



# 1-Port Side Fed Dipole Deepwave Antenna

DS040367-1A

Model #: 104DW-89A-12-01-07-D7

## Description

The novel side-fed dipole design of these antennas provides 6 dBd, 8 dBd, 10 dBd, or 12 dBd omnidirectional gain with 63 MHz bandwidth. They feature constant beamtilt, heavy null fill, and have been VSWR tested. Depending upon the specific required area of coverage, horizontal patterns O, A, B, D, or H are available.

## Features

- High gain maximizes ERP
- Heavy null fill enhances close-in coverage
- Customized beamtilt minimizes interference to and from adjacent systems
- Various patterns available to efficiently cover target area

## Electrical Specifications

Parameter	Value
Frequency Range (MHz)	806–869
Polarization	Vertical
Elevation Beamwidth (3 dB)	3.5°
Electrical Downtilt	0.75°
Impedance (Ohms)	50Ω
VSWR	< 1.5:1
1st Null Fill	Included
Null Fill	Included
Maximum Input Power (Watts)	500 W
Lightning Protection	Top Rod Grounded to Base Mount
Gain	14.1 dBi (12 dBd)
Azimuth Pattern	Omnidirectional
Azimuth Beamwidth (3 dB)	360°
Front-to-Back Ratio (dB)	Omni



## Mechanical Specifications

Parameter	Value
Connector Type	7/16 DIN Female
Connector Location	Bottom
Antenna Type	Penetrator
Mount Type	Bracket
Mounting Hardware	B1 Bracket (included)
Weight - Antenna Only	42 kg (92 lbs)
Weight with Mounting Bracket	56 kg (124 lbs)
Max Wind Loading Area	0.706 m <sup>2</sup> (7.6 ft <sup>2</sup> )
Rated Wind Speed	160 km/h (100 mph)
Survival Wind Speed	160 km/h (100 mph)
Overall Length	6.1 m (20 ft)
Diameter	168.3 mm (6.625 in)
Radiating Element Material	Aluminum
Element Housing Material	Fiberglass
Shipping Weight	61.3 kg (135 lbs)

## Environmental Specifications

Parameter	Value
Notes	<ul style="list-style-type: none"><li>• Always attach the antenna using all mounting points.</li><li>• Do not install antenna with the connectors facing upwards.</li><li>• For radiation patterns and additional technical documentation, visit: <a href="https://www.rfsworld.com/">https://www.rfsworld.com/</a></li></ul>