

# TX-COMBINERS AND HYBRIDS

## PRO-PHY450-2 2-Channel Hybrid Ring Combiner for 450 MHz Transmitters



### DESCRIPTION:

- ★ Combining of two transmitters or receivers on the same antenna.
- ★ Better utilisation of good antenna position.
- ★ Two antennas on the same transmitter or receiver.
- ★ Combining of two signal generators.
- ★ The only combining option with very small TX-TX frequency spacing.
- ★ 60 W load supplied (other loads or no load as option).



### SPECIFICATIONS:

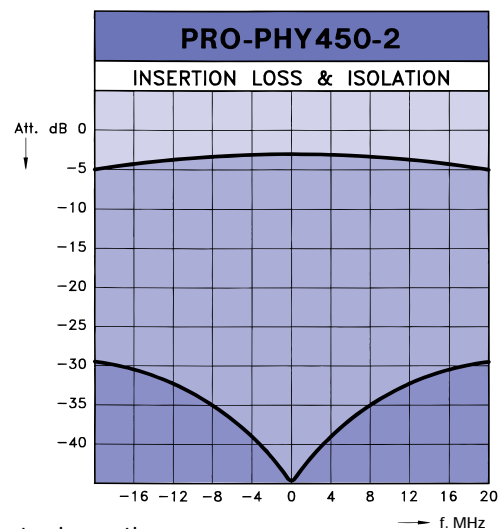
ELECTRICAL	
FILTER TYPE	Hybrid Ring Junction
FREQUENCY	400-475 MHz (see table)
MAX. INPUT POWER	50 W per channel (max. 150 W with larger load)
INSERTION LOSS	< 3.4 dB @ 10 MHz BW < 3.7 dB @ 20 MHz BW
ISOLATION TX <sub>1</sub> -TX <sub>2</sub> (*see note)	> 35 dB @ 10 MHz BW > 30 dB @ 20 MHz BW
IMPEDANCE	Nom. 50 Ω
LOAD (**see note)	60 W load fitted (other ratings available)
SWR	< 1.5 with all other ports terminated with 50 Ω
MECHANICAL	
TEMP. RANGE	-30° C i +60° C
CONNECTORS	N-female (other types as option)
DIMENSIONS (L x W x H)	216 x 89 (incl. conn.) x 42 mm (excl. load)
WEIGHT	Approx. 700 g (excl. load)

\* The isolation between the TX ports is directly dependent on the load's SWR on the antenna port. With an antenna load SWR = 1.5, the isolation between the two TX ports will be reduced to 20 dB @ 5 MHz bandwidth.

\*\* The load's SWR should be < 1.1! The load should be able to dissipate 1/2 of the total input power.  
E.g.: With 50 W input in total for the two channels, the load should be able to dissipate 50 W x 1/2 = 25 W.

### MODEL SELECTION TABLE:

MODEL	FREQ. RANGE
PRO-PHY450-2-1	400-420 MHz
PRO-PHY450-2-2	415-435 MHz
PRO-PHY450-2-3	430-450 MHz
PRO-PHY450-2-4	445-465 MHz
PRO-PHY450-2-5	460-480 MHz



PROCOM A/S reserve the right to amend specifications without prior notice.