



## SMW-413 multiband, 4-cable LTE 700 MHz, AWS, WiFi & GPS

- 4 antennas in 1 antenna housing
- Covers GPS, 700 MHz LTE, AWS & WiFi
- Two identical 1.7-2.7 GHz elements complement the Cellular/LTE element
- Available in either Surface-mount (SMW Series or Mag-mount (MGW Series)

The SMW-413 Series Antennas features 4 elements in one antenna radome. The unique feature of this model is that the cellular element (Cable 1) is extremely widebanded and can cover: LTE at 700 MHz as well as the established 850/1900 GSM/CDMA bands, 1.7/2.1 GHz AWS and 2.5 GHz WiMAX all on a single board.

This antenna is truly ready for any 4G 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 cellular bands on Cable 1, the antenna also covers 2.4 GHz WiFi on Cables 2 & 3. Other specialized applications are possible on cables 2 & 3 such as diversity WiFi at 2.4 GHz, AWS 1.7 & 2.1 GHz, UMTS 2.1 GHz or WiMAX 2.5 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 antennas can also be configured for combined GPS & Glonass use.

**Model Configurator**

SMW-413-     -   -

Cable/Connector 1

Cable/Connector 2

Cable/Connector 3

Cable/Connector 4

Color

Cable Length in Inches (eg. 120 or 180)

Example: SMW-413-3C3C3C2C-WHT-180  
MGW-413-3C3C3C2C-BLK-180

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	RF-195	C	SMA		
		J	RP SMA		

(Other Configurations available.)

### Specifications

#### Frequency & Gain\*:

Cable 1	694-894 MHz, 3 dBi & 1.7-2.7 GHz, 5 dBi
Cable 2	1.7-2.7 GHz, 5 dBi
Cable 3	1.7-2.7 GHz, 5 dBi
Cable 4 (GPS)	1575.42 +/- 2 MHz, LNA: 26dB 5 dBi nominal RHCP
VSWR*:	2:1 max over range
Nominal Impedance:	50 ohms
Maximum Power:	10 Watts
GPS	
Amplifier Bias:	2.7 to 5 VDC
Noise Figure:	2.0 dB max, 1.7 dB typical
Current:	20 mA max, 10 mA typical
GPS & Glonass Option:	1575 MHz & 1612 MHz
Case:	4.2"D x 3.2"H (107 mm x 81 mm) add 1/2" (13 mm) to height for mag

#### Cable:

Cables 1 - 3	Separate RF-195 15 ft (4.5 meters)
Cable 4	RG-174, 15 ft (4.5 meters)
Connector:	SMA Plug (Male) standard
Case Material:	White or Black UV resistant ASA
MGW Mounting:	Magnet Mount
SMW Mounting:	Threaded metal stud 3/4" dia. x 1/2" long (19 mm x 13mm) for 1/4" (6 mm) thick metal; supplied with gasket & nut; other stud lengths available
Operating Temp:	-40° to +80° C
Shock & Vibration:	IEEE1478, EN61373, MIL-810G TIA 329.2-C
Dust/Water Ingress:	IP67

\*Measured on 1' ground with 1' cable