



**BD-5-9**

## 5 GHZ BI-DIRECTIONAL

- BD-5-9

### DESCRIPTION

The Wade BD-5-9 antenna is a true bi-directional antenna with a single RF input to avoid the requirement for phase matched RF cables. This antenna is optimized for mobile mesh networks operating in the 5 GHz bands. This antenna uses an aerodynamic fiberglass radome cover for added strength and durability.

### APPLICATION

- Train Network (installed outside train cars)
- Vehicular

## SPECIFICATIONS

### ELECTRICAL

MODEL	BD-5-9
FREQUENCY RANGE	5.47 – 5.875 GHz
GAIN (dBic) - Horizon	9
Gain (dBic) - Peak	12.5
IMPEDANCE (Ohms)	50
POLARIZATION	V
CROSS POL REJECTION	20dB
F/B RATIO	N/A
VSWR:	
Min	1.05:1
Max	2:01
Typical	1.5:1
HPBW:	
Horz.	48
Vert.	41
STD. CONNECTOR	N-Male
MAX. INPUT POWER (watts)	35W
OPERATING TEMPERATURE	+70C to -40C

### MECHANICAL

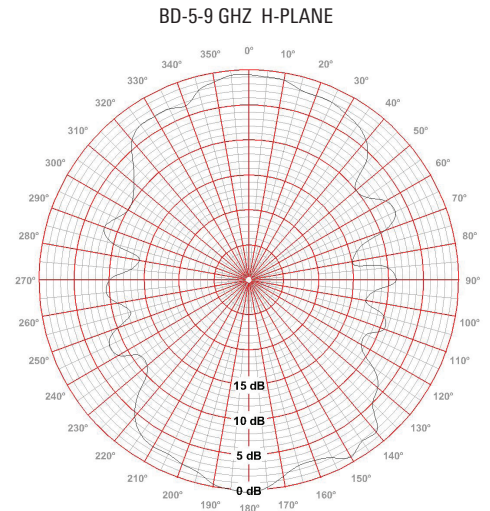
MODEL	BD-5-9
NUMBER OF ELEM. (TURNS)	1
OVERALL LENGTH [IN.]	11.5
GROUND PLANE DIAMETER	11
ANTENNA WEIGHT	2 lbs
<b>MOUNTING OPTIONS</b>	
TYPE	BD-5-9
MAST SIZE(O.D.)	wall or pipe (any size)

Designed to meet IEC 60529 Ingress Protection IP66  
Designed to meet IEC 61373 Category 1, Class A

### WIND LOADING

MODEL	BD-5-9
Wind Area (Sq Ft)	(No Ice) 0.1 (1/2" Radial Ice) 0.15
Wind Load (Ft-Lbs)	*(No Ice) 20.1 **(1/2" Radial Ice) 25.7

## ANTENNA PATTERN



### NOTES:

- \* Wind Speed = 400 MPH at sea level with 100% Humidity at 70° Fahrenheit.
- \*\* Wind Speed = 300 MPH at sea level with 100% Humidity at 0° Fahrenheit.
- \*\*\* Maximum Wind Speed at sea level with 100% Humidity at 70° Fahrenheit. Safety Factor of 1.65 included.

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

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