

- ◆ 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
- ◆ N connectors standard



Microlab CK-30N 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 are available.

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	Coupling	Coupled	Loss	Coupling, (ref. Input)			Weight	Dimensions in inches (mm)			
				3 port	4 port	dB		Actual Coupling, dB, in range	oz	A	B
		nom.	dB	806 - 960	1710 - 1990	1990 - 2200	(g)				
CK-36N	CK-36LN	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-37N	CK-37LN	10	0.454	10.8 ± 0.8	9.4 ± 0.7	10.4 ± 0.8	(330)	(90.7)	(98.3)	(143)	(21.6)
CK-35N	CK-35LN	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-38N	CK-38LN	20	0.045	20.8 ± 0.9	19.4 ± 0.8	20.4 ± 1.0	(330)	(96.3)	(104)	(148)	(18.5)
CK-39N	CK-39LN	30	0.004	30.8 ± 1.0	29.4 ± 1.0	30.4 ± 1.3					

