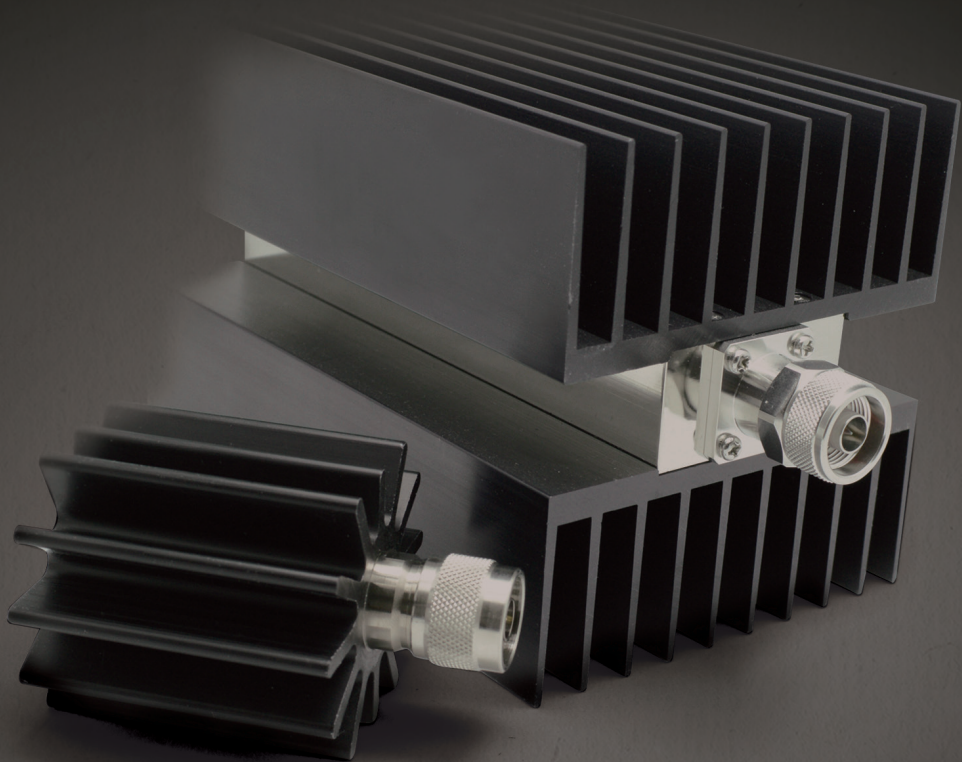




RF COMPONENTS

.....



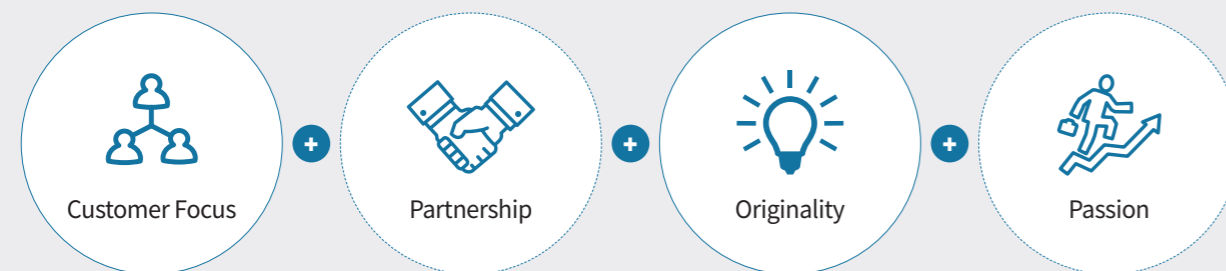
Simple Connectivity Solution

Company Information

Telcon seeks to develop the best technology by continuous investments in developing wireless communication parts which are essential for ICT business since the founding in 1999. Especially, we offer high-quality services in the fields of wireless communication device, wireless network installation, and communication system.

Moreover, our business area has expanded to automotive and medical equipment with the establishment of local subsidiaries in China and Vietnam, which help us enhance global competitiveness.

