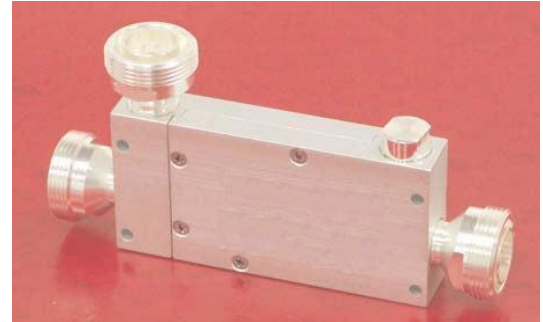


## Directional Coupler, CPL-KC-03D series

Quarter Wave Air-line Coupler  
806 - 960/1710 - 2200 MHz

- ◆ 6, 10, 15, 20 & 30 dB Coupling Values
- ◆ High Directivity/Isolation
- ◆ Low VSWR and Loss
- ◆ Dual Band Cellular and PCS/UMTS
- ◆ 200 Watt Average Power
- ◆ High Reliability, Low PIM
- ◆ RoHS compliant
- ◆ 7-16 mm DIN connectors standard



dBD Communications' KC-03D series, Directional Couplers, is a quarter wave, air-line design for applications covering all cellular bands to 2200 MHz. Units couple off a defined fraction of signal with minimal reflections or loss. The wide frequency range allows use with multi-band antennas, leaky cable systems and in wireless base stations. With minimal solder joints and an air dielectric, the dissipative loss has been minimized and reliability enhanced. Optional units with 4 port configuration, to IP65 and with combinations of DIN andN, male and female connectors.

See also KD and ND series, Unequal Power Splitters and Tappers, for different benefits.

Frequency Ranges:	806 to 960 MHz and 1710 to 2200 MHz
VSWR:	1.20:1 max, all ports
Dissipative Loss:	0.1 dB max. (Main Line)
Power Handling:	200 W avg., 3 kW peak*
Directivity:	25 dB min., <1990 MHz 23 dB min., >1990 MHz
Impedance:	50Ω nominal
Intermodulation, PIM:	<-140 dBc max. with 2 tones of +43 dBm. Lower levels to order.
Environment:	IP64, -35°C to +75°C
Attachment Bracket:	1 supplied (2 on request)
Finish/Connectors:	Conversion/Silver or triplate

\*Power may also be limited by feeding into poorly matched loads overloading the internal 2W termination.

Model Number		Coupling dB nom.	Coupled Loss dB	Coupling, (ref. Input) Actual Coupling dB, in range			Weight oz (g)	Dimensions in inches (mm)			
3 port	4 port			806 - 960	1710 - 1990	1990 - 2200		A	B	C	D
KC-63D	KC-63DL	6	1.26	6.8 ± 0.8	5.4 ± 0.6	6.4 ± 0.8	12	3.57	3.87	5.62	0.85
KC-73D	KC-73DL	10	0.454	10.8 ± 0.8	9.4 ± 0.7	10.4 ± 0.8	(330)	(90.7)	(98.3)	(143)	(21.6)
KC-53D	KC-53DL	15	0.140	15.5 ± 0.9	14.0 ± 0.8	15.1 ± 1.0	12	3.79	4.09	5.83	0.73
KC-83D	KC-83DL	20	0.045	20.8 ± 0.9	19.4 ± 0.8	20.4 ± 1.0	(330)	(96.3)	(104)	(148)	(18.5)
KC-93D	KC-93DL	30	0.004	30.8 ± 1.0	29.4 ± 1.0	30.4 ± 1.3					

