MultiBand with GPS
3 separate coaxes

New!
Magnet Mount
Version
(series MGW)

Surface Mount GPS Antenna (Pat.Pnd.)

GSM/CDMA, WiFi, WiMAX & GPS

- Mounts easily to roof, trunk or bulkhead
- MultiBand covers all popular worldwide frequency systems from 800 MHz - 6 GHz
- 3 Separate RF coax feeds; for radio comm channel (800-2.7 GHz), 2.4/5 GHz & GPS
- High performance GPS with 26 dB active amplifier

For maximum communications capability and ultimate versatility, this is the antenna of choice. This Wide Band antenna provides high performance operation on all cellular bands, all PCS bands and 2.4 GHz 802.11 bands along with GPS. An optional version can operate dual band on 2.4 & 5 GHz for 802.11 a/b/g. Three separate RF feeds allow communication with the voice/data channel, the WiFi radio, as well as GPS. The antennas can be mounted to any vehicle, cargo container or trailer.

The design uses a 3/4" feed thru (19 mm) for securing to the vehicle. Access to the underside of the body surface is required to complete the installation. Note, for best performance, the antenna should be mounted on a metal surface/groundplane.

For the GPS interface, the antennas are typically outfitted with 15 feet of RG-174 cable (4.5 meters). The communications channel cables are 15 feet of low loss RF-195. All connectors are male unless requested otherwise.

GPS performance is 26 dB, with 5 dBi antenna gain. The GPS circuit has a low noise figure (2.0 dB max) with excellent filter characteristics.

The antennas are enclosed in a 4.2"D x 3.2"H ASA radome (107 mm x 81 mm), and supplied with all mounting hardware and sealing gasket. The SMW radome color is white standard, black optional. The MGW mag mount is available in white (standard) or optional black.

Antenna Model Configurator

SMW-❑❑❑-❑❑-❑❑ -❑❑

example - SMW-UMB-3A3A2C
Mag Mount - MGW-UMB-3A3A2C

Combo Configuration

Code	Description
SMW-UMB	Cable 1 = 800 - 2.7 GHz Cable 2 = 2.4 GHz (WiFi) Cable 3 = GPS
SMW-301	Cable 1 = 800 - 2.7 GHz Cable 2 = 2.4 & 5+ GHz (WiFi) Cable 3 = GPS

Note: For Mag mount, substitute MGW for SMW in model

Cable #1

Code	Description
3A	RF-195/TNC
3B	RF-195/MiniUHF
3C	RF-195/SMA
3J	RF-195/RevPol SMA
3K	RF-195/RevPol TNC
00	No Cellular/cable

Cable #2

Code	Description
3A	RF-195/TNC
3B	RF-195/MiniUHF
3C	RF-195/SMA
3J	RF-195/RevPol SMA
3K	RF-195/RevPol TNC
00	No WiFi/cable

GPS Interface

Code	Description
2C	RG-174/SMA
2D	RG-174/SMB
2E	RG-174/MCX
2F	RG-174/MMCX
2H	RG-174/Fakra
2L	RG-174/SMC
00	No GPS/cable

Specifications

Frequency:	
Cable #1	800 - 2700 MHz
Cable #2	2400 - 2485 MHz or dual band 2.4-2.5/4.9 - 6.0 GHz
GPS	1575.42 +/- 2 MHz
Comm Channel Gain:	
800 - 1GHz	2 dBi
1700 - 2700	5 dBi (peak)
2.4 - 2.5 GHz	5 dBi (peak)
4.9 - 6.0 GHz	5 dBi (peak)
GPS Gain:	26 dB, 5 dBi Antenna
VSWR:	2:1 max over range
Noise Figure:	2.0 dB max, 1.7 dB typical
Operating Temp:	-40° to +85° C
Nominal Impedance:	50 ohms
Amplifier Bias:	3.3 or 5 VDC +/- 10%
Maximum Power:	
800 - 1900 MHz	20 Watts
1900 - 5800 MHz	10 Watts
Current:	20 mA max, 10 mA typical
Cable:	
GPS	RG-174, 15 ft (4.5 meters)
CABLE #1 & #2	Separate RF-195 Cables, 15 ft (4.5 meters)
Case:	4.2"D x 3.2"H (107 mm x 81 mm)
Case Material:	White ASA, black optional
Mounting:	3/4" dia.x 1/2" long (19 mm x13 mm) for 3/16" thick (4.7 mm) metal
Hardware:	Nut and gasket included
Option:	Mag Mount MGW, 15 ft cables