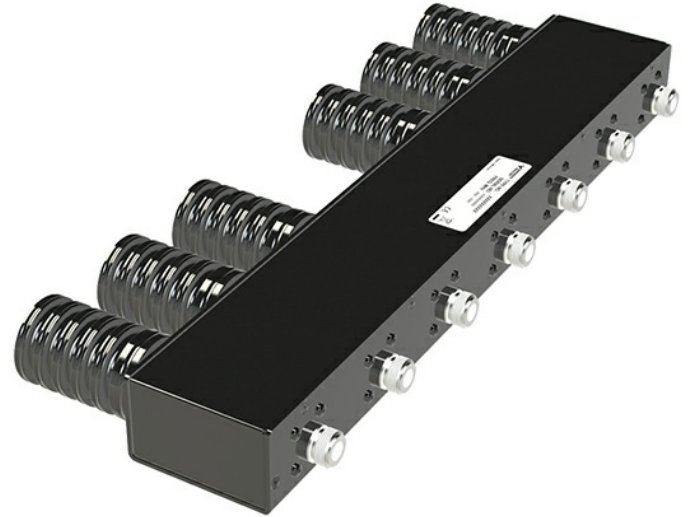


## 6-Channel Hybrid Combiner for 450 MHz Transmitters

### DESCRIPTION

- Combining six transmitters or receivers on the same antenna.
- Better utilisation of good antenna position.
- Six antennas on the same transmitter or receiver.
- The only combining option with very small Tx-Tx frequency spacing.
- 30 W loads included (other loads or no loads as option).



### SPECIFICATIONS

Electrical	
Model	PRO-PHY450-6
Filter Type	Hybrid Junction
Frequency	380 - 480 MHz
Max. Input Power	36 W per channel (max. 120 W with larger load)
Insertion Loss	< 9.2 dB $\pm$ 0.3 dB @ 11 MHz BW < 9.5 dB $\pm$ 0.3 dB @ 22 MHz BW
Impedance	50 $\Omega$
Isolation Tx1 - Tx2	> 28 dB @ 11 MHz BW > 26 dB @ 22 MHz BW (*see note)
VSWR	< 1.5:1 with all other ports terminated with 50 $\Omega$
Load	30 W load fitted (other ratings available) (** see note)
No. of channels	6
Mechanical	
Connection(s)	N(f)
Dimensions	400 x 108 (incl. conn.) x 42 mm (excl. load) / 15.75 x 4.25 (incl. conn.) x 1.65 in. (excl. load)
Weight	Approx. 2.31 kg / 5.08 lb.
Environmental	
Operating temperature range	-30 °C to +60 °C

### ORDERING

Model	Product No.	Frequency
PRO-PHY450-6-1	210002937	380 - 400 MHz
PRO-PHY450-6-2	Contact for product no.	390 - 410 MHz
PRO-PHY450-6-3	Contact for product no.	400 - 420 MHz
PRO-PHY450-6-4	210002824	410 - 430 MHz
PRO-PHY450-6-5	Contact for product no.	420 - 440 MHz
PRO-PHY450-6-6	210002899	430 - 450 MHz
PRO-PHY450-6-7	210002938	440 - 460 MHz
PRO-PHY450-6-8	210002822	450 - 470 MHz
PRO-PHY450-6-9	Contact for product no.	460 - 480 MHz

#### \* NOTE

The isolation between the Tx ports is directly dependent on the terminating VSWR on the antenna port.

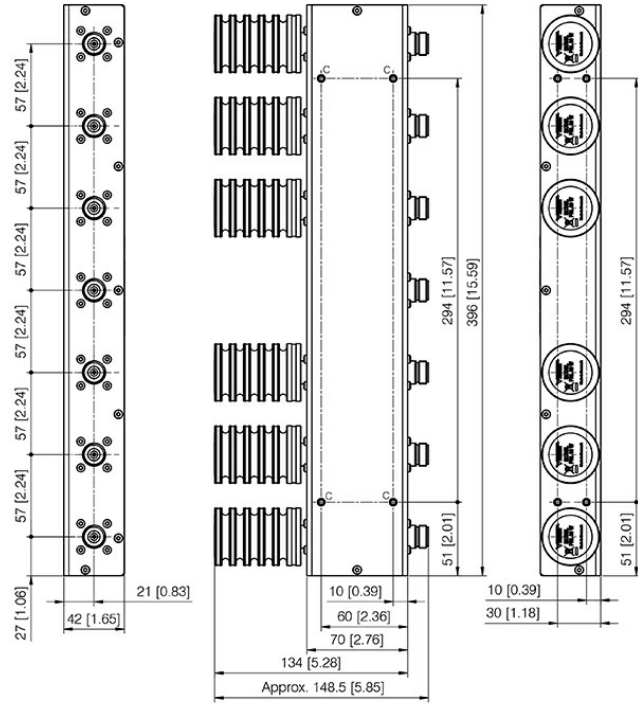
With an antenna load VSWR = 1.5, the isolation between the two Tx ports will be reduced to 20 dB @ 5 MHz bandwidth.

#### \*\* NOTE

The VSWR of the load's should be < 1.1! Each load should be able to dissipate 5/6 of the input power.

E.g.: With 60 W input, each load should be able to dissipate 60 W x 5/6 = 50 W.

MOUNTING DETAILS



C =  $\varnothing$ 4 mm [0.16] through-going for nut F-M4-1 to be pressed from inside (8 pcs.)

All dimensions are given in mm [in.]

TYPICAL RESPONSE CURVES

