



RF-3070-AT242

Soldier-Worn Active L1/L2 GPS Antenna

MECHANICAL

RF Connector

Mounting

Right-angle SMBe Four 0.5-inch holes, equally spaced around a 4.5-inch bolt circle

ENVIRONMENTAL

Meets MIL-STD-810F

ELECTRICAL

Frequency Range	L1: 1575.42 MHz ± 15 MHz L2: 1227.6 MHz ± 15 MHz
DC Power Requirement	2.7 V - 6 V; 35mA
RF Power Capacity	1 W CW
Input Impedance	50 ohms (nominal)
Radiation Pattern	Hemispherical
Polarization	Right hand circularly polarized
VSWR	< 2.0:1; relative to 50 ohms
Gain	(@ 90 degree elevation) L1 Band: 4 dBic at 1575.42 MHz L2 Band: 4 dBic at 1227.6 MHz

PHYSICAL

Length	35 in (88.9 cm)
Weight	3.7 oz (104 g)
Color	RF-3184-AT320: 383 Green RF-3184-AT324: 686 Tan

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The RF-3070-AT242 is a portable, active L1/L2 GPS antenna with an integrated pendant coaxial cable and magnetic mount with an approximate 18-pound retaining force. The 3-foot long RG-174 coaxial cable terminates in a right-angle SMB connector for direct connection to the AN/PRC-117G(V)1(C) and RF-7800M-MP Falcon III® manpack transceivers. This 2-inch square antenna incorporates band-pass filtering, supporting greater than 40 dB of rejection at ± 50 MHz. This soldier-worn solution incorporates a limiter, protecting against damage from electrostatic discharge and co-located in-band interference. The RF-3070-AT242 contains a 33 dB Low Noise Amplifier, which minimizes the noise figure while optimizing antenna sensitivity. Small and lightweight, the antenna can be stowed in a soldier's rucksack or spare pocket located within 3 feet of the radio connector.



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