

# Public Safety Directional Coupler

340-2700 MHz, Low PIM, N-Female

ventev®

Connect, Protect, and Enable™

Ventev's Public Safety Directional Couplers are wideband covering 340-2700 MHz of frequency range. It supports public safety bands in UHF, 700/800 MHz, and FirstNet as well as bands in-between up to 2700 MHz for cellular networks. Highly reliable design offers low insertion and higher isolation with ultra-low PIM (-161 dBc). It can handle up to 500 W of power and is suitable for indoor and outdoor deployments (IP65). Available in range of coupling values in N-Female connector option.



## Available Models

Description	MFG Part #	SKU
5 dB Coupling	VEN-05DC-327-NF	609668
6 dB Coupling	VEN-06DC-327-NF	609667
7 dB Coupling	VEN-07DC-327-NF	609666
8 dB Coupling	VEN-08DC-327-NF	609665
10 dB Coupling	VEN-10DC-327-NF	609664
13 dB Coupling	VEN-13DC-327-NF	609663
15 dB Coupling	VEN-15DC-327-NF	609662
20 dB Coupling	VEN-20DC-327-NF	609661
30 dB Coupling	VEN-30DC-327-NF	609660

## Features & Benefits

- Covers 340-2700 MHz supporting bands in-between including Public Safety bands in UHF, 700/800 and FirstNet.
- Highly reliable design with low insertion loss and high isolations.
- 500 W power rating and ultra-low PIM (-161 dBc).
- Suitable for indoor and outdoor applications (IP65).

## Electrical Specifications

MFG Part #	VEN-05DC-327-NF	VEN-06DC-327-NF	VEN-07DC-327-NF	VEN-08DC-327-NF	VEN-10DC-327-NF	VEN-13DC-327-NF	VEN-15DC-327-NF	VEN-20DC-327-NF	VEN-30DC-327-NF	
<b>Coupling</b>	<b>5 dB</b>	<b>6 dB</b>	<b>7 dB</b>	<b>8 dB</b>	<b>10 dB</b>	<b>13 dB</b>	<b>15 dB</b>	<b>20 dB</b>	<b>30 dB</b>	
<b>Tolerance</b>	<b>340-510</b>	±1.3 dB	±1.3 dB	±1.3 dB	±1.5 dB	±1.5 dB	±1.6 dB	±1.6 dB	±1.8 dB	±2.0 dB
	<b>600-960</b>	±0.8 dB	±0.8 dB	±0.8 dB	±1.0 dB	±1.1 dB	±1.2 dB	±1.2 dB	±1.3 dB	±1.3 dB
	<b>1700-2700</b>	±1.0 dB	±1.0 dB	±1.0 dB	±1.2 dB	±1.2 dB	±1.3 dB	±1.3 dB	±1.4 dB	±1.4 dB
<b>Insertion Loss</b>	<b>340-510</b>	≤ 2.3 dB	≤ 1.6 dB	≤ 1.3 dB	≤ 1.2 dB	≤ 0.9 dB	≤ 0.6 dB	≤ 0.5 dB	≤ 0.4 dB	≤ 0.2 dB
	<b>600-960</b>	≤ 2.5 dB	≤ 1.8 dB	≤ 1.5 dB	≤ 1.4 dB	≤ 1.1 dB	≤ 0.7 dB	≤ 0.6 dB	≤ 0.4 dB	≤ 0.2 dB
	<b>1700-2700</b>	≤ 2.5 dB	≤ 1.8 dB	≤ 1.5 dB	≤ 1.4 dB	≤ 1.1 dB	≤ 0.7 dB	≤ 0.6 dB	≤ 0.4 dB	≤ 0.2 dB
<b>Isolation</b>	<b>340-960</b>	≥ 25 dB	≥ 26 dB	≥ 27 dB	≥ 28 dB	≥ 30 dB	≥ 33 dB	≥ 35 dB	≥ 40 dB	≥ 48 dB
	<b>1700-2700</b>	≥ 24 dB	≥ 25 dB	≥ 26 dB	≥ 27 dB	≥ 29 dB	≥ 32 dB	≥ 34 dB	≥ 38 dB	≥ 48 dB
<b>VSWR</b>	<b>340-960</b>	≤ 1.25	≤ 1.25	≤ 1.25	≤ 1.25	≤ 1.25	≤ 1.25	≤ 1.25	≤ 1.25	≤ 1.25
	<b>1700-2700</b>	≤ 1.3	≤ 1.3	≤ 1.3	≤ 1.3	≤ 1.3	≤ 1.3	≤ 1.3	≤ 1.3	≤ 1.3
<b>3rd Order PIM</b>	≤ -161 dBc at 2x 43 dBm Carrier									
<b>Power Rating</b>	500 W (3 kW Peak)									
<b>Impedance</b>	50 Ohms									
<b>Connectors</b>	N-Female									



