



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	Cable:	
GPS Option	1575.42 +/- 2 MHz, 26 dB, 5 dBi	Cable 1 & 2	Separate LL-195, 15 ft (4.5 m)
	5 dBi nominal RHCP, Antenna	Cable 3 (GPS)	RG-174, 15 ft (4.5 m)
Data Modem:		Connectors:	SMA Plug (Male)
VSWR*	2:1 max over range	MGW Mounting:	Magnet Mount
Nominal Impedance	50 Ohm	SMW Mounting:	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:	IEEE1478, EN 61373, MIL-810G TIA 329.2-C
GPS:		Dust/Water Ingress:	IP67
Noise Figure	2.0 dB max, 1.7 dB typical	*Measured on 1'(30cm) ground with 1'(30cm) cable 1'(30cm) cable 1'(30cm) cable	
Amplifier Bias	2.7 to 5 VDC		
Amplifier Current	20 mA, 10 mA typical		
GPS & Glonass Option:	1561, 1575 MHz & 1602 MHz		
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		