

# HF Power Combiner **BPC-10**

Datasheet

Made in Germany



## Fuctions

The BELEKTRONIG HF Power Combiner / Splitter BPC-10 allows to summarize the two channels of the SAW Generator BSG. Thus SAW actuators can be controlled with a power of up to 8 W. Alternatively, the signal of one channel can be split into two signals to generate standing wave fields.

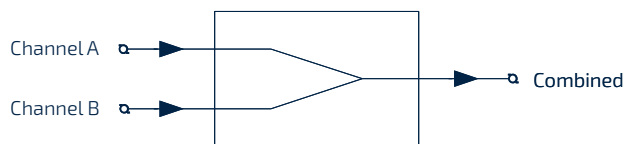
## Key Features

- ✓ Transferable power combiner: 2 x 4 W
- ✓ Transferable power splitter: 1 x 8 W (Splitter)
- ✓ Frequency range: 5...215 MHz
- ✓ Insertion loss: ~0,3 dB

## Application Examples

### Power Combiner

$$P_{\text{Combined}} = P_{\text{Channel A}} + P_{\text{Channel B}}$$

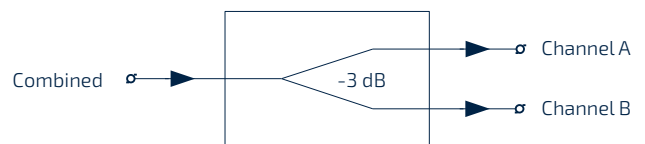


The input signals must be equal in frequency and phase to achieve optimal signal combination.

### Power Splitter

$$P_{\text{Channel A}} = \frac{P_{\text{Combined}}}{2}$$

$$P_{\text{Channel B}} = \frac{P_{\text{Combined}}}{2}$$



The loads on Channel A and Channel B must be equal to achieve a symmetrical distribution of the input signal between the two output channels. -3 dB means that the input power is reduced by factor 2.



**Technical Data**

**Signal Transmission**

- › Transferable power combiner: 2 x 4 W
- › Transferable power splitter: 1 x 8 W
- › Frequency range: 5...215 MHz
- › Insertion loss: ~0.3 dB

**Dimensions and Conditions of Operation**

- › Dimensions (L x W x H): 70 x 85 x 40 mm<sup>3</sup>
- › Weight: ~0.150 g
- › Operating temperature: 10...45°C
- › Relative humidity: 0...80 %, not condensating

**Scope of Delivery**

- › HF Power Combiner BPC-10
- › Connecting cable

**SAW Generator BSG: The Perfect Tool for Applications in Acoustofluidics**



- › Capable of replacing the cost-intensive and complex setups that have been necessary so far to drive and characterize SAW actuators
- › Characterization of SAW actuators, signal generation, signal amplification and continuous monitoring
- › Easy and intuitive operation

**Accessories for the SAW Generator BSG  
HF Power Switch BPS-300**



- › HF Power Switch BPS-300
- › Customization of BSG firmware

Technical modifications and errors excepted. Images similar. Last update: 21.03.2019

Learn more about the quality standards of BELEKTRONIG and easily request a quote for your individual experimental setups.  
Dr.-Ing. Glen Guhr and Dr.-Ing. Raimund Bruenig

