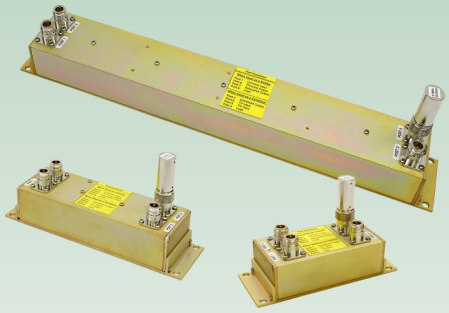
Hybrid Directional Couplers



Used for power division and signal distribution applications. The broad array of splits facilitates balanced signal distribution in the most comprehensive systems. Additionally, the Tri-Band products allow multi -band signal distribution via a single transmission line where multi-agency communication systems are required. They largely eliminate the near-far problem and maximize the cost-efficiency of the signal boosters. Bi-directional nature of the couplers allows them to be used for two-way communications with minimal loss above the desired coupling value.

FEATURES

- Alodine Gold Finish with silver plated N female connectors and gold plated pins
- Epoxy coating available upon request
- Multiple load configurations (no load, 5W, or 25W) available for different power requirements

Frequency Range	Decoupled Value (dB)	Thruline Loss (dB)	Power Ratio vs. Decoupled Ports	5-Watt Load Model No (2.8lb)	25-Watt Load Model No. (3.2 lbs)	No Load Model No. (2.6 lbs)
VHF, UHF, & 800 MHz Harmonic (144 -174 MHz, 450-530 MHz and 806-890 MHz)	-3.0 ± 0.7	-3.0 ± 0.3	50% / 50%	85-05-01	85-05-0101	85-05-01-LT
	-4.8 ± 0.7	-1.8 ± 0.3	67% / 33%	85-05-02	85-05-0201	85-05-02-LT
	-6.0 ± 0.7	-1.2 ± 0.3	75% / 25%	85-05-03	85-05-0301	85-05-03-LT
	-7.0 ± 1.0	-1.0 ± 0.2	80% / 20%	85-05-04	85-05-0401	85-05-04-LT
	-10 ± 1.0	-0.5 ± 0.2	90% / 10%	85-05-05	85-05-0501	85-05-05-LT
	-15	-0.2	97% / 3%	85-05-06	85-05-0601	85-05-06-LT
	-20	-0.2	99% / 1%	85-05-07	85-05-0701	85-05-07-LT
	-30	-0.2	99.9% / 0.1%	85-05-08	85-05-0801	85-05-08-LT
132-174 MHz	-3.0 ± 0.7	-3.0 ± 0.3	50% / 50%	85-38-01	85-38-0101	85-38-01-LT
	-4.8 ± 0.7	-1.8 ± 0.3	67% / 33%	85-38-02	85-38-0201	85-38-02-LT
	-6.0 ± 0.7	-1.2 ± 0.3	75% / 25%	85-38-03	85-38-0301	85-38-03-LT
	-7.0 ± 1.0	-1.0 ± 0.2	80% / 20%	85-38-04	85-38-0401	85-38-04-LT
	-10 ± 1.0	-0.5 ± 0.2	90% / 10%	85-38-05	85-38-0501	85-38-05-LT
350-520 MHz	-3.0 ± 0.7	-3.0 ± 0.3	50% / 50%	85-58-01	85-58-0101	85-58-01-LT
	-4.8 ± 0.7	-1.8 ± 0.3	67% / 33%	85-58-02	85-58-0201	85-58-02-LT
	-6.0 ± 0.7	-1.2 ± 0.3	75% / 25%	85-58-03	85-58-0301	85-58-03-LT
	-7.0 ± 1.0	-1.0 ± 0.2	80% / 20%	85-58-04	85-58-0401	85-58-04-LT
	-10 ± 1.0	-0.5 ± 0.2	90% / 10%	85-58-05	85-58-0501	85-58-05-LT
	-15.0 ± 1.0	-0.2	97% / 3%	85-58-06	85-58-0601	85-58-06-LT
	-20.0 ± 1.0	-0.2	99% / 1%	85-58-07	85-58-0701	85-58-07-LT
	-30.0 ± 1.0	-0.2	99.9% / 0.1%	85-58-08	85-58-0801	85-58-08-LT
746-960 MHz	-3.0 ± 0.7	-3.0 ± 0.3	50% / 50%	85-83-01	85-83-0101	85-83-01-LT
	-4.8 ± 0.7	-1.8 ± 0.3	67% / 33%	85-83-02	85-83-0201	85-83-02-LT
	-6.0 ± 0.7	-1.2 ± 0.3	75% / 25%	85-83-03	85-83-0301	85-83-03-LT
	-7.0 ± 1.0	-1.0 ± 0.2	80% / 20%	85-83-04	85-83-0401	85-83-04-LT
	-10 ± 1.0	-0.5 ± 0.2	90% / 10%	85-83-05	85-83-0501	85-83-05-LT
	-15.0 ± 1.0	-0.2	97% / 3%	85-83-06	85-83-0601	85-83-06-LT
	-20.0 ± 1.0	-0.2	99% / 1%	85-83-07	85-83-0701	85-83-07-LT
	-30.0 ± 1.0	-0.2	99.9% / 0.1%	85-83-08	85-83-0801	85-83-08-LT