



MICROLAB/FXR Directional Coupler

CK-20N series

Quarter Wave Air-line Coupler
Tetra Band, 380 - 520 MHz

- ◆ 6, 10, 15, 20 & 30 dB Coupling, Tetra Band
- ◆ High Directivity/Isolation
- ◆ Low VSWR and Loss
- ◆ 200 Watt Average Power Rating
- ◆ High Reliability, Low PIM
- ◆ N connectors standard



Microlab/FXR CK-20N series, Directional Couplers, is a quarter wave, air-line design for indoor Tetra applications 380 - 520 MHz, and useable down to 150 MHz. Units couple off a defined fraction of signal with minimal reflections or loss.

With air dielectric the loss is very low and with minimal solder joints the reliability is exceptional, making these couplers ideally suited to in-building passive distributed antenna networks and leaky cable systems for UHF wireless services.

Units are also available in a 4 port configuration and with 7-16 mm DIN connectors. (4/05)

Main Frequency Band: 380 to 520 MHz
 Insertion Loss: < 0.2 dB (above coupled loss)
 VSWR: 1.15:1 max., all ports
 Power Handling: 200 W avg., 3 kW peak*
 Directivity: 25 dB min.
 Impedance: 50Ω nominal
 Intermodulation, PIM: < -140 dBc max. with 2 tones of +43 dBm
 Environment: IP64, -35°C to +75°C
 Finish: Passivated Aluminum
 N Connectors: Silver plated, female

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

Model Number	Coupling Value, nom.	Coupled Loss, dB	Frequency Sensitivity, dB	Coupling at 150 MHz	Weight oz. (g)	Dimensions in inches (mm)			
						A	B	C	D
CK-26N	6 dB	1.26	± 0.75	~9.5 dB	14 (397)	8.83	9.13	10.63	0.93
CK-27N	10 dB	0.454	± 1.0	~15 dB	14 (397)	(224)	(232)	(270)	(23.6)
CK-25N	15 dB	0.140	± 1.0	~20 dB	14 (397)	8.83	9.13	10.63	0.93
CK-28N	20 dB	0.045	± 1.0	~25 dB	14 (397)	(224)	(232)	(270)	(23.6)
CK-29N	30 dB	0.004	± 1.0	~35 dB	14 (397)				

