



SMWG-313 multiband, 3-cable 2xDSRC/C-V2X & 1xGPS

- 3 antennas in 1 antenna housing
- Popular Choice for DSRC and C-V2X Trials
- Available in either Surface-mount (SMWG Series) or Mag-mount (MGWG)

The SMW-313 Series Antenna is a 3 cable surface mount and provides multiband coverage on DSRC/C-V2X at 5.9 GHz and GNSS.

This 3 cable surface mount multiband antenna mounts easily to a roof, trunk or bulkhead. The stud mount design uses a 3/4" diameter feed thru (19mm) for securing to the vehicle. The data cables are 15 feet of Low Loss -195 (4.5 meters). GNSS cable is 15 feet of RG-174. All connectors are SMA plug unless otherwise requested.

For best performance, the antenna should be mounted on a metal surface or ground plane. A Mag-mount version is available with the same performance specs.

The antennas are enclosed in a 4.2"D x 3.2"H weatherproof ASA radome (107 mm x 81 mm) and supplied with all mounting hardware and a sealing gasket. The SMWG Series is extremely weather resistant and rated IP67 for Dust and Water Ingress. The antennas have also passed industrial and military shock and vibration testing.

Model Configurator

SMWG-313------

Cable/Connector 1

Cable/Connector 2

Cable/Connector 3

Color

Cable Length in Inches (eg. 12 or 180)

Example: SMWG-313-3C3C2C-WHT-180
 MGWG-313-3C3C2C-BLK-180

Specify "SMW" or "MGW" instead of "SMWG" or "MGWG" for GPS only option antenna.

Cable Options:		Connector Options:		Color Options:	
Code	Cable	Code	Connector	Code	Color
1	RG-58	A	TNC	WHT	White
2	RG-174	C	SMA	BLK	Black
3	LL-195	J	RP SMA		

(Other Configurations available.)

Specifications		
Frequency & Gain*:		
Cables 1&2 (DSRC/C-V2X)	5.8-6.0 GHz, 5 dBi	White or Black UV resistant ASA
Cable 3 (GNSS)	1561, 1575 & 1602 MHz, 5 dBi	
GPS Option	1575.42 +/- 2 MHz, 26 dB, 5 dBi	Separate LL-195, 15 ft (4.5 m)
	5 dBi nominal RHCP, Antenna	RG-174, 15 ft (4.5 m)
Data Modem:		SMA Plug (Male)
VSWR*	2:1 max over range	Magnet Mount
Nominal Impedance	50 Ohm	Threaded metal stud 3/4" dia. x 1/2" long (1.9 cm x 1.3 cm) for 1/4" (6mm) thick metal; supplied with gasket & nut; other stud lengths available
Power	10 Watts	Shock & Vibration:
GPS:		IEEE1478, EN 61373, MIL-810G
Noise Figure	2.0 dB max, 1.7 dB typical	TIA 329.2-C
Amplifier Bias	2.7 to 5 VDC	Dust/Water Ingress:
Amplifier Current	20 mA, 10 mA typical	IP67
GPS & Glonass Option:	1561, 1575 MHz & 1602 MHz	<small>*Measured on 1'(30cm) ground with 1'(30cm) cable 1'(30cm) cable 1'(30cm) cable</small>
Operating Temp:	-40° to +80° C	
Case:	4.2"D x 3.2"H (10.7 cm x 8.1 cm) add 1/2" (1.3 cm) for mag base	