



## SMW-311 multiband, 3-cable Global Cellular/LTE, WiFi & GPS

- 3 antennas in 1 antenna housing
- Covers all Cellular/LTE frequencies worldwide, WiFi at 2.4/5 GHz & GPS
- Available in either Surface-mount (SMW Series or Mag-mount (MGW Series)

The SMW-311 Series antennas features 3 antenna elements in one radome. The unique feature of this model is that the cellular element (Cable 1) is extremely widebanded and can cover the traditional GSM/CDMA frequencies, 700 MHz LTE, 1.7 & 2.1 GHz AWS/UMTS bands and LTE/WiMAX at 2.5 or 3.7 GHz, all on a single board.

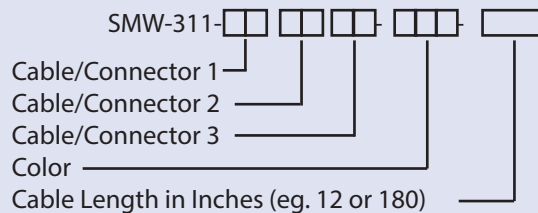
This antenna is truly ready for any 4G or 5G rollout but is also compatible with earlier generation such as GPRS. See the spec table below for exact frequencies covered on each cable.

In addition to covering all Cellular & LTE bands worldwide on the first antenna element, the antenna also covers 2.4/5 GHz dual-band WiFi on the second antenna element. Alternatively, the second element can be used for other specialized applications such as: Public Safety coverage at 4.9 GHz, Military at 4.4 GHz or DSRC at 5.9 GHz.

The antenna is enclosed in a 4.2"D x 3.2"H (107 mm x 81 mm) weatherproof radome, and supplied with all mounting hardware and a sealing gasket. The radome is available in either black or white.

The antenna is available in either surface mount (SMW Series) or mag mount (MGW Series). The antennas can also be built with a combined GPS & Glonass antenna.

### Model Configurator



Example: SMW-311-3C3C2C-WHT-180  
 MGW-311-3C3C2C-BLK-180

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

#### Cable Options:

Code	Cable
1	RG-58
2	RG-174
3	LL-195

#### Connector Options:

Code	Connector
A	TNC
C	SMA
D	SMB
J	RP SMA

#### Color Options:

Code	Color
WHT	White
BLK	Black

(Other Configurations available.)

### Specifications

#### Frequency & Gain\*:

Cable 1	694-960 MHz, 3 dBi 1710-3700 MHz, 4 dBi
Cable 2	2.4-2.5 & 4.9-6.0 GHz, 5 dBi
Cable 3 (GPS)	1575.42 +/- 2 MHz, LNA 26dB 5 dBi nominal RHCP, Antenna

#### Data Modem:

VSWR*	2:1 max over range
Nominal Impedance	50 ohms
Power	10 Watts

#### GPS:

Noise Figure	2.0 dB max, 1.7 dB typical
Amplifier Bias	2.7 to 5 VDC
Amplifier Current	20 mA, 10 mA typical
GPS & Glonass Option:	1575 MHz & 1612 MHz

Operating Temp:	-40° to +80° C
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#### Case:

4.2"D x 3.2"H (107 mm x 81 mm)  
 add ½" (13 mm) for mag base  
 White or Black UV resistant ASA

#### Case Material:

#### Cable:

Cable 1 & 2  
 Cable 3 (GPS)

#### Connectors:

#### MGW Mounting:

#### SMW Mounting:

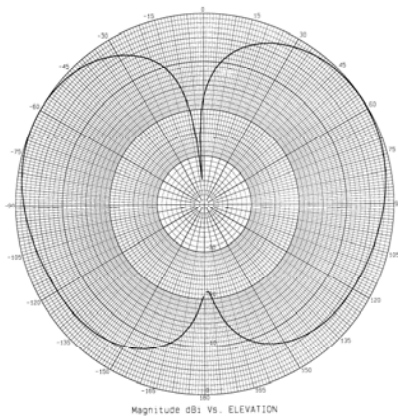
Separate LL-195, 15 ft (4.5 meters)  
 RG-174, 15 ft (4.5 meters)  
 SMA Plug (Male)  
 Magnet Mount  
 Threaded metal stud ¾" dia. x  
 ½" long (19 mm x 13mm) for ¼"  
 (6mm) thick metal; supplied with  
 gasket & nut; other stud lengths  
 available  
 IEEE1478, EN 61373, MIL-810G  
 TIA 329.2-C  
 IP67

