

# **Bi-Directional Helical Antenna**





## **Product Features**

MODEL: BDH2024

### Description

Wade Antenna's new bi-directional Helical Antenna is designed for the Wi-Fi 2.4 - 2.5 GHz frequency band. It is based on our H2024 high gain Helical Antenna. Additional mounting options are also available.

#### **Application**

Idea for underground corridors, mining, security and other wireless applications.

ELECTRIC	CAL SPEC	IFICATIONS
FREQUENCY RANGE - GHz		2.4 - 2.5
GAIN - dBi		15 (Assumed)
IMPEDANCE - Ohm		50
CROSS POL. REJECTION - dB		20
POLARIZATION		Right or Left Circular
VSWR:	Min.	1.1
	Max.	2.0
	Typical	1.5
HPBW:	Horz.	23
	Vert.	23
STD. CONNECTOR		N-Female
MAX. INPUT POWER - W		50
OPERATING TEMPERATURE		-40 to +70
- °C (°F)		(-40 to +158)

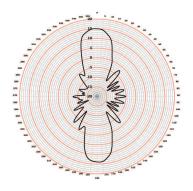
WIND LOADING				
WIND AREA:	Ft <sup>2</sup> (No Ice)	0.6		
	(½" Radial Ice)	0.9		
WIND LOAD:	Ft-lbs* (No Ice)	27		
	**(1/2" Radial Ice)	12		

<sup>\*</sup> Wind Speed = 100 MPH at sea level with 100% Humidity at 70°F

MECHANICAL SPECIFICATIONS				
NUMBER OF ELEMENTS (TURNS)	20			
OVERALL LENGTH - in (mm)	60.4 (1535)			
GROUND PLANE DIAMETER - in (mm)	5.5 (140)			
HELICAL DIAMETER - in (mm)	2 (50.8)			
ANTENNA WITH MOUNT WEIGHT - Ibs (kg)	2.5 (1.13)			

MOUNTING OPTIONS		
MAST OD - in (mm)	2 (50.8)	

#### **ANTENNA PATTERN**



Wade Antenna's ongoing policy of continuing development may result in specification changes to its products.

<sup>\*\*</sup> Wind Speed = 50 MPH at sea level with 100% Humidity at 0°F

<sup>\*\*\*</sup> Maximum Wind Speed at sea level with 100% Humidity at 70°F (Safety factor of 1.65 included)