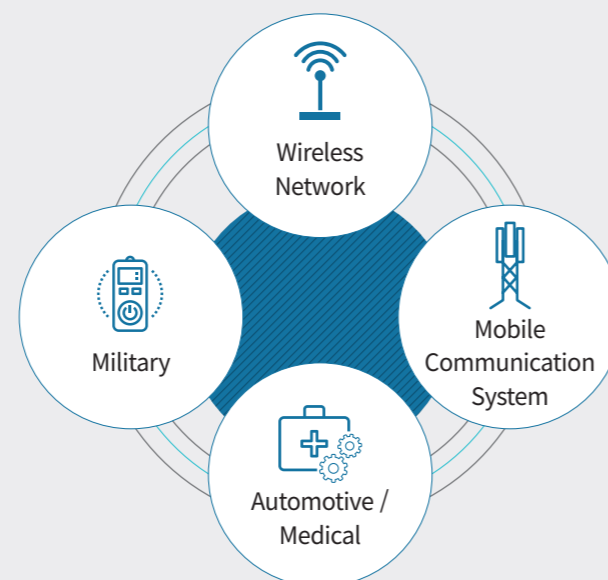
Core Values



Vision



Business Area



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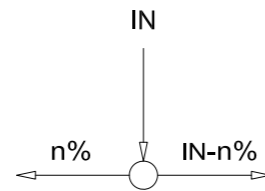
POWER SPLITTER

Coaxial Type

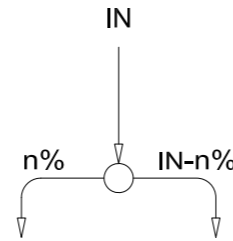
Low loss reactive splitters are used to distribute RF signals to multiple transceiver antennas or radiating cables. The RF power is evenly split to all outputs with excellent amplitude and phase balance. In addition, output ratios up to 90:10 can be applied when uneven power levels are required depending on the transmission segment.



A Right Angle



B In-line



- Average 500Watt RF Power
- Typical -160dBc PIMD
- Typical 0.1dB Insertion Loss
- 50:50 ~ 90:10 Split ratio

Product List

No.	Frequency range(GHz)	Split ratio	VSWR (Input)	Insertion loss (dB)	Connector [Direction]	Power (Watt)	PIMD (dBc)
1	0.8~2.7	2way (Equal)	<1.2	<3.3	N, 7/16 [A,B]	500	<-150
2	0.8~2.7	2way (70:30)	<1.2	<2.1, <5.8	N, 7/16 [A,B]	500	<-150
3	0.8~2.7	3way (Equal)	<1.2	<5.5	N, 7/16 [A,B]	500	<-150
4	0.8~2.7	3way (50:25:25)	<1.2	<3.5, <6.5, <6.5	N, 7/16 [A,B]	500	<-150
5	0.7~2.7	2way (Equal)	<1.2	<3.2	N, 4.3/10, 7/16 [A]	500	<-160
6	0.7~2.7	3way (Equal)	<1.2	<5.0	N, 4.3/10, 7/16 [A]	500	<-160
7	0.7~2.7	4way (Equal)	<1.25	<6.3	N, 4.3/10, 7/16	500	<-160
8	0.7~2.7	2way (70:30)	<1.25	<2.1, <5.8	N, (RA/IL)	300	<-160
9	0.7~2.7	2way (80:20)	<1.25	<1.5, <8.0	N, (RA/IL)	300	<-160
10	0.7~2.7	2way (90:10)	<1.25	<0.7, <11	N, (RA/IL)	300	<-160
11	0.7~4.0	2way (Equal)	<1.2	<3.3	N, 4.3/10	500	<-155
12	0.7~4.0	3way (Equal)	<1.25	<5.2	N, 4.3/10	500	<-155
13	0.7~4.0	4way (Equal)	<1.3	<6.5	N, 4.3/10	500	<-155

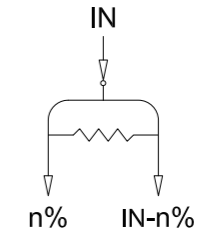
POWER SPLITTER

PCB Type

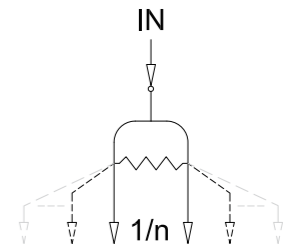
Wilkinson type combiners/splitters is ideally suited for equally combining or dividing low power multi-carrier multi-operator signals.



