * 8:1	(DEV 2428)
	32:1	(DEV 2432)
	16 * 2:1	(DEV 2461)
	8 * 4:1	(DEV 2462)
	4 * 8:1	(DEV 2462)
	1:4	(DEV 2405)
	1:8	(DEV 2409)
	1:16	(DEV 2417)
	4 * 1:8	(DEV 2443)
	2 * 1:16	(DEV 2444)
Impedance, connectors	75 Ohm, Precision F (f)	
Damage level	+140 dB $\mu$ V	
Return loss	>16 dB, typ. 18 dB	
Insertion loss	5 $\pm$ 1 dB	(DEV 2461)
	7 $\pm$ 1 dB	(DEV 2404, DEV 2462)
	8 $\pm$ 1 dB	(DEV 2405)
	11 $\pm$ 1 dB	(DEV 2463, DEV 2443)
	14 $\pm$ 1 dB	(DEV 2408, DEV 2428)
	15 $\pm$ 1 dB	(DEV 2409, DEV 2444)
	18 $\pm$ 1 dB	(DEV 2416)
	19 $\pm$ 1 dB	(DEV 2417)
	25 $\pm$ 1 dB	(DEV 2432)
Frequency response	$\pm$ 0.1 dB	(in any 8 MHz interval)
Isolation between equal ports	>24 dB	

### Monitoring Port (DEV 2404, DEV 2405, DEV 2408, DEV 2409, DEV 2416, DEV 2417, DEV 2428, only)

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

### General Specifications

Housing	19" (483 mm), 1 RU (45 mm), depth: 70 mm	(DEV 2443, DEV 2444, DEV 2461, DEV 2462, DEV 2463)
	80 mm	(DEV 2404, DEV 2405)
	280 mm	(DEV 2408, DEV 2409, DEV 2416, DEV 2417, DEV 2428, DEV 2432)
Weight	~2 kg	(DEV 2404, DEV 2405, DEV 2443, DEV 2444, DEV 2461, DEV 2462, DEV 2463)
	~5 kg	(DEV 2408, DEV 2409, DEV 2416, DEV 2417, DEV 2428, DEV 2432)
Environmental conditions	ETS 300019 Part 1-3 Class 3.1	

### Order Information

DEV 2404	4:1	CATV-Band Combiner, 75 Ohm
DEV 2405	1:4	CATV-Band Splitter, 75 Ohm
DEV 2408	8:1	CATV-Band Combiner, 75 Ohm
DEV 2409	1:8	CATV-Band Splitter, 75 Ohm
DEV 2416	16:1	CATV-Band Combiner, 75 Ohm
DEV 2417	1:16	CATV-Band Splitter, 75 Ohm
DEV 2428	2 * 8:1	CATV-Band Combiner, 75 Ohm
DEV 2432	32:1	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 2461	16 * 2:1	CATV-Band Combiner, 75 Ohm
DEV 2462	8 * 4:1	CATV-Band Combiner, 75 Ohm
DEV 2463	4 * 8:1	CATV-Band Combiner, 75 Ohm

### Contact

DEV Systemtechnik GmbH & Co. KG  
Grüner Weg 4A  
D-61169 Friedberg, Germany  
Phone: +49 (0) 6031 18999-0  
Fax: +49 (0) 6031 18999-15  
info@dev-systemtechnik.com  
www.dev-systemtechnik.com

DEV America  
4695 MacArthur Court, 11<sup>th</sup> Floor  
Newport Beach, CA 92660, USA  
Phone: (949) 798-6120  
Fax: (949) 798-6121  
info@dev-america.com  
www.dev-america.com

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