

3-Channel Hybrid Combiner for 150 MHz Transmitters

DESCRIPTION

- Combining three transmitters or receivers on the same antenna.
- > Better utilization of good antenna position.
- > Three antennas on the same transmitter or receiver.
- > The only combining option with very small Tx-Tx frequency spacing.
- > 30 W load supplied (other loads or no load as option).



Typical response curves

	INSERTION LOSS & ISOLATION [dB]								
0									
-5									
-10									
-15									
-20									
-25								/	
-30				1	_	_	/		
-35									
-40									
	-4	lO -3	30 -2	0 -1	0 () 1	0 2	0 3	0 50 MHz]

ORDERING

Туре	Product No.	Frequency
PRO-PHY150-3-1	210001225	130 - 142 MHz
PRO-PHY150-3-2	210000639	138 - 150 MHz
PRO-PHY150-3-3	210000611	146 - 158 MHz
PRO-PHY150-3-4	210000547	154 - 166 MHz
PRO-PHY150-3-5	210000583	162 - 174 MHz
PRO-PHY150-3-6	210000793	170 - 182 MHz

SPECIFICATIONS

Electrical	
Model	PRO-PHY150-3
Filter Type	Hybrid Junction
Frequency	136 - 175 MHz (see ordering)
Insertion Loss	< 5.2 dB +/- 0.3 dB @ 8 MHz BW < 5.4 dB +/- 0.3 dB @ 16 MHz BW
Impedance	50 Ω
Isolation Tx1 - Tx2	> 26 dB @ 8 MHz BW > 24 dB @ 16 MHz BW (* see note)
VSWR	$<$ 1.5:1 with all other ports terminated with 50 Ω
Max. Input Power	45 W per channel (max. 150 W with larger load)
Load	30 W load fitted (other ratings available) (** see note)
No. of Channels	3

Mechanical	
Connection(s)	N female (other on request)
Dimensions	400 x 89 (incl. conn.) x 42 mm (excl. loads)
Weight	Approx. 1.3 kg / 2.87 lb (excl. load)

Environmental	
Operating Temperature Range	-30°C to +60°C

NOTE

 * The isolation between the TX ports is directly dependent on the terminating 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 SWR of the load's should be < 1.1! Each load should be able to dissipate 2/3 of the input power. E.g.: With 50 W input, each load should be able to dissipate 50 W \times 2/3 = 33 W.