

- ◆ 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.

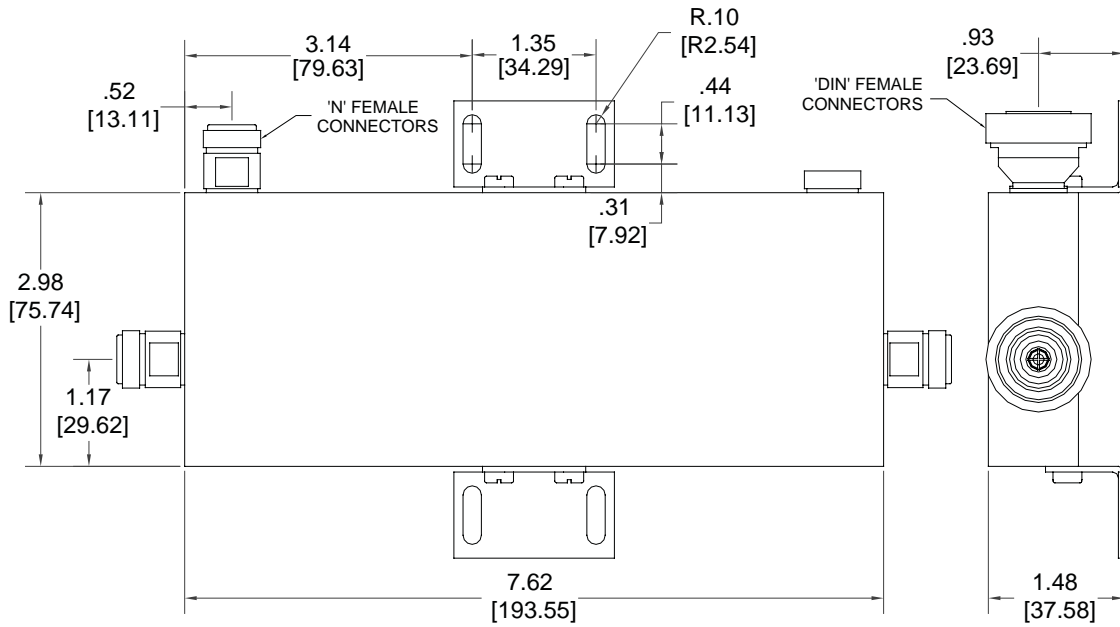
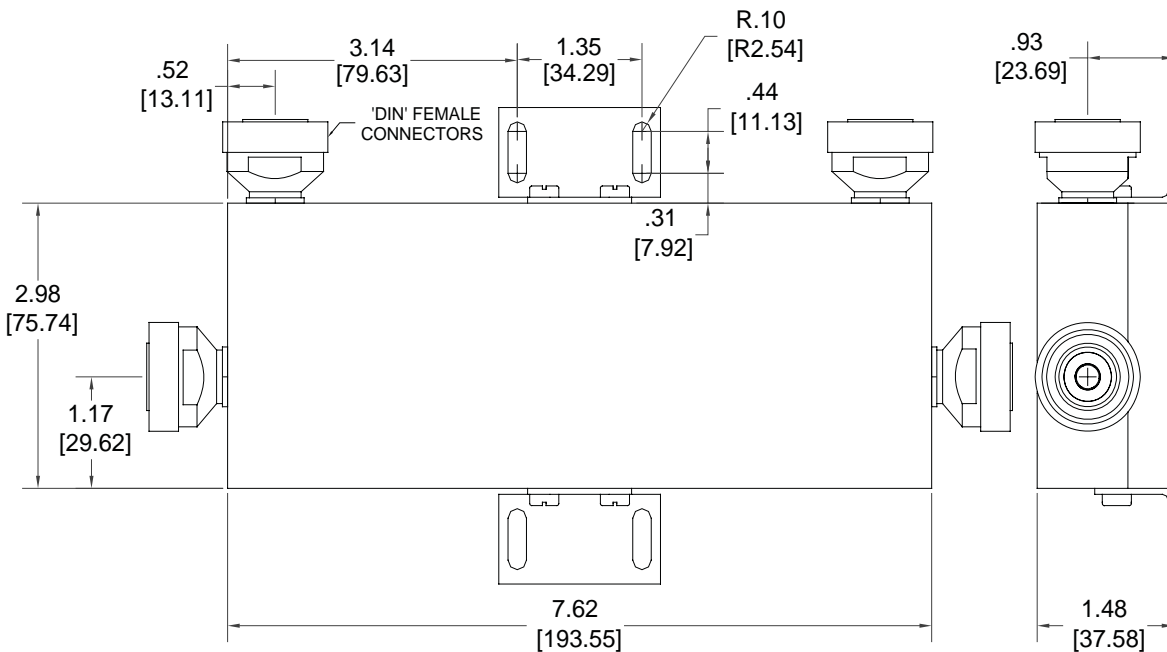
See also DK and DN series, Unequal Power Splitters and Tappers, in same range for different benefits. (01/13)

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:	50Ω 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)
Finish: Housing:	Passivated aluminum
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.

Model No. (3 port) N conn	Model No. (4 port) 7-16 DIN	Model No. (3 port) N conn	Model No. (4 port) 7-16 DIN	Coupling Value, nom.	Coupled Loss	Dissipative Loss	Coupling at 80 MHz	Coupling <500 MHz	Flatness >500 MHz	Wt., nom oz (g)
<b>CK-76N</b>	<b>CK-76D</b>	<b>CK-76LN</b>	<b>CK-76LD</b>	6 dB	1.26 dB	<0.1dB	~19 dB	± 1.0	± 1.0	24 (680)
<b>CK-77N</b>	<b>CK-77D</b>	<b>CK-77LN</b>	<b>CK-77LD</b>	10 dB	0.454 dB	<0.1dB	~23 dB	± 1.5	± 1.0	24 (680)
<b>CK-75N</b>	<b>CK-75D</b>	<b>CK-75LN</b>	<b>CK-75LD</b>	15 dB	0.140 dB	<0.1dB	~28 dB	± 1.5	± 1.0	24 (680)

**3 Port Outline**

**4 Port Outline**


All dimensions  $\pm 0.005$  inches unless otherwise noted.  
 Dimensions in mm are for reference only.