A



B



- Max. 200Watt RF Power
- 0.4~6GHz, Max. 20Way
- 50:50 ~ 70:30 Split ratio

Product List

No.	Frequency range(GHz)	Split ratio	VSWR (Input)	Insertion loss (dB)	Isolation (dB)	Connector	Power (Watt)	PIMD (dBc)
1	0.88~0.9	2way(Equal)	<1.3	<3.8	>18	N	50	-
2	0.8~2.7	2way(Equal)	<1.2	<3.5	>20	N	50	<-140
3	0.8~2.7	2way(70:30)	<1.2	<2.2, <5.9	>20	N	50	<-140
4	0.8~2.7	3way(Equal)	<1.2	<6.0	>20	N	50	<-140
5	0.8~2.7	3way(50:25:25)	<1.2	<3.7, <7.0	>20	N	50	<-140
6	0.7~2.7	2way(Equal)	<1.2	<3.5	>20	SMA	50	-
7	0.7~2.7	4way(Equal)	<1.25	<7.0	>20	SMA	50	-
8	0.7~2.7	6way(Equal)	<1.3	<9.3	>20	SMA	50	-
9	0.7~2.7	8way(Equal)	<1.3	<11	>20	SMA	50	-
10	0.7~2.7	16way(Equal)	<1.3	<14	>20	SMA	50	-
11	0.7~2.7	20way(Equal)	<1.4	<15.5	>20	SMA	50	-
12	0.7~2.7	2way(Equal)	<1.2	<3.5	>20	N	50	<-140
13	0.7~2.7	3way(Equal)	<1.3	<5.6	>20	N	50	<-140
14	0.7~2.7	4way(Equal)	<1.3	<7.5	>18	N	50	<-140
15	0.7~2.7	2way(Equal)	<1.2	<3.6	>23	N	200	<-150
16	0.7~2.7	2way(70:30)	<1.2	<2.1, <5.6	>23	N	200	<-150
17	0.7~2.7	3way(Equal)	<1.2	<5.8	>23	N	200	<-150
18	0.7~2.7	3way(50:25:25)	<1.2	<3.6, <7.0, <7.0	>23	N	200	<-150
19	0.7~3.6	3way(Equal)	<1.3	<5.8	>18	N	150	<-150
20	0.7~3.6	4way(Equal)	<1.3	<7.0	>18	N	150	<-150
21	0.4~6.0	2way(Equal)	<1.5	<4.2	>16	SMA	10	-
22	0.7~6.0	4way(Equal)	<1.5	<8.2	>16	SMA	10	-
23	0.7~6.0	6way(Equal)	<1.5	<10.5	>16	SMA	10	-
24	0.7~6.0	8way(Equal)	<1.5	<12.3	>16	SMA	10	-
25	0.7~6.0	16way(Equal)	<1.5	<16.0	>16	SMA	10	-

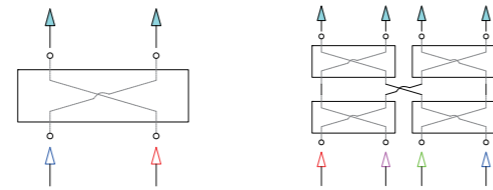
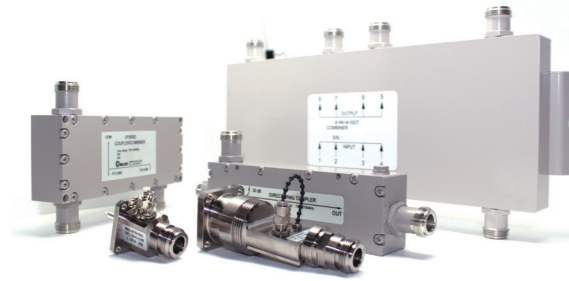
COMBINER

COMBINER

Hybrid Combiner

Hybrid coupler has been designed to meet the special needs of the wireless market. They are most commonly used to combine wireless carriers in the band to a single antenna feed or distribution cable. You can choose the coverage by referring to PIMDs, IP Classes, installation structures, and topology specifications.

