



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.					
<u>Cable Options:</u>		<u>Connector Options:</u>		<u>Color Options:</u>	
<u>Code</u>	<u>Cable</u>	<u>Code</u>	<u>Connector</u>	<u>Code</u>	<u>Color</u>
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

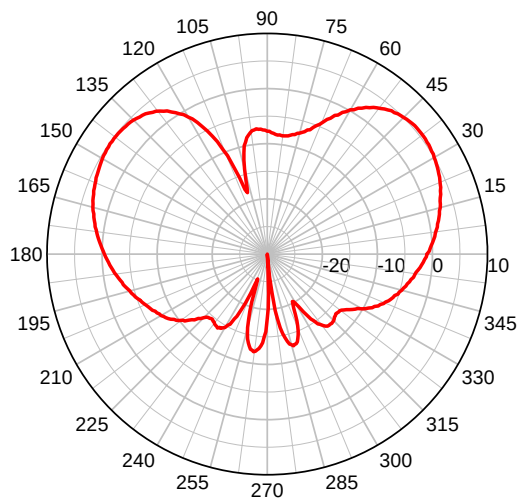
MGW-303 Series Antennas

Magnet Surface Mount Multi-Band Antenna with
5 dBi Gain, Frequency (2.4 & 4.9-6.0 GHz) Cable #1

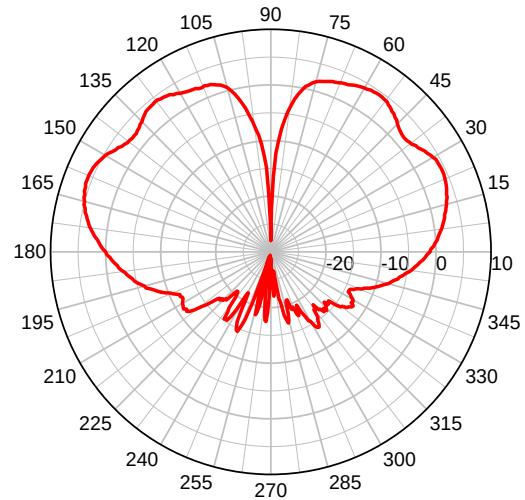
5 dBi Gain, Frequency (2.4/5.5 GHz) Cable #2

GPS (1575 MHz) Cable #3

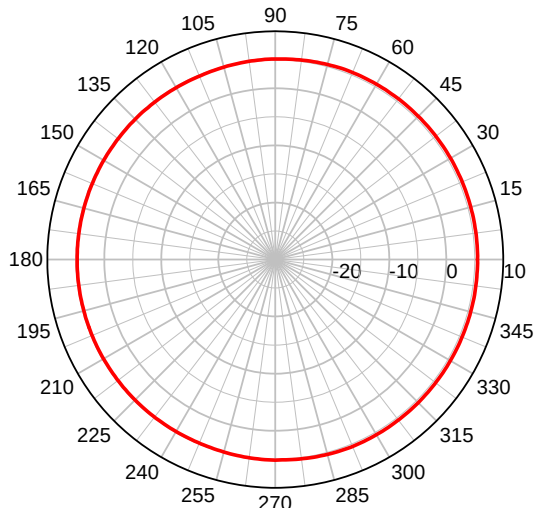
Cable #1 & #2
MGW 2400 MHz Band – Elevation Plot



Cable #1 & #2
MGW 5500 MHz – Elevation Plot



Cable #1 & #2
MGW 2400 MHz Band – Azimuth Plot



Cable #1 & #2
MGW 5500 MHz – Azimuth Plot

