

Directional Coupler, CK-70 series

Low Loss, Multi Section, Air-line Coupler 380 - 2700 MHz, N or 7-16 mm DIN

- ♦ 6, 10, 15 dB Coupling Values
- ♦ High Directivity/Isolation
- ♦ Low VSWR and Loss
- ♦ Tetra, Cellular and PCS/UMTS
- ♦ 200 Watt Average Power Rating
- High Reliability, Low PIM
- ♦ IP67, RoHS compliant
- ♦ 7-16 mm DIN or N Connectors



The CK-70 series, Directional Couplers, is a multi-section quarter wave, air-line design for indoor applications covering all Tetra and cellular bands, 380 to 2700 MHz and usable down to 80 MHz. Units couple off a defined fraction of signal with minimal reflections or loss.

The wide frequency range allows use with multiband antennas and leaky cable systems and in wireless base stations. With no solder joints and an air dielectric, the dissipative loss has been minimized and reliability enhanced. Standard units are 3 port configuration, and a 4 port configuration is available to order.

See also DK and DN series, Unequal Power Splitters and Tappers, in same range for different benefits. (08/10)

Frequency Ranges: 380 to 2700 MHz VSWR, max: 1.20:1, all ports

(1.30:1, >2500 MHz) 200 W avg., 3 kW peak* 20dB, (18dB >2500 MHz)

Impedance: 50Ω nominal

Power Handling:

Directivity, min:

Intermodulation, PIM: <-140 dBc with 2 tones of +43 dBm; <-150 dBc to order

Environment: -35°C to +75°C, IP64 (IP67 to order)

Finish: Housing: Passivated aluminum Connectors: Triplate, female

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

Model No. N conn	Model No. 7-16 DIN	Coupling Value, nom.	Coupled Loss, dB	Dissipative Loss, dB	Coupling at 80 MHz		Flatness >500 MHz	Weight nom., oz (g)
CK-76N	CK-76D	6 dB	1.26	<0.1	~19 dB	± 1.0	± 1.0	24 (680)
CK-77N	CK-77D	10 dB	0.454	<0.1	~23 dB	± 1.5	± 1.0	24 (680)
CK-75N	CK-75D	15 dB	0.140	<0.1	~28 dB	± 1.5	± 1.0	24 (680)