A 2X2 Hybrid Combiner **B** 4X4 Hybrid Combiner



- Max. 200Watt RF Power
- Typical -160dBc PIMD Product Constitution
- 0.4~6GHz Wide Band Frequency
- 50:50 ~ 70:30 Split ratio

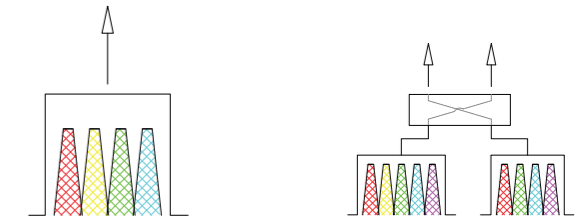
Product List

No.	Frequency range(GHz)	Input Output	VSWR (Input)	Insertion loss(dB)	Isolation (dB)	Connector	Power (Watt)	PIMD (dBc)	Phase (Degrees)
1	0.38~0.49	2x2	<1.2	3.1±0.4	>30	N	100	-	90±5
2	0.38~0.49	4x4	<1.2	6.1±0.8	>25	N	100	-	-
3	0.7~2.7	2x1	<1.2	3.1±0.5	>28	N, 7/16	100	<-150	-
4	0.7~2.7	3x1	<1.2	5.0±0.8	>25	N, 7/16	100	<-150	-
5	0.7~2.7	2x2	<1.2	3.1±0.5	>25	N, 7/16	100	<-150	90±5
6	0.7~2.7	2x2	<1.2	3.1±0.5	>28	N, 7/16	250	<-155	90±5
7	0.7~2.7	4x4	<1.2	6.2±0.8	>23	N, 7/16	100	<-150	-
8	0.7~3.6	2x2	<1.2	3.2±0.5	>25	N, 4.3/10	100	<-150	90±5
9	0.7~3.6	3x1	<1.3	< 5.8	>18	N, 4.3/10	20	-	-
10	0.7~3.6	4x1	<1.3	< 7.0	>18	N, 4.3/10	20	-	-
11	0.7~4.0	2x2	<1.25	3.2±0.6	>18	SMA	100	-	90±5

Multiplexer & Combination type

The Cavity filter has a very good separation between different frequency bands, and the insertion loss is excellent as well. In an outdoor environment for multi-carrier, Multi-Antenna deployments, the most suitable product of a combination of signals between multiple spectrum bands and carriers can be provided.

A General Multiplexer **B** 9x1 Combiner



- Max. 200Watt RF Power
- Typical -150dBc PIMD Product Constitution
- 0.4~6GHz Wide Band Frequency
- 50:50 ~ 70:30 Split ratio

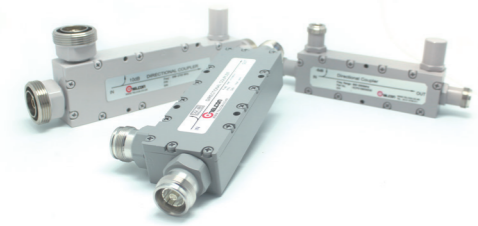
Product List

No.	Frequency Range(GHz)	Input Output	VSWR (Input)	Insertion loss(dB)	Isolation (dB)	Connector	14mm	PIMD (dBc)
1	0.80 ~ 0.96 1.71~1.88	2x1	<1.25	<0.5	>50	N	100	-
2	0.80~0.96 1.71~1.88 1.92~2.17	3x1	<1.25	<0.5	>50	N	100	-
3	0.69~0.96 1.71~1.88 1.92~2.17 2.50~2.70	4x1	<1.25	<0.5	>50	N, 7/16	100	<-150
4	0.69~2.70-5port 0.80~2.70-4port	9x1	<1.3	<6.0	>35	N, 7/16	100	<-150

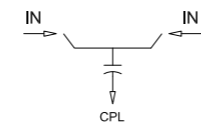
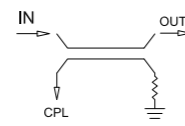
COUPLER

Directional Couplers is a tapered stripline design covering from 698 to 3600 MHz. Units couple off a defined fraction of signal with minimal reflections or loss. Availability in a wide range of coupling values makes this series useful in optimizing the power distribution required in passive inbuilding distributed antenna systems (DAS).

