

assured communications\*

# *RF-387-AT002 VHF VEHICULAR WHIP ANTENNA*

30-108 MHz

with GPS antenna

The Harris RF-387-AT002 vehicular center-fed whip antenna is designed for use with the RF-5800V transceiver. It provides both a low-band VHF antenna and GPS antenna integrated within one package. The 121-inch whip provides exceptional gain and instantaneous bandwidth performance over the whip length without unsightly bulges. This puts the power pattern on the horizon allowing exceptional LOS communications without the need for a ground plane. The VHF center-fed element and matching network is rated for 100 Watts.

The flexible spring feed-through mounting base contains a GPS antenna, required with the RF-5800V-MP when equipped with the internal GPS option. With the GPS spring base, the overall antenna length is 131 inches. On the underside of the base, there is a ground stud and two connectors: the VHF connector is a female BNC and the GPS connector is a female SMA. Its feed through spring base mounts directly to a Harris RF-292 Universal Antenna Mount or to any horizontal surface using four 0.4 inch holes spaced 90 degrees on a 4.5 inch bolt bole circle with a 3.5 inch center cut-out.

## Specifications for the RF-387-AT002

### **VHF Electrical**

Frequency Range	30 to 108 MHz
Polarization	Vertical
Impedance	50 ohms
VSWR	3.5: 1 max
Gain	-4 dB to +1 dB ref 1/4 wave monopole
Power Rating	100W continuous
Matching	No tuning required
<b>Radiation Pattern</b>	Omnidirectional, null overhead

### **GPS Electrical**

Frequency Range 1575.42 ±10 MHz Preamplifier gain 26.5 dB Noise Figure 2.5 dB Supply voltage  $5.0 \pm 0.5 \text{ V}$ Supply Current <40 mA

#### Mechanical

Height	131 in (3.3m)
Weight	4.4 kg including GPS base
Temperature	−55°C to +85°C
<b>RF</b> Connectors	VHF-BNC(f), GPS-SMA(f)
Color	CARC 383 Green
Wind Rating	125 mph (55m/s)
Mounting	Four 0.4 in holes spaced on 4.5 inches
	BHC (Hardware included)
	Bolts directly to RF-292 (not included)

### **Features**

- Instantaneous bandwidth for ECCM waveforms
- Matching network in whip element
- Dual port (VHF and GPS)
- Multi-sectional
- Standard bolt pattern
- Feed through spring base
- Ground plane insensitive

Specifications are subject to change without notice.



RF Communications Division | 1680 University Avenue | Rochester, NY USA 14610 www.harris.com 1-585-244-5830