



## SMW-303 multiband, 3-cable DSRC or WiFi MIMO & GPS

- Popular choice for DSRC trials
- Covers GPS, WiFi, Public Safety 4.9 & Military 4.4 GHz
- Available in either Surface-mount (SMW Series or Mag-mount (MGW Series)

The SMW-303 Series Antenna provides multiband coverage on WiFi at 2.4 & 5 GHz, Public Safety at 4.9 GHz, Military at 4.4 GHz, DSRC at 5.9 GHz and GPS. The antenna is configured with 3 cables: one for GPS and the other two for the modems.

This surface mount multiband antenna mounts easily to a roof, trunk or bulkhead. The stud mount design uses a 3/4" diameter feed thru (1.9 cm) for securing to the vehicle.

The data cables are 15 feet of Low Loss -195 (4.5 m). GPS cable is 15 feet of RF-174 (4.5m). All connectors are male 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 weather-proof ASA radome (10.7 cm x 8.1 cm) and supplied with all mounting hardware and a sealing gasket. The SMW 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**

SMW-303-    -   -

Cable/Connector 1

Cable/Connector 2

Cable/Connector 3

Color

Cable Length in Inches (eg. 12 or 180)

Example: SMW-303-3C3C2C-WHT-180 (surface mount)  
 MGW-303-3C3C2C-BLK-180 (mag mount)

Specify "SMWG" or "MGWG" instead of "SMW" or "MGW" for GPS/Glonass combination antenna.

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

(Other Configurations available.)

Specifications	
Frequency & Gain (peak):	
Cable 1	2.4-2.5 & 4.9-6.0 GHz, 5 dBi
Cable 2	2.1-2.5 & 4.4-6.0 GHz, 5 dBi
Cable 3 (GPS)	1575.42 +/- 2 MHz, LNA 26dB 5 dBi nominal RHCP, Antenna
GPS & Glonass Option:	1575 MHz & 1602 MHz
Data Modem:	
VSWR	2:1 max over range
Nominal Impedance	50 Ohm
Power	10 Watts
GPS:	
Noise Figure	2.0 dB max, 1.7 dB typica
Amplifier Bias	2.7 to 5 VDC
Amplifier Current	20 mA, 10 mA typical
Case Dimensions:	4.2"D x 3.2"H (10.7 cm x 8.1 cm) add 1/2" (1.3 cm) for mag base
Case Material:	White or Black UV resistant ASA
Cable:	
Cable 1 & 2	Separate Low Loss-195,15 ft (4.5 m)
Cable 3 (GPS)	RG-174, 15 ft (4.5 m)
Connectors:	SMA Plug (Male)
Surface Mounting:	Threaded metal stud 3/4" dia. x 1/2" long (1.9 cm x 1.3 cm) for 1/4" (6 mm) thick metal; supplied with gasket and nut
MGW Mounting:	Magnet
Operating Temp:	-40° to +80° C
Shock & Vibration:	IEEE1478, EN 61373, MIL-810G, TIA 329.2-C
Dust/Water Ingress:	IP67

\*Measured on 1'(30cm) ground with 1'(30cm) cable