

## 900 MHz UP-series Omni-directional Antennas

Models: HG903UP-NF, HG906UP-NF and HG908UP-NF

### Applications

- 900 MHz ISM band and Wireless LAN systems
- Multipoint applications
- Non Line of Sight (NLOS)
- Wireless video links
- GSM, SCADA applications

### Features

- Superior all weather performance
- Rugged industrial grade design
- Lightweight slim fiberglass radome
- Integral N-Female connector
- Extruded aluminum mounting bracket



HG903UP-NF Shown

### Description

The 900 MHz UP-series are lightweight, slim, high performance omni-directional antennas designed for the 900 MHz ISM band. They are ideally suited for multipoint, Non Line of Sight (NLOS) and mobile applications where compact size, high gain and wide coverage is desired. Typical applications include 900 MHz Wireless LAN, SCADA, Wireless Video Links and 900 MHz Cellular band applications.

The UP-series antennas feature an integral N-Female type connector and include a mast mounting kit. The kit consists of an extruded aluminum bracket and a pair of U-bolts which allows installation on masts up to 2.0" in diameter. To ease installation, the bracket can be installed first without the antenna which can then be mounted after the bracket is installed.

The UP-series antennas feature a slim 20 mm diameter white UV-stable fiberglass radome for durability and aesthetics. It is designed with a sealed aluminum end cap and includes drain holes at the aluminum base to help prevent condensation build-up inside the antenna providing trouble-free performance.

### Specifications

#### Electrical Specifications

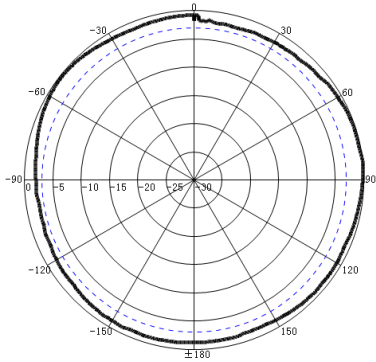
Models	HG903UP-NF	HG906UP-NF	HG908UP-NF
<b>Frequency</b>	902 – 928 MHz		
<b>Gain (typ.)</b>	3 dBi	6 dBi	8 dBi
<b>Vertical Beam Width (-3dB)</b>	44°	35°	15°
<b>Horizontal Beam Width (-3dB)</b>	360°		
<b>Polarization</b>	Vertical		
<b>Impedance</b>	50 Ohm		
<b>Max. Input Power</b>	50 Watts		
<b>VSWR (avg.)</b>	< 1.6:1		

### Mechanical Specifications

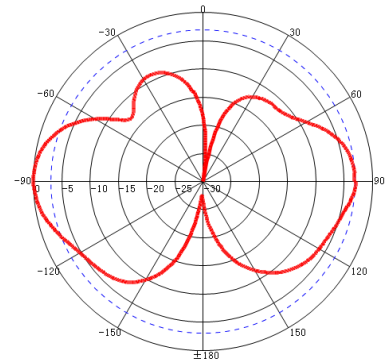
<b>Connector</b>	Integral N-Female		
<b>Weight</b>	1.06 lbs. (0.48 kg)	1.21 lbs. (0.55 kg)	1.79 lbs. (0.81 kg)
<b>Length</b>	13.8 in. (350 mm)	23.0 in. (585 mm)	57.3 in. (1454 mm)
<b>Diameter</b>	0.79 in. (20 mm) – 1.0 in (25 mm) at base		
<b>Radome Material</b>	UV-stable White Fiberglass		
<b>Mounting Mast Size</b>	1.2 to 2 in. Dia. (30 to 50 mm dia.)		
<b>Operating Temperature</b>	-40° C to 60° C (-40° F to 140° F)		
<b>Rated Wind Velocity (max.)</b>	130 MPH (210km/h)		
<b>RoHS Compliant</b>	Yes		

