
Phantom® Antennas Patented Whipless Performance



Features & Benefits

- **Whipless Design:** The patented whipless design of our Phantom® antenna allows car washes without removing the antenna. Whipless means they don't look like antennas, attract less attention, less vandalism, and have lower wind resistance. The Phantom® is also less susceptible to damage by trees, garages or other obstructions.
- **Field Diversity:** Field diversity means that the antenna is simultaneously sensitive to both the electric and magnetic fields of the signal, like having two antennas. Field diversity makes the antenna resistant to the picket-fence fading and multipath nulls that are found in urban operation and undulating mobile environments.
- **Permanent Mounting:** Permanent mount versions of the UHF and higher frequency models are available for high risk applications such as metering where antennas must resist vandalism and achieve economical mounting.
- **Versatile:** Excellent for voice or telemetry applications.

Our unique patented Phantom® is a tough antenna for outdoor or indoor applications. The Phantom® revolutionary design features field diversity with both vertical and horizontal polarization components. This gives the antenna

diversity, frequency agility, low visibility, wide bandwidth and a low angle radiation pattern that is superior to traditional gain antennas in most applications.

The industry standard NMO mounting socket mates with all Antenex[®] Magnetic, Trunk lid, and hole mounts. We also provide a threaded stud mount model for vandal resistant mounting on brackets, panels, ceilings or any other kind of housing.

The Phantom[®] patented technology is beneficial when high performance is desired and extreme ruggedness and low profile is required.



Technical Data - Product Features & Information

	142-174 MHz	210-230 MHz	
Gain:	Unity	Unity	
Frequency Range:	142-160 MHz 150-168 MHz 156-172 MHz	210-230 MHz	
VSWR:	<1.5:1 850 kHz <2.0:1 1.0 MHz	<1.5:1 2.2 MHz <2.0:1 4.0 MHz	
Maximum Power:	60 watts	100 watts	
Bandwidth:	1.5 MHz	4 MHz	
Impedance:	50 ohms	50 ohms	
Height:	3 1/2"	2 3/4"	
	410-490 MHz	800-900 MHz	2400 MHz
Gain:	3 dB-MEG.	3 dB-MEG.	
Frequency Range:	410-425 MHz 430-450 MHz 450-470 MHz 470-490 MHz	806-866 MHz 821-896 MHz 890-960 MHz 902-928 MHz	2400-2500 MHz
VSWR:	<1.5:1 10 MHz <2.0:1 20 MHz	<1.8:170 MHz	<1.5:1 100 MHz
Maximum Power:	150 watts 100 watts	150 watts	100 watts

	NGP		
Bandwidth:	>20 MHz	>70 MHz	>100 MHz
Impedance:	50 ohms	50 ohms	50 ohms
Height:	3½"	2½"	3½"