

# POWER COMBINERS

## CANTEQ TELECOM Products for Telecommunications

### High Power Wide Band Asymmetrical Combiner

The wide band power dividers are four port short Directional Couplers and consequently exhibit ultraflat coupling, high directivity and good return loss in all ports. A wave incident in Port1 couples power into Port2 and Port3 but not Port4. Table1 shows standard coupling values from 6 to 10 dB but Canteq can deliver coupling up to 40 dBs if needed.

#### HIGH DIRECTIVITY COUPLER

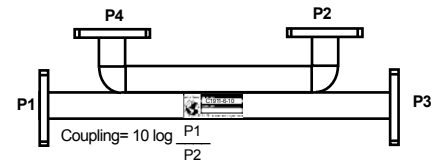
Model No	W/G
C1911-1	284
C1911-2	229
C1911-3	187
C1911-4	159
C1911-5	137
C1911-6	112
C1911-7	90
C1911-8	75
C2001-9	62
C2001-10	51
C2001-11	42
C2001-12	34
C2001-13	28

#### ELECTRICAL SPECIFICATIONS:

- Typical Coupling:  $\pm 5\%$  over 10% of bandwidth
- Typical RL: 28 dB each port
- Typical Directivity: 30 dB

DASH	COUPLING (DB)*	
	PORT1 TO 2	PORT 1 TO 3
6	6.00	1.25
7	7.00	0.97
8	8.00	0.75
9	9.00	0.58
10	10.00	0.46

\*Coupling up to 40 dB available



#### How to order the right part:

Specify the model number according to the required frequency and waveguide size. Specify desired coupling. Specify flange type and position

**Example** Thus Canteq Model No. C1911-5-10-2-2-2 is:

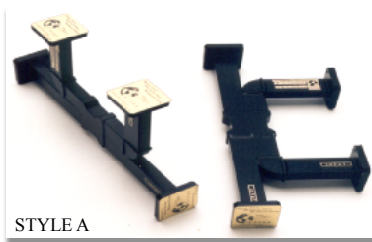
Model No No	Coupling (dB)	Flanges P1-P2-P3-P4
C1911-5	10	2-2-2-2

a WR137 High Power coupler

With a coupling value of 10 dB and CPRF flanges at each port.

#### WAVEGUIDE HYBRID COUPLERS

Model No	W/G (WR)	Freq. Range (GHz)	VSWR	Balance dB( $\pm$ )
C1901-4	159	5.90-6.425	1.15	0.15
C1901-5	137	5.85-6.500	1.15	0.20
C1901-6	112	7.90-8.40	1.15	0.15
C1901-8	75	14.00-14.50	1.15	0.25
C1901-9	62	14.00-14.50	1.15	0.25



STYLE A

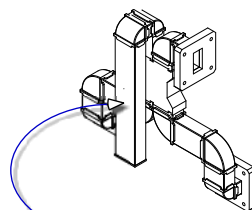
Our waveguide hybrid coupler is a four (4) port device which is generally built with a casting with a standard coupling of 3dBs. These couplers offer a good directivity, a high power carrying capacity in an exceptional compact size. As they are symmetrical devices any arm could be used as an input. They are built in three different styles (see below).

**Example** Thus Canteq Model No. C1911-5-10-2-2-2-2 is:

Model No No	STYLE (A,B or C)	Flanges P1-P2-P3-P4
C1901-5	A	2-2-2-2

a WR137 High Hybrid coupler 5.85-6.5GHz

Built with Style A configuration and CPRF flanges at each port.



Consult our Sales Department to help you with your particular requirements or other configurations.

