



Tri-Band 850/1900 & GPS

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

- Mounts easily to roof, trunk or bulkhead
- 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 GSM/CDMA 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 GSM/CDMA, as well as other popular private 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 GSM/CDMA 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

Color Options:

BLK-Black, WHT-White, GRY-Grey

Freq. Options:

Code	Freq (MHz)
U15	850/1900/GPS
C15	925/1900/GPS
E15	925/1800/GPS
N15	837/1900/GPS

Cable Options:

Code	Cable
1	RG-58
2	RG-174
3	RF-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
C15	870-960 MHz/1850-1990 MHz
E15	870-960 MHz/1710-1880 MHz
N15	806-870 MHz/1850-1990 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 +85° 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)	RG-58, 15 ft (4.5 meters)
Cable 2 (GPS)	RG-174, 15 ft (4.5 meters)
Case:	4.5"D x .95"H (114mm x 24 mm)
Case Material:	White or Black: ASA; Grey: ABS
Stud Mounting:	5/8" dia x 18/32" long (16 mm x 14 mm) thread for 7/32" thick (5.3 mm) metal
Hardware:	Locknut and gasket included
Connector:	See above, others available
Shock & Vibration:	EN 61373, IEEE 1478, MIL-810G TIA-329.2-C
Water Ingress:	IPx5