



**MultiBand/Orbcomm  
Tracking Antenna**

## Surface Mount Multiband GSM/CDMA, WiFi, Orbcomm & GPS

- Model SMW-403: 4 cable feed multiband
- Covers GPS, Cellular GSM/CDMA, WiFi & Orbcomm
- 4 antennas in 1 radome; saves time and money by reducing the number of installations

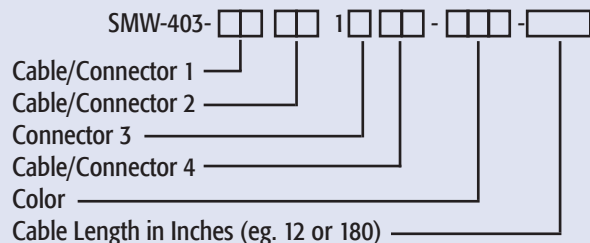
The SMW-403 Series Antenna is a 4-cable model and combines Orbcomm satellite coverage with worldwide GSM/CDMA, 802.11b/g WiFi and GPS. The Orbcomm efficiency is rated at 85% yet needs only a fraction of the foot print and height of traditional Orbcomm designs. With WiFi and Broadband also included, a variety of fleet services can be provided for drivers and fleet administrators.

The SMW-403 antenna is different from other models in the SMW family in that it includes an external whip mounted directly onto the antenna base.

The whip is used for Orbcomm applications at 137-150 MHz and measures only 15" (38 cm) in height. The base of this SMW antenna model measures 5.5 inches (140 mm) in diameter.

The remaining elements, including GPS, are housed in a standard SMW radome. This weatherproof antenna is supplied with all mounting hardware and sealing gasket. The design uses a 3/4-inch feed thru (19 mm) for securing to the vehicle. For best performance, the antenna should be mounted on a metal surface or ground plane.

### Model Configurator



Example: SMW-403-3C3C1C2C-WHT-12  
MGW-403-3C3C1C2C-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		
4	RG-188	D	SMB		
7	LMR-100	E	MCX		

(Other Configurations available.)

### Specifications

Frequency & Gain:		Base:	5.5 " (140 mm) Diameter
Cable 1	800-1250 MHz, 3 dBi	Cable:	
Cable 2	1650-2700 MHz, 5 dBi	Cables 1 & 2	Separate RF-195 15 ft (4.5 meters)
Cable 3	2400-2485 MHz, 5 dBi	Cable 3 (Orbcomm)	RG-58 15 ft (4.5 meters)
Cable 4 (GPS)	Orbcomm (137-138/148-150), 2 dBi	Cable 4	RG-174, 15 ft (4.5 meters)
VSWR:	1575.42 +/- 2 MHz, LNA: 26dB	Connector:	SMA Plug (Male)
Nominal Impedance:	5 dBi nominal RHCP	Orbcomm Whip:	15" H (381 mm), 17-7 Stainless Steel
Maximum Power:	2:1 max over range	Case Material:	White UV resistant ASA
GPS	50 ohms	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. Other length studs available
Amplifier Bias:	20 Watts (max)	Operating Temp:	-40° to +85° C
Noise Figure:	2.7 to 5 VDC		
Current:	2.0 dB max, 1.7 dB typical		
GPS & Glonass Option:	20 mA max, 10 mA typical		
Radome:	1575 MHz & 1612 MHz		
	4.2"D x 3.2"H (107 mm x 81 mm)		