All product specifications are subject to change without notice or obligation.

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## Mechanical Specifications

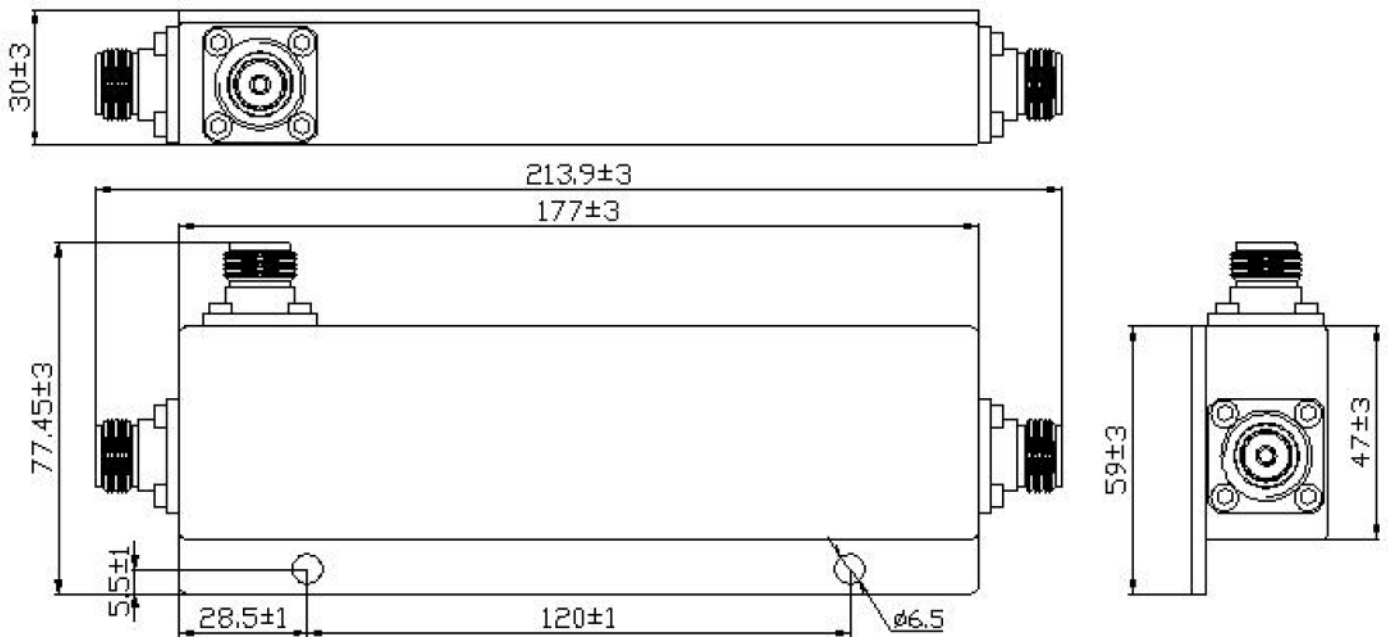
Dimensions (without connectors)	7 x 1.8 x 1.2 in. (177 x 47 x 30 mm)
Weight	1 lbs. (0.45 kg)
Color & Material	Red Aluminum
Mounting	Using Mounting Tabs

## Environmental Specifications

Ingress Protection	IP65
Operating Temperature	-31° to 185°F (-35° to 85°C)
Operating Humidity	Up to 95%
Application	Indoor/Outdoor

## Dimensions

Shown in millimeters



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