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

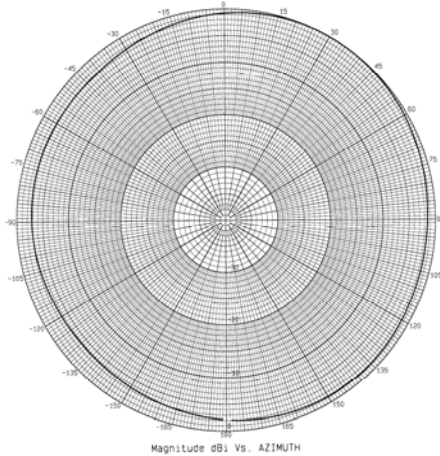
# SMW-311 Series Antennas (page 1 of 2)

## Surface Mount Multi-Band Antenna with GPS (1575 MHz)

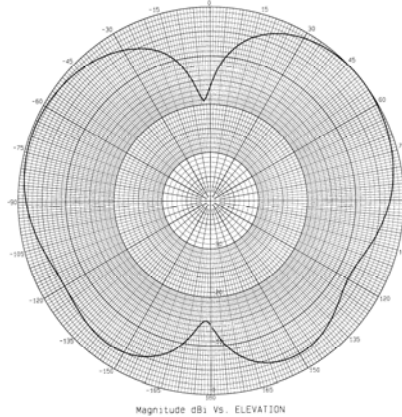
695 MHz – Elevation



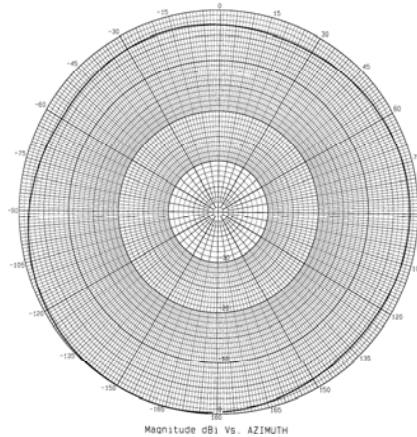
695 MHz – Azimuth



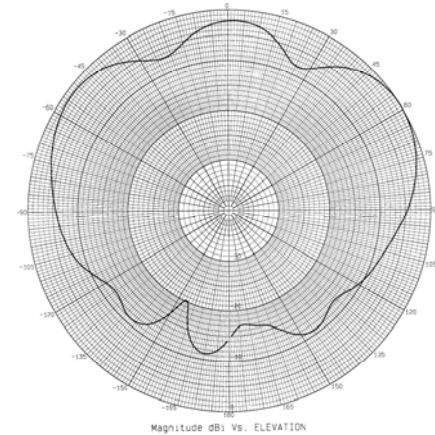
925 MHz – Elevation



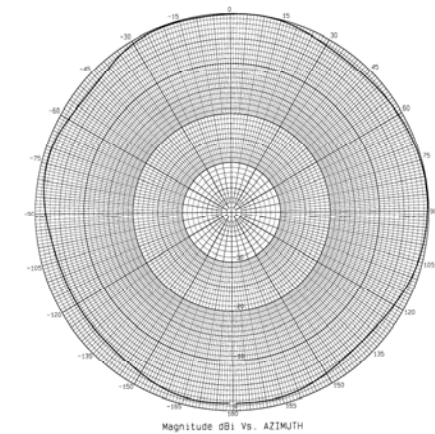
925 MHz – Azimuth



1850 MHz – Elevation



1850 MHz – Azimuth

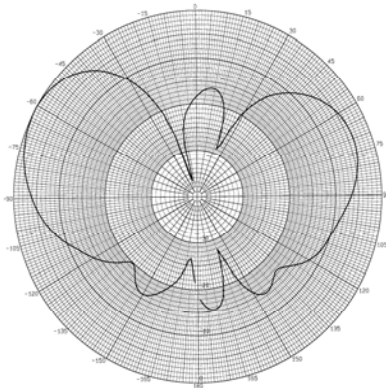




