

SMWG-313

MULTIBAND SURFACE MOUNT ANTENNA

PRODUCT OVERVIEW

This 3-cable Multiband Surface Mount Antenna provides 2x C-V2X elements at 5.9 GHz and a GNSS element. The default cable lengths are 15 feet; custom cable lengths are available upon request. This model is configured with GNSS. The GNSS element operates on GPS, Galileo, Glonass, QZSS or Beidou. Specify SMW-313 for a model configured with GPS.

Mount antenna on a metal surface or ground plane. Metallic tape can be added to non-metallic surfaces to create a ground plane. Specify MGWG-313 for the Mag-Mount Configuration.

Visit our [eStore](#) to purchase an Antenna Online.

Electrical Specifications		
Frequency & Gain	C-V2X Cables 1 & 2	5.8 - 6.0 GHz, 5dBi
	GNSS Cable 3	1561, 1575, & 1602 MHz, LNA 26 dB, 5 dBi
VSWR	2:1 Max Over Range	
Impedance	50 Ohm Nominal	
Power Rating	10 Watts	
GNSS	Amplifier Gain	26 dB, 5 dBi
	Amplifier Bias Voltage	2.7 to 5 VDC
	Noise Figure	2.0 dB max, 1.7 dB typical
	Current	20 mA max, 10 mA typical

Mechanical Specifications	
Radome Material & Color	ASA UV-Inhibitive Plastic, Available in White or Black
Radome Dimension	4.20" (107 mm) in Diameter 3.20" (81 mm) in Height Add .50" (13 mm) to Height for Mag-Mount Base
Standard Connectors	SMA Plugs (Male) - Other Options Available
C-V2X Cables 1 & 2	Separate LL-195, 15 ft (4.5 m)
GNSS Cable 3	RG-174, 15 ft (4.5 m)
Operating Temperature	-40° to +80° C
Mounting	Threaded Metal Stud .75" Dia. x .50" long (19 mm x 13 mm) for .25" (6 mm) thick metal; supplied with gasket & nut; other stud lengths available. Specify MGWG-313 for Mag-Mount.
Shock & Vibration	IEEE1478, EN61373, MIL-810G, TIA 329.2-C
Dust & Water Ingress	IP69K (Stud Mount, When Properly Mounted)
	IP67 (Mag-Mount, When Properly Mounted)
RoHS Compliant	Yes



SMWG-313-3C3C2C-BLK-180
 Model
 C-V2X
 GNSS
 Radome Color
 Cable Length (in inches)

HIGHLIGHTS:

- 3-Cable Multiband:
2x C-V2X & 1x GNSS
- C-V2X Element: 5.8 - 6.0 GHz
- High Performance; High Gain
- Made-in-the-USA & UK

RELATED MODELS:

- MXFG-5900
(MaxFin with 3x C-V2X & GNSS)
- MGWG-313
(Mag Mount Model)
- SMW-313
(GPS Model)

COMMON APPLICATIONS:

- Intelligent Transportation System (ITS) Trials
- C-V2V (Vehicle to Vehicle)
- C-V2I (Vehicle to Infrastructure)



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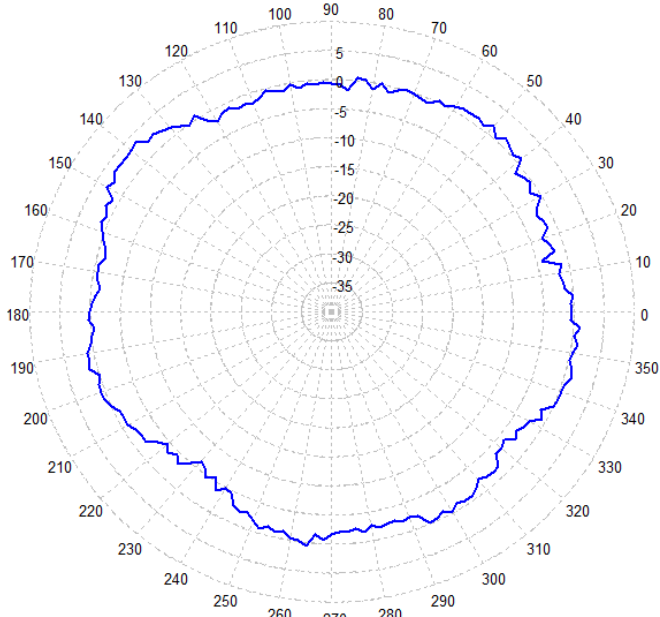
Moving Wireless Forward®

