

## BD-5900 Blade Style DSRC Antenna



Blade Style Antenna

- Slim profile; dependable link
- Mechanically sound, meets IPx7 water ingress standards
- Bi-directional Blade Style

The BD-5900 antenna is designed for Utility Cabinets and NEMA Boxes, it can be mounted in any setting where a slim profile is desired. It offers outstanding electrical performance as well as a unique mechanical package.

Mobile Mark's BD-5900 blade-style antenna has a single element for 5.850 to 5.925 GHz DSRC in a slim, compact radome. It measures only 7 1/2" long by 1 1/2" deep and less than 4" tall (19 cm x 3.8 cm x 10 cm).

This blade style antenna is ground-plane independent and designed to perform on either a fiberglass or metal box with up to a .20" (5 mm) thick surface.

Using our new slim line package, the BD-5900 is a Bi-Directional antenna designed for DSRC 5.9 GHz surface mounted applications. This particular model comes with Direct N connection.

The base bolt is attached through a mounting hole that accommodates the DSRC connection. A special gasket preserves the IPx7 water ingress rating when properly mounted.

Two 5/8" (1.6 cm) studs at the base of the antenna are attached through separate mounting holes to help prevent the antenna from rotating on the surface.

The BD-5900 has 50 OHM Nominal Impedance with a maximum power of 10 watts. In addition, the VSWR rating for this antenna is less than 2:1 over range.

The beamwidth for the BD-5900 comes in at 40° for Azimuth and 30° for Elevation. While no ground plane is required for this antenna, it does perform better on a metal groundplane. The electrical tilt beamwidth is 0° with no ground plane compared to 7° max uptilt with a groundplane.

Model #	Description
BD-5900-GRY	Bi-directional DSRC @ 5.9 GHz

### Specifications

Frequency:	5.850-5.925 GHz	Radome Material:	Light Grey UV Inhibitive Plastic
Gain:	13 dBi	Operating Temperature:	-40° to +80° C
VSWR:	<2:1 VSWR over Range	Connectors/Interface:	Direct N Jack
Impedance:	50 Ohm Nominal	Groundplane:	Not required, but recommended
Maximum Power:	10 Watts	Electrical Tilt Beamwidth:	No groundplane: 0°
Beamwidth:		With groundplane:	7° max uptilt
Azimuth:	40° horizontal	Water Ingress:	IPx7
Elevation:	30° vertical	Hardware included:	Two 5/8" (1.6 cm) anti-rotational studs attached at the base of antenna
Mounting dimensions	5/8" (1.5 cm) Dia. Feed through 5/8" long thread through (1.5 cm) lg. thread for up to .20" (0.5cm) thick surface (Electrical cabinet)		