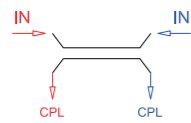
- Max. 500Watt RF Power
- Typical -160dBc PIMD Product Constitution
- Wide Band Frequency



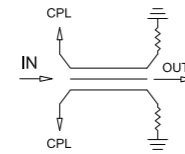
- A** Directional Coupler
- B** None Directional Coupler



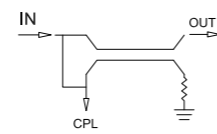
- C** Bi-Directional Coupler



- D** Dual Coupler



- E** DC Pass Coupler



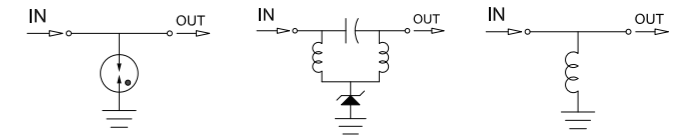
Product List

No.	Frequency range(GHz)	Coupling Ports (dB)	VSWR (Input)	Insertion loss(dB)	Directivity (dB)	Connector (Circuit)	Power (Watts)	PIMD (dBc)
1	0.8~2.7	10, 20, 30, 50 Dual Ports	±1.0	<1.2	<1.2~0.2	N [D]	100	<-150
2	0.7~2.7	5, 6, 7, 8, 10, 13, 15, 20, 30, 40	±1.0	<1.2	<2.0~0.3	N, 7/16 [A]	100	<-155
3	0.7~3.6	6, 8, 10, 13, 15, 20	±1.0	<1.2	<1.6~0.3	N [A]	100	<-150
4	0.7~4.0	6, 10, 15, 20	±1.0	<1.2	<1.6~0.3	N, 4.3/10 [C]	100	<-155
5	DC, 0.01, 0.4~2.7	10	±1.0	<1.2	<3.0~1.8	N [E]	100	-
6	BW 40MHz	30, 40, 50	±1.0	<1.1	<0.2	N, 4.3/10, 7/16 [B]	500	-
7	0.7~2.7	6, 10, 15, 20	±1.0	<1.2	<1.2~0.3	N, 4.3/10, 7/16 [B]	500	-

ARRESTOR

coax surge protectors protect valuable communications equipment in wireless networks. We offer DC-6 GHz, quarter wave styles, and more. These coax surge protector and lightning protectors feature popular connectors including: Type N, DIN 7/16.

- A** GDT (GAS DISCHARGED TUBE)
- B** Improved GDT
- C** Shorted Stub



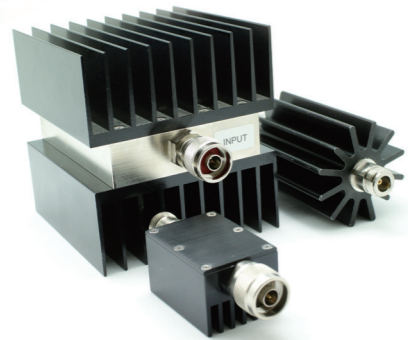
- Max. 500Watt RF Power
- Typical -160dBc PIMD Product Constitution
- DC~6GHz Wide Band Frequency
- Low residual voltage

Product List

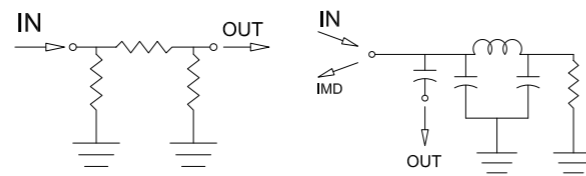
No.	Frequency range(GHz)	DC Spark over Voltage(V)	Max Surge Current(A)	VSWR (Input)	Insertion loss(dB)	Connector	RF Power (Watts)	PIMD (dBc)
1	DC 1.565~1.615	6	20K(8/20µs)	<1.2	<0.3	N	20	-
2	DC~3.0	90, 230	20K(8/20µs)	<1.2	<0.3	N	20	-
3	DC~6.0	90	20K(8/20µs)	<1.3	<0.6	N	20	-
4	0.7~2.7	0 GND SHORT	50K(8/20µs)	<1.2	<0.1	N, 7/16	500	<-150
5	0.7~3.6	0 GND SHORT	50K(8/20µs)	<1.3	<0.2	N, 7/16	500	<-150
6	0.2~6.0	0 GND SHORT	20K(8/20µs)	<1.3	<0.3	N	100	<-150

ATTENUATOR

High power attenuators include a comprehensive range from 1 to 300 Watts with a large choice of connectors available. Designed to cover up to 6 GHz frequency with possibility of fixed attenuation to 1~30 dB, they offer excellent electrical and mechanical performances : reliability and safety are ensured.