SMW313 Series Antenna

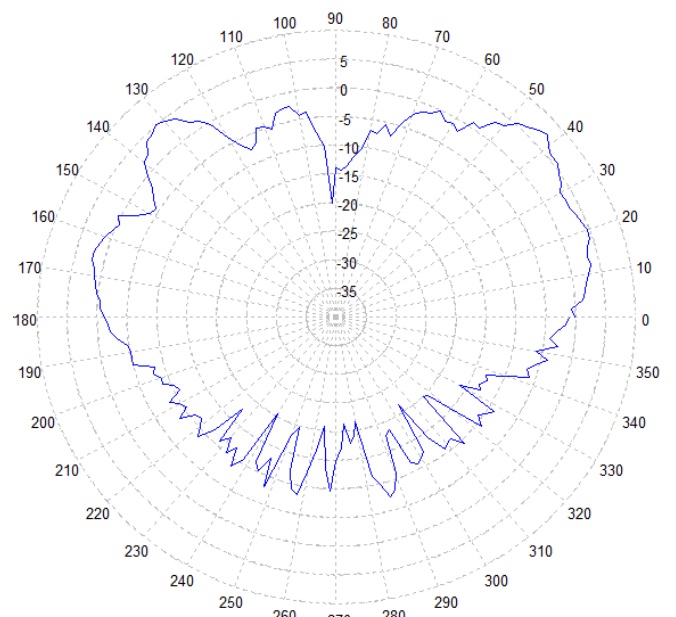
Multi-band Mount Antenna with GPS

2 x 5.8-6.0 GHz (DSRC)

