

PRODUCT DESCRIPTION

Product Number
NSN
Market

RDB2020-GPS
Not Assigned
Military - Land

This is a ruggedized multiband vehicular antenna which significantly reduces the number of antennas on the vehicle. The antenna operates with legacy radios for SINCGARS and EPLRS. Multiple frequency inputs may be used simultaneously. This version of the antenna includes an active GPS antenna element integral to the matching base unit. This antenna is fully "oak beam" compliant and can be tied down to a 90 degree bend for storage or during transit.

ELECTRICAL SPECIFICATIONS

Antenna Class

VHF: Dipole
UHF: Integrated Dipole
GPS Navigation

Frequency

30-108 MHz and 225-512 MHz
1575 \pm 2 MHz (GPS)

Impedance

50 Ohms Nominal

VSWR

3:1 Maximum
1.5:1 Maximum (GPS)

Polarization

Vertical
Right Hand Circular (GPS)

Pattern

Omni-Directional

RF Power Handling

VHF: 75 Watts CW
UHF: 75 Watts CW

Peak Gain at Horizon

30-108 MHz: -6 to -1.0 dBi
(on a 10'x10' ground plane)
-10 to -1.0 dBi (no ground plane)
225-450 MHz: -1.0 to +2.0 dBi
450-512 MHz: -3.0 to +1.0 dBi
-1 to +2.0 dBi at \pm 15° from horizon

Clamping voltage

200 V at the antenna

Impulse Discharge

20Ka

Connector

N Female
SMA Female (GPS)

MECHANICAL SPECIFICATIONS

Height

93.25 in. (236.9 cm)

Max Weight

13 lbs. (5.9 kg)

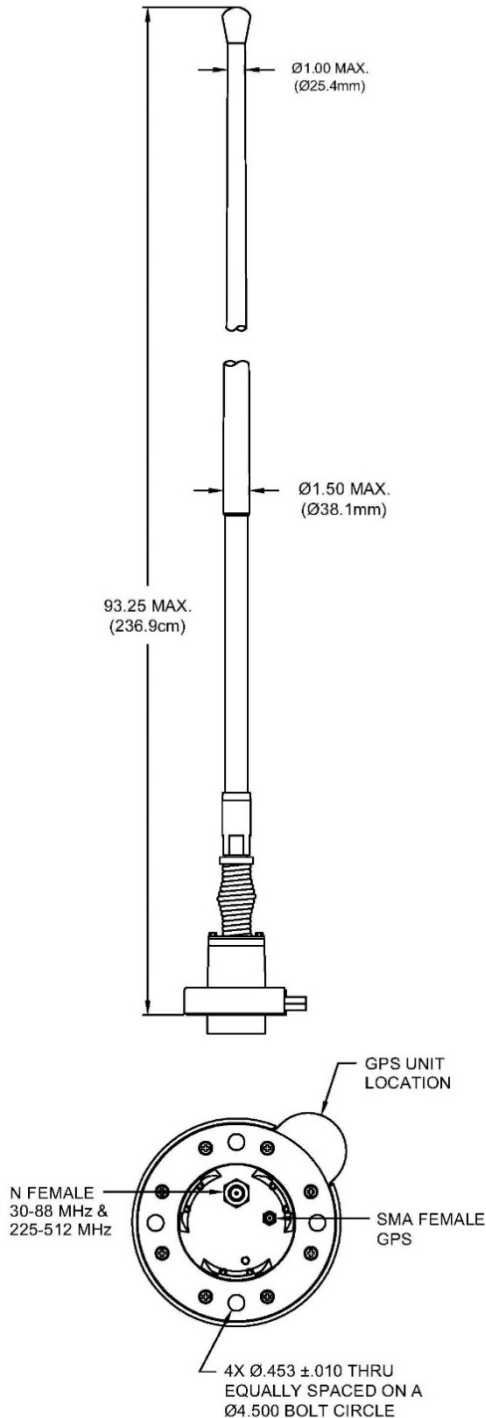
Available Colors

P/N: RDB2020G-GPS CARC Green
P/N: RDB2020T-GPS CARC Tan
P/N: RDB2020B-GPS CARC Black

Mount Hardware Kit
included with Antenna

Tied Down Kit Sold Separately

P/N: RAMI-TDK-1



ENVIRONMENTAL SPECIFICATIONS (MIL STD-810G unless otherwise noted)

High Operating Temperature	+71 deg C Method 501.5 Proc. II
Low Operating Temperature	-40 deg C Method 502.5 Proc. II
High Temperature Storage	+71 deg C Method 501.5 Proc. I
Low Temperature Storage	-50 deg C Method 502.5 Proc. I
Temp Shock	Method 503.5 Proc. I-C
Altitude Storage	40,000 Ft Method 500.5
Humidity	Method 507.5 Proc. II
Ballistic Shock	MIL-S901D
Shock	Method 516.6 Proc. I
Vibration	Method 514.6 Proc I
Impact	25 Strikes on 4"x4" oak beam at 25 mph
Loose Cargo Transit	Method 514.6 Proc. II
Transit Drop	Method 516.6 Proc. IV
Spring Flexibility	40,000 Cycles
Salt Fog	Method 509.5
Immersion	Method 512.5 Proc. I
Rain	Method 506.4 Proc. II
Icing/Freezing	Method 521.3
Sand and Dust	Method 510.5 Proc. I
Solar Radiation	Method 505.5 Proc. I
Fungus	Method 508.6

RAMI-TDK-1

Tie down kit includes a 10 ft rope and a steel clip.