A General Attenuator **B** Low PIMD Attenuator



- Max. 300Watt RF Power
- Typical -160dBc PIMD Product Constitution
- DC~6GHz Wide Band Frequency
- 1~60dB, 1dB Step Product Constitution

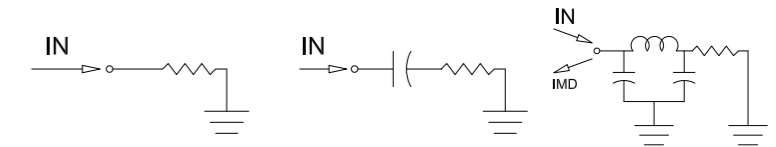
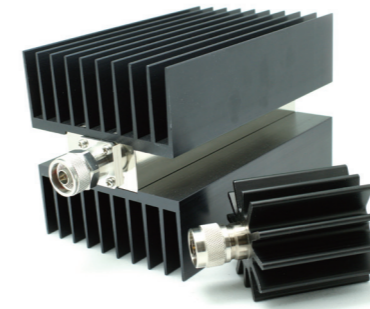
Product List

No.	Power (Watts)	Frequency range(GHz)	Attenuation (dB)	VSWR (Input)	Connector	PIMD (dBc)	Note
1	1	DC~3.0	1~60, 1-step	<1.2	SMA, N	-	
2	2	DC~6.0	1~10, 1-step 15, 20, 30	<1.3	SMA, N	-	
3	5	DC~6.0	3, 6, 10, 20, 30	<1.2	SMA, N	-	
4	10	DC~3.0	10, 20, 30	<1.2	N	-	
5	20	DC~4.0	3, 6, 10, 20, 30	<1.2	N	-	
6	50	DC~4.0	3, 6, 10, 20, 30	<1.2	N	-	
7	100	DC~3.0	10, 20, 30	<1.2	N	-	
8	150	DC~3.0	10, 20, 30	<1.2	N,	-	
9	150	0.7~3.6	10, 20, 30	<1.3	N, 7/16, 4.3/10	<-155	LOW PIMD
10	300	0.7~2.7	30	<1.3	N, 7/16	-	

TERMINATION

High Power Terminations include a comprehensive range from 1 to 1000 Watts, with a large choice of connector options available. Designed to cover up to 18 GHz frequency, High Power Terminations offer excellent electrical and mechanical performances and provide reliability and safety.

A General Load **B** DC Block Load **C** Low PIMD Load



- Max. 1KW RF Power
- Typical -165dBc Low PIMD Product Constitution
- DC~18GHz Wide Band Frequency
- DC Block Seletable

Product List

No.	Power (Watts)	Frequency range(GHz)	VSWR (Input)	Connector	PIMD (dBc)	Note
1	1	DC~3.0	<1.1	SMA, N	-	
2	1	DC~18.0	<1.22	SMA	-	
3	2	30KHz~3.0	<1.2	N	-	DC BLOCK
4	5	DC~3.0	<1.2	N, 7/16	-	
5	10	DC~4.0	<1.2	N, 7/16	-	
6	20	DC~3.0	<1.2	N, 7/16	-	
7	30	DC~4.0	<1.2	N, 7/16	-	
8	50	DC~4.0	<1.2	N, 7/16	-	
9	50	0.7~4.0	<1.3	N, 4.3/10, 7/16	<-155	LOW PIMD
10	100	DC~3.0	<1.2	N, 7/16	-	
11	150	DC~3.0	<1.2	N, 7/16	-	
12	150	0.7~4.0	<1.3	N, 4.3/10, 7/16	<-155	LOW PIMD
13	250	DC~3.0	<1.2	N, 7/16	-	
14	1000	0.7~2.7	<1.3	N, 7/16	-	



Company Products



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