



Tri-Band 850/1900 & GPS

Surface Mount, Low Profile Cellular 806-1990 MHz & GPS

- High performance GPS with 26 dB active amplifier
- Secure & low profile less than 1" high (25 mm), mounts to 5/8" hole (16 mm)
- For Cellular 3G and Trunking

The Tri-Band antenna provides operation on Cellular and Trunking bands along with GPS. The surface mount style antennas can be mounted to any vehicle, cargo container or trailer.

Models are available for Cellular 3G networks. Separate cabling is provided for the GPS and cellular/Data interface.

The design uses a 5/8" feed through (16 mm) for securing to the vehicle. For the GPS interface, the antennas are outfitted with 15 feet (4.5 meters) of RG-174 cable and choice of connector.

The connectors are typically SMA Plug (Male). The cellular cable is 15 feet of RG-58 (4.5 meters). Please consult factory for special lengths or connectors.

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. Power for the GPS amplifier (2.7-5 VDC) and signal is applied through the same cabling directly to the GPS circuit.

The antennas are supplied with all mounting hardware and sealing gasket.

Model Configurator

SM------

Frequency Option

Cable/Connector 1

Cable/Connector 2

Color

Example: SM-U15-1A2C-WHT-180

Color Options:

BLK-Black, WHT-White, GRY-Grey

Freq. Options:

Code	Freq. (MHz)
U15	850/1900/GPS
E15	925/1800/GPS

Cable Options:

Code	Cable
1	RG-58
2	RG-174
3	LL-195

Connector Options:

Code	Connector
A	TNC
B	Mini UHF
C	SMA
D	SMB
E	MCX

(Other Configurations available.)

Specifications

Frequency:

U15	824-894 MHz/1850-1990 MHz
E15	870-960 MHz/1710-1880 MHz
GPS	1575.42 +/- 2 MHz

Cellular / PCS Gain:

Unity

GPS Gain:

26 dB LNA
 5 dBi nominal RHCP Antenna

VSWR:

2:1 max over range

Noise Figure:

2.0 dB max, 1.7 dB typical

Operating Temp:

-40° to +80° C

Nominal Impedance:

50 ohms

Maximum Power:

10 Watts (800/900 MHz Band)

Amplifier Bias:

2.7 to 5 VDC

Current:

20 mA max, 10 mA typical

Cable:

Cable 1 (Cellular/PCS)
 Cable 2 (GPS)

RG-58, 15 ft (4.5 meters)
 RG-174, 15 ft (4.5 meters)

Case:

Case Material:

Stud Mounting:

4.5"D x .95"H (114mm x 24 mm)
 White or Black: ASA; Grey: ABS
 5/8" dia x 18/32" long
 (16 mm x 14 mm) thread
 for 7/32" thick (5.3 mm) metal
 Locknut and gasket included
 See above, others available

Hardware:

Connector:

Shock & Vibration:

Water Ingress:

EN 61373, IEEE 1478, MIL-810G, TIA-329.2-C
 IPx5