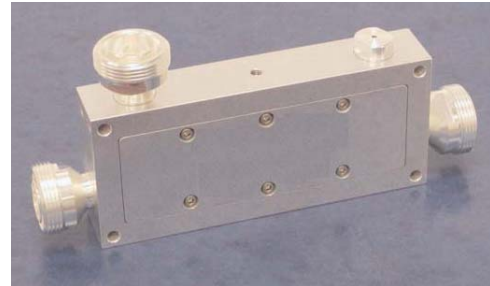




Directional Coupler, CPL-KC-01 series

Ultra-wideband, Low-loss Stripline Coupler
3 or 4 port, 700 - 2,700 MHz

- ◆ Ultra wide-band, taper design
- ◆ Flat response 700 to 2700 MHz
- ◆ 6, 10, 20 & 30 dB Values
- ◆ Minimal RF Insertion Loss
- ◆ Rugged, High Reliability
- ◆ Low Passive Intermodulation (PIM)
- ◆ RoHS compliant
- ◆ 200 Watt Average Main Line Power
- ◆ 7-16 mm DIN or N Connectors



The KC-01 series of Directional Couplers is a tapered stripline design for indoor applications covering from 700-2,700 MHz (close to specification from 500 to 3,000 MHz, usable to 3,600 MHz). Units couple off a defined fraction of a signal with minimal reflections or loss. Each model is available as a 4 port coupler.

The extremely wide frequency range allows use with multi-band antennas and leaky cable systems and wireless base stations. With minimal solder joints and a low loss dielectric, the dissipative loss has been minimized and reliability enhanced. See also KD and ND series, Unequal Power Splitters/Tappers, which offer alternate benefits for some in-building applications.

Frequency Range: 700 to 2,700 MHz with usable performance to 3,600 MHz
 VSWR, all ports: 1.20:1 max.
 Power Rating: 200 W avg., 1.5 kW pk*
 Directivity: 20 dB min.
 Impedance: 50Ω nominal
 Intermod, PIM: <-140 dBc, 2 x +43 dBm
 Environment: 0°C to +50°C, IP65
 below 0°C coupling is maintained but directivity falls
 Finish: Body: Passivated Aluminum
 Connectors: N or 7-16 mm (f), triplate

*Power may be limited by feeding into poorly matched loads overloading the termination.

7-16 mm DIN Models		N Models		Coupling nom.	Frequency Sensitivity	Coupled Loss	Insertion Loss, dB	Weight oz (kg)	
3 Port	4 Port	3 Port	4 Port					DIN	N
KC-61D	KC-61DL	KC-61N	KC-61NL	6 dB	±0.75 dB	1.26 dB	<0.25	26 (0.75)	24 (0.67)
KC-71D	KC-71DL	KC-71N	KC-71NL	10 dB	±1.0 dB	0.45 dB	<0.20	26 (0.75)	24 (0.67)
KC-81D	KC-81DL	KC-81N	KC-81NL	20 dB	±1.0 dB	0.04 dB	<0.20	26 (0.75)	24 (0.67)
KC-91D	KC-91DL	KC-91N	KC-91NL	30 dB	±1.0 dB	0.01 dB	<0.20	26 (0.75)	24 (0.67)

