

## Surface Mount Multi-band LTE 700 MHz, AWS, WiFi & GPS



- Model SMW-412: 4 cable feed multiband
- Covers GPS, 700 MHz LTE, AWS, WiFi, & Public Safety 4.9 GHz
- 4 antennas in 1 radome; saves time and money by reducing the number of installations
- Available in either surface mount (SMW Series) or mag mount (MGW Series).

The SMW-412 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 AWS bands and WiMAX 2.5 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 all of the cellular bands on Cable 1, the antenna also covers 2.4/5 dual-band WiFi on Cables 2 & 3. Other specialized applications are possible, e.g. Public Safety coverage at 700 MHz & 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.

**Model Configurator**

SMW-412-     -   -

Cable/Connector 1

Cable/Connector 2

Cable/Connector 3

Cable/Connector 4

Color

Cable Length in Inches (eg. 12 or 180)

Example: SMW-412-3C3C3C2C-WHT-180  
MGW-412-3C3C3C2C-BLK-120

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		
		D	SMB		
		E	MCX		

(Other Configurations available.)

### Specifications

Frequency & Gain:	
Cable 1	694-894 MHz, 3 dBi & 1.7-2.7 GHz, 5 dBi
Cable 2	2.4 GHz 5 dBi; 4.9-6.0 GHz, 5 dBi
Cable 3	2.1-2.5 GHz, 5 dBi; 4.4-6.0 GHz, 5 dBi
Cable 4 (GPS)	1575.42 +/- 2 MHz, LNA: 26dB 5 dBi nominal RHCP
VSWR:	2:1 max over range
Noise Figure:	2.0 dB max, 1.7 dB typical
Nominal Impedance:	50 ohms
Amplifier Bias:	2.7 to 5 VDC
Maximum Power:	20 Watts (max)
Current:	20 mA max, 10 mA typical
Case:	4.2"D x 3.2"H (107 mm x 81 mm) add 1/2" (1.3 cm) to height for mag base

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)
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" (6mm) thick metal; supplied with gasket and nut
Operating Temp:	Other length studs available -40° to +85° C
Shock & Vibration:	IEEE1478, EN 61373, MIL-810G
Dust/Water Ingress:	TIA 329.2-C SMW:IP67, MGW:IPx5