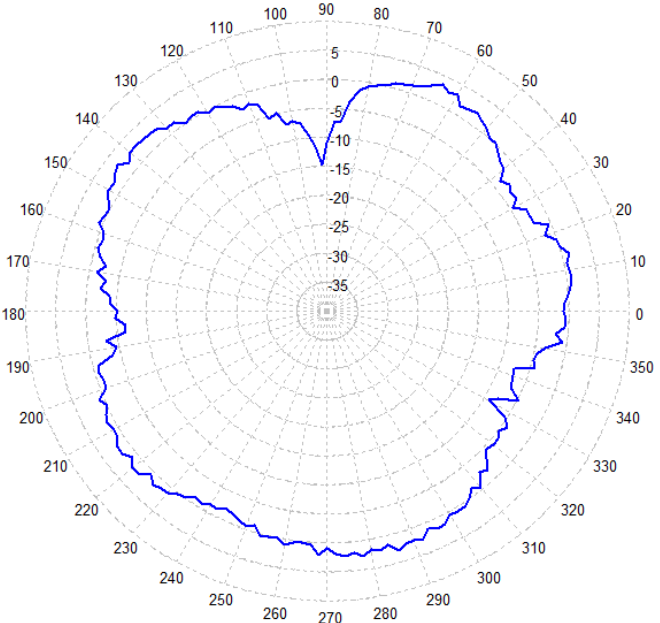
DSRC 1 - 5900 MHz - Azimuth Plot



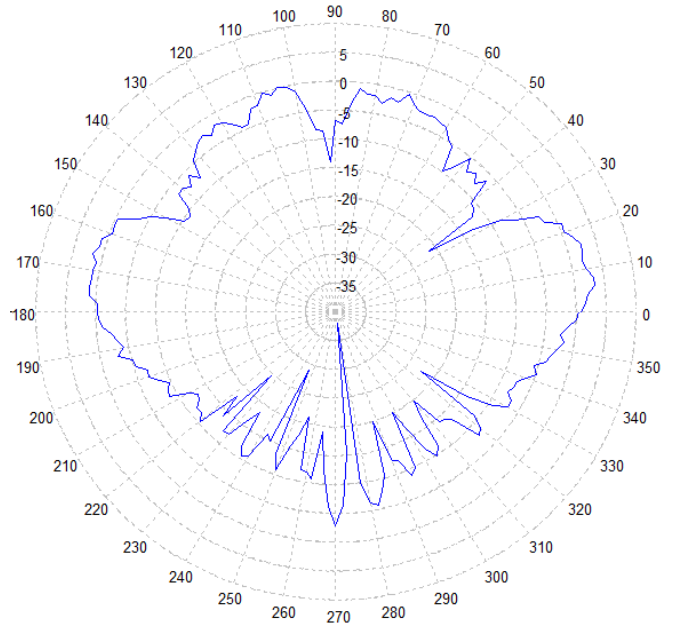
DSRC 1 - 5900 MHz - Elevation Plot



DSRC 2 - 5900 MHz - Azimuth Plot



DSRC 2 - 5900 MHz - Elevation Plot

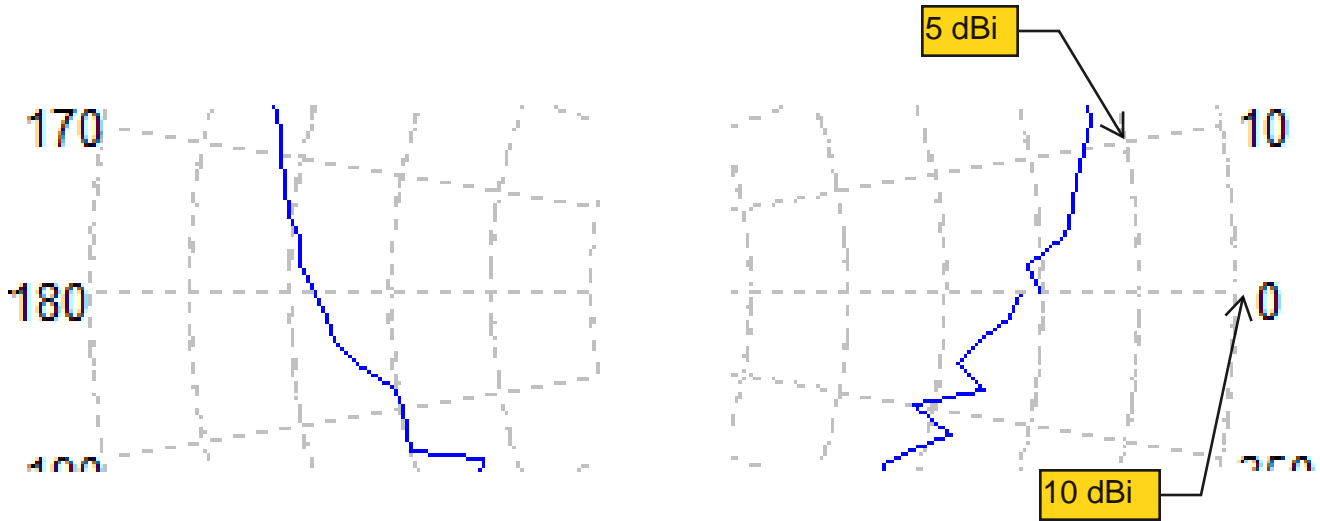


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Multi-band Mount Antenna with GPS

2 x 5.8-6.0 GHz (DSRC)

DSRC 1 - 5900 MHz - Elevation Plot - ZOOM



DSRC 2 - 5900 MHz - Elevation Plot - ZOOM

