



Surface Mount Multiband European Diversity Cellular & GPS

- Model SMW-309: 3 cable feed multiband
- Covers GPS, Cellular Diversity or European Cellular and UMTS
- 3 antennas in 1 radome; saves time and money by reducing the number of installations

The SMW-309 Series Antennas features 3 elements in one antenna radome. The unique feature of this SMW model is that it offers two elements covering European Cellular frequencies. The first cellular element is the broadband element found in other SMW antennas and covers 800-1250 & 1650-2700 MHz. The second element, because it is shorter, covers 870-960 & 1710-1880 MHz.

The antenna was designed for European Cellular Diversity modems that require two separate cellular elements for optimum performance. But, the antenna can also be used for other applications.

For example, the first cable could be connected to a multiband modem that includes UMTS and the second cable could be connected to a GPRS modem covering traditional 925 & 1800 MHz bands.

The SMW antennas can be mounted to any vehicle, cargo container or trailer. Access to the underside of the body surface is required to complete the installation. For best performance the antenna should be mounted on a metal surface or ground plane.

The antenna is also available as a mag-mount; specify MGW instead of SMW to order the mag-mount version.

| Model Configurator | | | | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------|--------------------------|--------------------------|---|--------------------------|
| SMW-309- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | <input type="checkbox"/> | <input type="checkbox"/> | - | <input type="checkbox"/> |
| Cable/Connector 1 | <hr/> | | | | | | | |
| Cable/Connector 2 | <hr/> | | | | | | | |
| Cable/Connector 3 | <hr/> | | | | | | | |
| Color | <hr/> | | | | | | | |
| Cable Length in Inches (eg. 12 or 180) <hr/> | | | | | | | | |
| Example: SMW-309-3C3C2C-WHT-180 MGW-309-3C3C2C-BLK-120 | | | | | | | | |
| Specify "SMWG" or "MGWG" instead of "SMW" or "MGW" for GPS/Glonass combination antenna. | | | | | | | | |
| Cable Options: | | | Connector Options: | | Color Options: | | | |
| <u>Code</u> | <u>Cable</u> | <u>Code</u> | <u>Connector</u> | <u>Code</u> | <u>Color</u> | | | |
| 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 | 800-1250 MHz, 3 dBi | Case: | 4.2"D x 3.2"H (107 mm x 81 mm) |
| | 1650-2700 MHz, 5 dBi | Case Material: | add 1/2" (1.3 cm) for mag base |
| Cable 2 | 870-960 MHz, 0 dBi peak | Cable: | White or Black UV resistant ASA |
| | 1710-1880 MHz, 3dBi peak | Cable 1 & 2 | Separate RF-195, 15 ft (4.5 meters) |
| Cable 3 (GPS) | 1575.42 +/- 2 MHz, LNA 26dB | Cable 3 (GPS) | RG-174, 15 ft (4.5 meters) |
| | 5 dBi nominal RHCP, Antenna | Connectors: | SMA Plug (Male) |
| VSWR: | 2:1 max over range | Mounting: | Threaded metal stud |
| Nominal Impedance: | 50 ohms | | 3/4" dia. x 1/2" long |
| Power: | 10 Watts | | (19 mm x 13 mm) for |
| GPS: | | | 1/4" (6 mm) thick metal; |
| Noise Figure | 2.0 dB max, 1.7 dB typical | | supplied with gasket and nut |
| Amplifier Bias | 2.7 to 5 VDC | Operating Temp: | -40 to +85 °C |
| Amplifier Current | 20 mA, 10 mA typical | Shock & Vibration: | IEEE1478, EN 61373, |
| GPS & Glonass Option: | 1575 MHz & 1612 MHz | Dust/Water Ingress: | MIL-810G, TIA 329.2-C |
| | | | IP67 |