

- ◆ 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



Microlab CK-30D 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 and N, male and female connectors.

See also DK and DN series, Unequal Power Splitters and Tappers, for different benefits. (8/08)

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 3 port	Coupling 4 port	Coupling dB nom.	Coupled Loss dB	Coupling, (ref. Input) Actual Coupling, dB, in range			Weight oz (g)	Dimensions in inches (mm)			
				806 - 960	1710 - 1990	1990 - 2200		A	B	C	D
CK-36D	CK-36LD	6	1.26	6.8 ± 0.8	5.4 ± 0.6	6.4 ± 0.8	12	3.57	3.87	5.62	0.85
CK-37D	CK-37LD	10	0.454	10.8 ± 0.8	9.4 ± 0.7	10.4 ± 0.8	(330)	(90.7)	(98.3)	(143)	(21.6)
CK-35D	CK-35LD	15	0.140	15.5 ± 0.9	14.0 ± 0.8	15.1 ± 1.0	12	3.79	4.09	5.83	0.73
CK-38D	CK-38LD	20	0.045	20.8 ± 0.9	19.4 ± 0.8	20.4 ± 1.0	(330)	(96.3)	(104)	(148)	(18.5)
CK-39D	CK-39LD	30	0.004	30.8 ± 1.0	29.4 ± 1.0	30.4 ± 1.3					