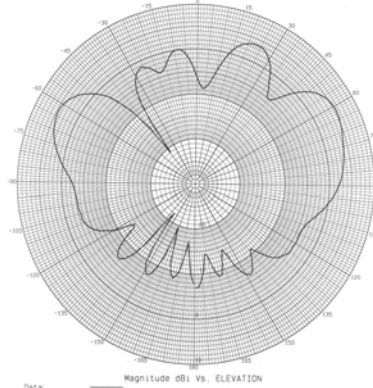
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Surface Mount Multi-Band Antenna with GPS (1575 MHz) Cable#3

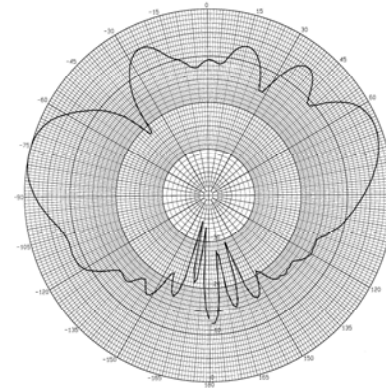
2450 MHz – Elevation



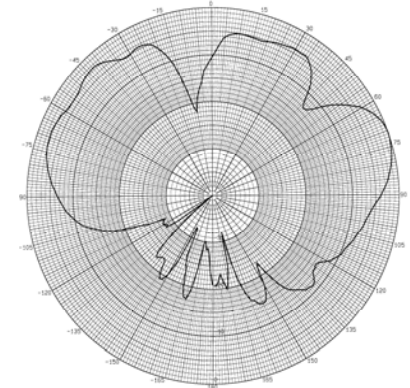
3700 MHz – Elevation



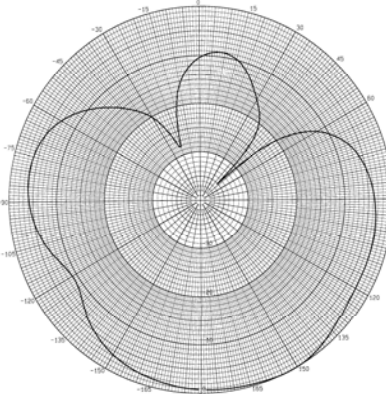
4900 MHz – Elevation



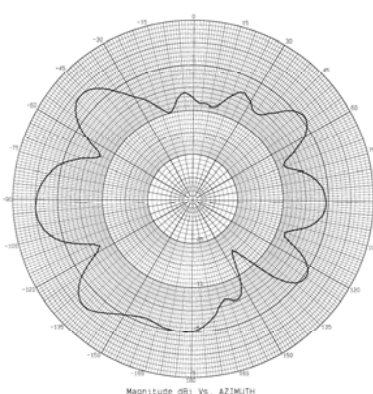
5950 MHz – Elevation



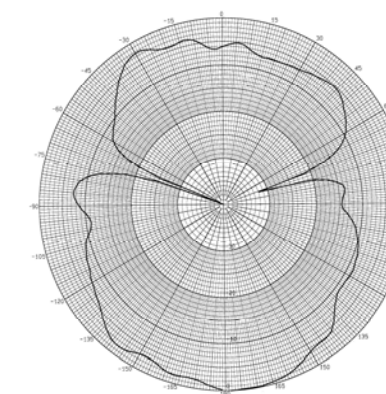
2450 MHz – Azimuth



3700 MHz – Azimuth



4900 MHz – Azimuth



5950 MHz – Azimuth

