

- ◆ Ultra-wideband directional couplers for 5G FR1 signal distribution
- ◆ 300 W Average Main Line Power
- ◆ Minimal RF Insertion Loss & High Directivity
- ◆ Guaranteed Low PIM
- ◆ 4.3-10 Connectors
- ◆ Salt Fog Rated
- ◆ RoHS Compliant



The CC-6xxE series of Directional Couplers are designed to cover from 617 to 5925 MHz. Units couple off a defined fraction of signal with minimal reflections or loss. Availability in a wide range of coupling values makes this series useful in optimizing the power distribution required in 5G passive distributed antenna systems (DAS).

The extremely wide frequency range allows use with multiband antennas, 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.

Part No	Coupling nom	Frequency Sensitivity	Coupled Loss
CC-605E	5 dB	±1.0 dB	1.65 dB
CC-606E	6 dB	±1.1 dB	1.25 dB
CC-607E	7 dB	±1.2 dB	0.97 dB
CC-608E	8 dB	±1.2 dB	0.84 dB
CC-610E	10 dB	±1.2 dB	0.45 dB
CC-613E	13 dB	±1.3 dB	0.22 dB
CC-615E	15 dB	±1.4 dB	0.14 dB
CC-620E	20 dB	±1.4 dB	0.04 dB

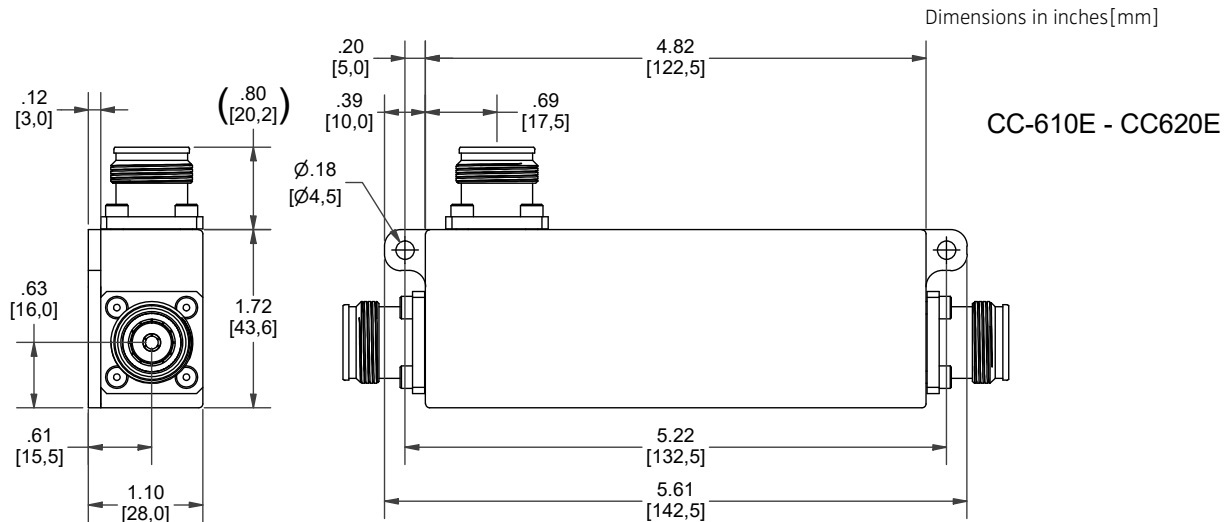
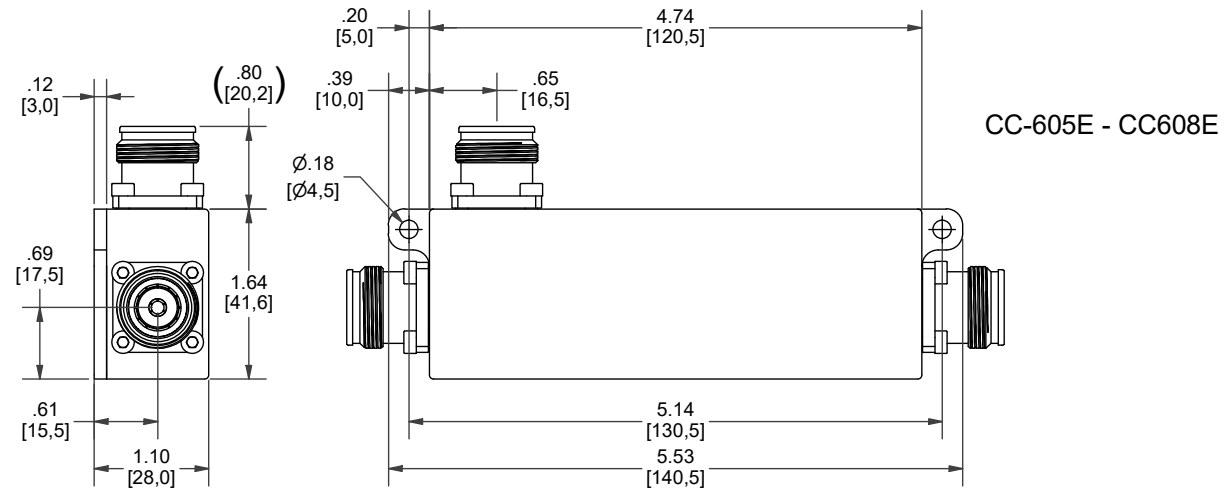
Frequency:	617 to 5925 MHz
Directivity:	20 dB min for 617-2700MHz 18 dB min for 2700-4900MHz 17 dB min for 4900-5925MHz
VSWR:	1.20:1 max for 617-3800MHz 1.30:1 max for 3800-5925MHz
PIM:	-161 dBc (-118 dBm) min. (Tested with 2x +43 dBm)
Power Rating:	300 W avg., 1 kW pk*
Dissipative Loss:	0.3 dB max
Impedance:	50Ω nominal
Group Delay:	1.2 ns typ.
Environment:	-40°C to +75°C, IP67 ASTM B117, 720hrs Salt Fog Test
Housing Finish:	Painted
Connectors:	4.3-10 (f), 4-hole Flange Triplate
Weight:	0.9 lbs (0.41 kg)
Dimensions:	
5-8 dB:	5.53 x 1.64 x 1.10 inches [140.5 x 41.6 x 28 mm]
10-20 dB:	5.61 x 1.72 x 1.10 inches [142.5 x 43.8 x 28 mm]

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

Note: Specifications are subject to change without prior notification.

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Mechanical Outline



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