



Low Loss, Multi Section, Air-line Coupler 380 - 2700 MHz, 3 or 4 port, N or 7-16 Rev. A

- ♦ 6, 10, 15 dB Coupling Values
- Low VSWR and Loss
- ♦ 200 Watt Average Power Rating
- ♦ IP64, RoHS compliant

- High Directivity/Isolation
- ♦ Tetra, Cellular and PCS/UMTS
- ♦ High Reliability, Low PIM
- ♦ 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 an equivalent 4 port configuration is available to order.

See also DK and DN series, Unequal Power Splitters and Tappers, in same range for different benefits. (01/13)

Frequency Ranges: 380 to 2700 MHz

VSWR, max: 1.20:1, all ports
(1.30:1, >2500 MHz)

Power Handling: 200 W avg., 3 kW peak\*

Directivity, min: 20dB, (18dB >2500 MHz)

Impedance:  $50\Omega$  nominal

Intermodulation, PIM<sup>†</sup>: <-140 dBc with 2 tones of

+43 dBm; <-150 dBc to order

Environment: -35°C to +75°C, IP64

(IP67 to special order)
Passivated aluminum

Finish: Housing: Passivated alumin Connectors: Triplate, female

\*Power may also be limited on 3 port models by feeding into

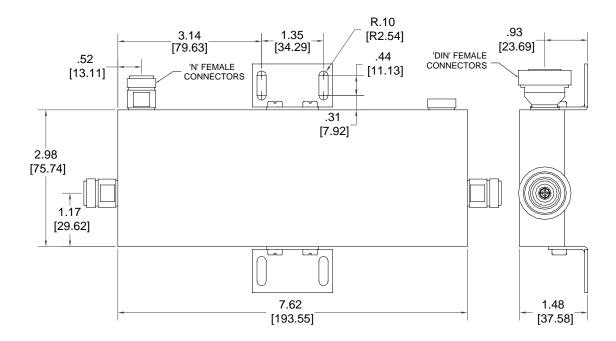
poorly matched loads overloading the internal 2W termination.

<sup>†</sup>PIM performance may be improved by using 4 port model and a low PIM load of the appropriate power.

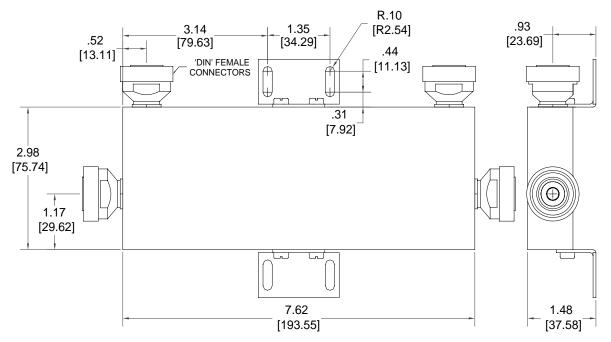
				Coupling Value, nom.	•	-				Wt., nom oz (g)
CK-76N	CK-76D	CK-76LN	CK-76LD	6 dB	1.26 dB	<0.1dB	~19 dB	± 1.0	± 1.0	24 (680)
CK-77N	CK-77D	CK-77LN	CK-77LD	10 dB	0.454 dB	<0.1dB	~23 dB	± 1.5	± 1.0	24 (680)
CK-75N	CK-75D	CK-75LN	CK-75LD	15 dB	0.140 dB	<0.1dB	~28 dB	± 1.5	± 1.0	24 (680)

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## 3 Port Outline



## **4 Port Outline**



All dimensions ±0.60 inches unless otherwise noted. Dimensions in mm are for reference only.