



# 1-Port Side Fed Dipole Deepwave Antenna

DS040363-1A

Model #: 104DW-89A-10-00-07-N

## 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
Gain (dBi)	12.1
Azimuth Pattern	Omnidirectional
Azimuth Beamwidth (3 dB)	360°
Elevation Beamwidth (3 dB)	5°
Electrical Downtilt	0.75°
Impedance (Ohms)	50Ω
VSWR	< 1.5:1
Front-to-Back Ratio (dB)	Omni
1st Null Fill	Included
Null Fill	Included
Maximum Effective Power Per Port (Watts)	500 W

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## Mechanical Specifications

Parameter	Value
Length	3960 mm (155.9 in)
Diameter	168.3 mm (6.6 in)
Net Weight - Antenna Only	22.7 kg (50 lbs)
Net Weight - Mounting Hardware Only	22.7 kg (50 lbs)
Max Wind Loading Area	0.66 m <sup>2</sup> (7.2 ft <sup>2</sup> )
Survival Wind Speed / Rated Wind Speed	225 km/h (140 mph)
Connector Type	(1x) N Female at Bottom
Radiating Element Material	Aluminum
Element Housing Material	Fiberglass
Lightning Protection	Top Rod Grounded to Base Mount
Antenna Shipping Weight	40.4 kg (89 lbs)
Mounting Hardware Shipping Weight	23.6 kg (52 lbs)

## Environmental Specifications

Parameter	Value
Installation 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>• Up to a maximum height of 500 ft. 250 ft max height rating is 150 mph.</li></ul>