TX-COMBINERS AND HYBRIDS

PRO-PHY150-2

2-Channel Hybrid Ring Combiner for 150 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	136-175 MHz (see table)
MAX. INPUT POWER	50 W per channel (max. 150 W with larger load)
INSERTION LOSS	< 3.3 dB @ 3 MHz BW < 3.5 dB @ 6 MHz BW
ISOLATION TX ₁ -TX ₂ (*see note)	> 35 dB @ 3 MHz BW > 30 dB @ 6 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 @ 3 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 $50 \text{ W} \times 1/2 = 25 \text{ W}$.

MODEL SELECTION TABLE:

MODEL	FREQ. RANGE
PRO-PHY150-2-1	136-142 MHz
PRO-PHY150-2-2	140-146 MHz
PRO-PHY150-2-3	144-150 MHz
PRO-PHY150-2-4	148-154 MHz
PRO-PHY150-2-5	152-158 MHz
PRO-PHY150-2-6	156-162 MHz
PRO-PHY150-2-7	160-166 MHz
PRO-PHY150-2-8	164-170 MHz
PRO-PHY150-2-9	168-174 MHz
PRO-PHY150-2-10	172-178 MHz

