



PRO-PHY450-4/380-470

4-channel Broadband Hybrid Combiner for the frequency range UHF/LTE 450 MHz



DESCRIPTION

- New improved design on PCB of high power hybrid combiners.
- Broadband, working in all the frequency range 380-470 MHz, without compromise the Tx-Tx isolation
- Used for combining four transmitters or receivers to just one antenna.
- Can also be used with four antennas combining to one transmitter or receiver.
- As standard the hybrid is supplied with 30 W loads.
- Other loads for higher input power are available on request.

SPECIFICATION

Electrical

Model	PRO-PHY450-4/380-470
Filter Type	Hybrid Junction
Frequency	380 – 470 MHz
Max. Input Power	40 W per channel with 30 W loads fitted (See note**) (Max. 130 W per ch. with larger loads)
Insertion Loss	< 6.8 dB
Impedance	50 Ω
Isolation Tx – Tx	> 30 dB (See note*)
VSWR	< 1.5:1 on every port, when the other ports are terminated with 50 Ω
Load	30 W load fitted (other ratings available)
No. of channels	4

Environmental

Operating temperature range	-30 °C to +60 °C
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Mechanical

Connection(s)	N(f)
Historic Brand	Amphenol Procom
Dimensions	428 x 56.7 x 70 mm / 16.85 x 2.23 x 2.76 in. (excl. load)
Weight	Approx. 1.6 kg / 3.54 lb. incl. 30 W loads

ORDERING CODES

Model	Product No.	Max. Input Power
PRO-PHY450-4/380-470/40W	210003085	40W
PRO-PHY450-4/380-470/65W	210003113	65W
PRO-PHY450-4/380-470/100W	210003114	100W

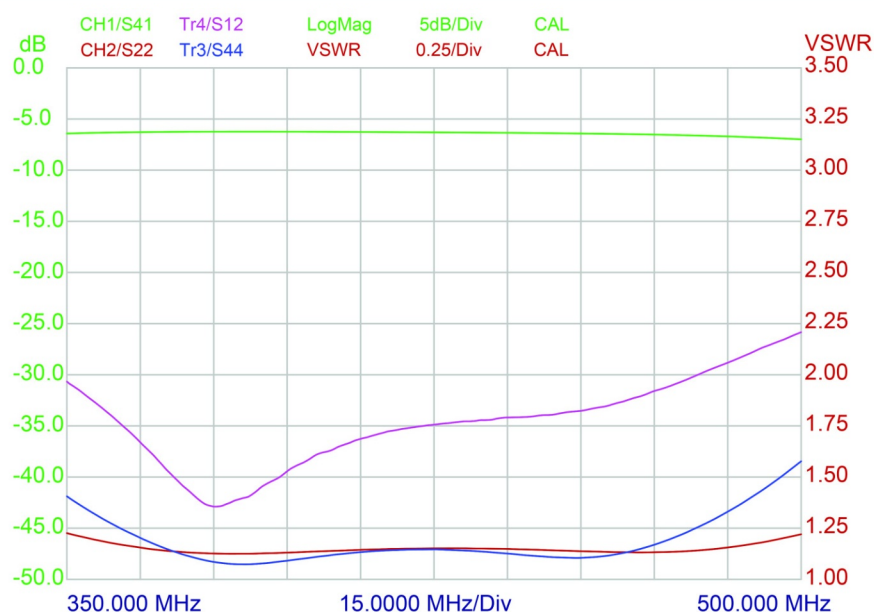
ADDITIONAL INFORMATION

Note

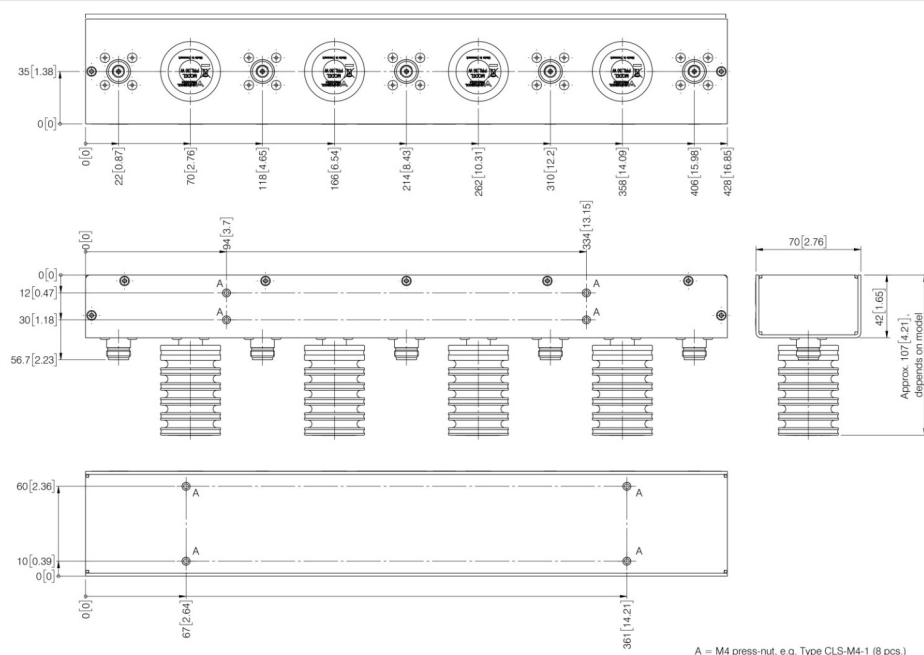
* The isolation between the Tx ports is directly dependent on the terminating VSWR on the antenna port. E.g. with a VSWR = 1.5:1 on the ANT. port, the isolation between the Tx ports can be reduced to 20 dB @ in the 380-470 MHz range.

** In a 4 channel hybrid 1/4 of the total input power will be led out to the Ant. port. The rest 3/4 of the total input power will be distributed equal to the 4 loads. E.g. with 4 x 40 W input power, $3/4 = 120$ W is accommodated equal in the 4 loads, this means $120\text{W}/4$ loads = 30 W of power per load

Typical response curve



Mounting details



All dimensions are given in mm [in.]

