



## Surface Mount Antennas UHF & GPS

- Three UHF models available: 400, 425 or 450 MHz bands
- Thru-hole mount design insures a strong secure installation
- IPx5 water ingress rating; no need to remove for car washes
- High performance GPS operates with 26 dB active GPS gain

These dual band configurations combine a UHF antenna along with a GPS satellite antenna into one convenient package. This saves on space, looks and installation time without sacrificing performance.

These antennas can be mounted to a vehicle's metal surface or any bulkhead through a 3/4" hole (19 mm). The antennas provide completely independent dual band operation.

GPS performance is 26 dB LNA, with 5 dBi nominal antenna gain. The GPS circuitry has a low noise figure (2.0 dB max) with excellent filter characteristics. No interaction occurs between the bands.

These models have passed the IPx5 water ingress rating. This rating along with a flexible whip allows these antennas to go through car washes without the need to remove either the whip or the base of the antenna from the vehicle.

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

The GPS cable is 15 feet of RG-174 cable (4.5 meters) and the connector is an SMA Plug (Male). The UHF bands are outfitted with 15 feet of RG-58 (4.5 meters) and SMA Plug (Male) connector.

Other connectors and configurations are available upon request.

Trunk Lid and Mirror Mount kit are provided for additional mounting options.

Model #	Description
SMF-400/1575-1C-BLK-180	UHF & GPS Antenna
SMF-425/1575-1C-BLK-180	UHF & GPS Antenna
SMF-450/1575-1C-BLK-180	UHF & GPS Antenna
Add "-TM" for Vehicle Trunk Lid Mount	
Available in Black Only	
SM-MM	Mirror Mount option

Specifications			
Frequency:		Dimensions:	
400 MHz UHF	380-430 MHz, factory set	400 MHz UHF	6 1/4" height (158.7 mm)
425 MHz UHF	400-450 MHz, factory set	425 MHz UHF	6" height (152.4 mm)
450 MHz UHF	430-512 MHz, factory set	450 MHz UHF	5 3/4" height (146.0 mm)
GPS, all Models	1575.42 +/- 2 MHz	Base Dimension:	
Gain:	Unity	1" H x 2 5/8" D	
VSWR:	2:1 max over range	(25mm x 67 mm)	
GPS Gain:	26 dB LNA	Stud Mounting:	
	5 dBi nominal RHCP Antenna	3/4" dia x 1/2" long	
Noise Figure:	2.0 dB max, 1.7 dB typical	(19mm x 13mm) for	
Nominal Impedance:	50 ohms	3/16" thick (4.7 mm) surface	
Maximum Power:	30 Watts on UHF	GPS Cable:	
Amplifier Bias:	2.7 to 5 VDC	RG-174, 15 feet (4.5 meters)	
Current:	20 mA max, 10 mA typical	UHF Cable:	
Operating Temp:	-40° to +85° C	RG-58, 15 feet (4.5 meters)	
Case Material:	Polycarbonate, black	Cable Attachment:	
		Integral to device, bottom exit	
		SMA Plug (Male) standard	
		Shock & Vibration:	
		EN 61373, IEEE 1478, MIL-810G	
		TIA-329.2-C	
		Water Ingress:	
		IPx5	