### RF Antenna Patterns – HG903UP-NF

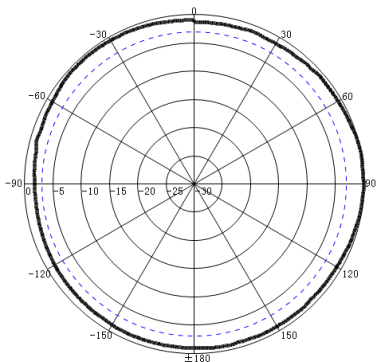
H-Plane: 902MHz



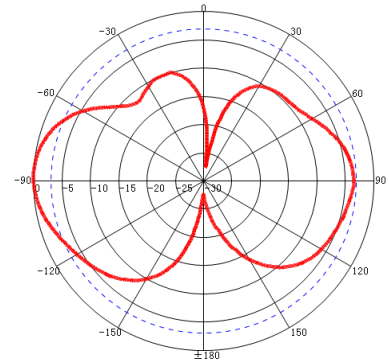
V-Plane: 902MHz



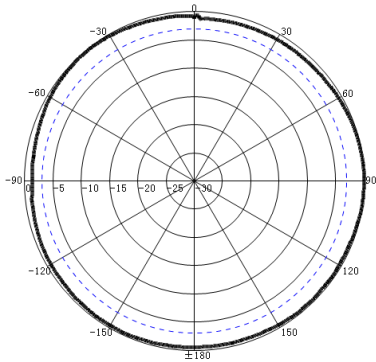
H-Plane: 915MHz



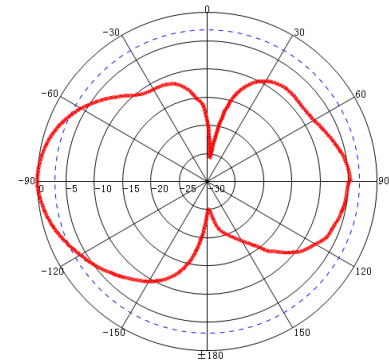
V-Plane: 915MHz



H-Plane: 928MHz

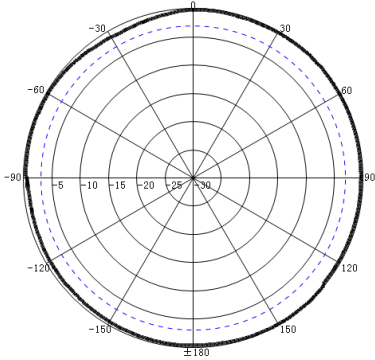


V-Plane: 928MHz

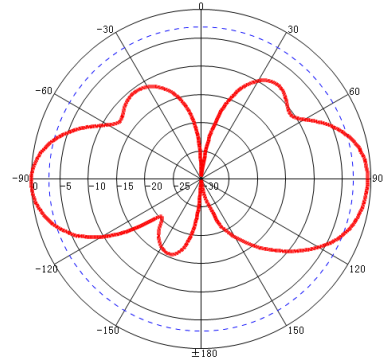


**RF Antenna Patterns – HG906UP-NF**

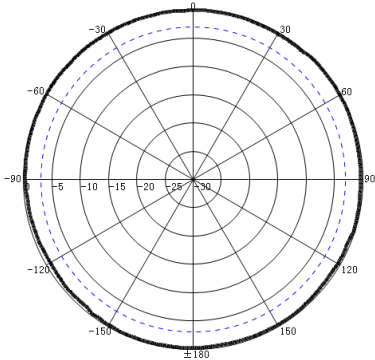
**H-Plane: 902MHz**



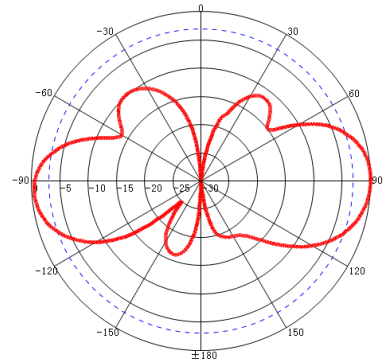
**V-Plane: 902MHz**



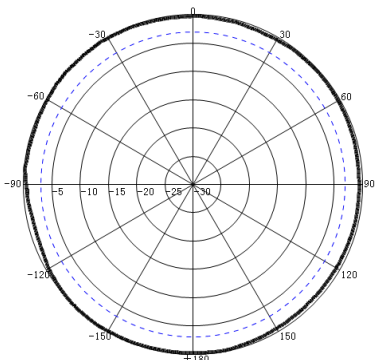
**H-Plane: 915MHz**



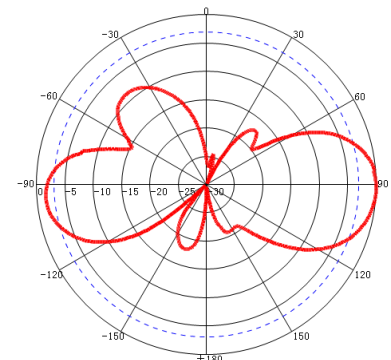
**V-Plane: 915MHz**



**H-Plane: 928MHz**

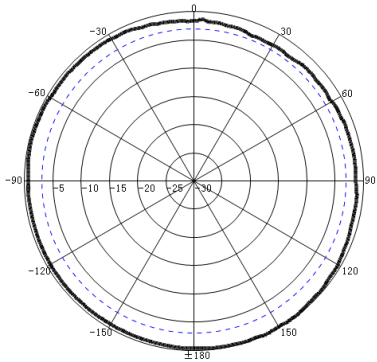


**V-Plane: 928MHz**

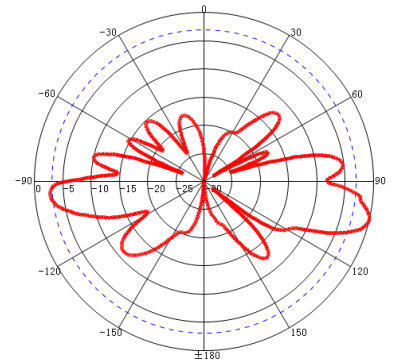


**RF Antenna Patterns – HG906UP-NF**

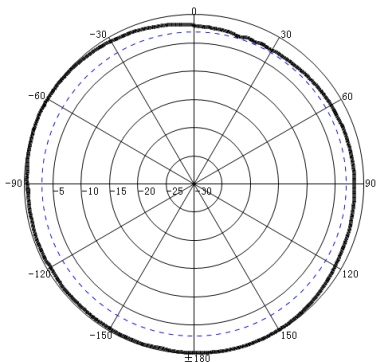
**H-Plane: 902MHz**



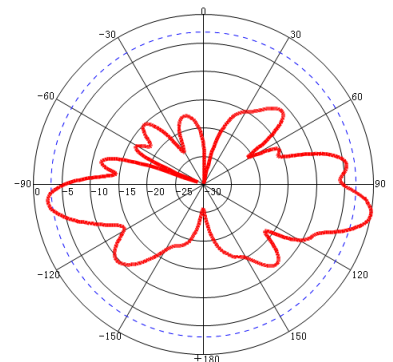
**V-Plane: 902MHz**



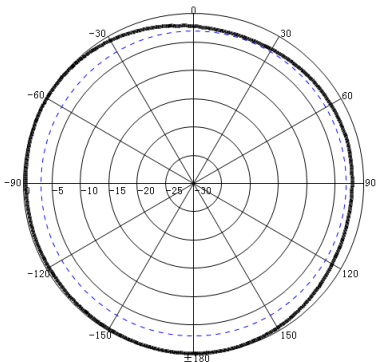
**H-Plane: 915MHz**



**V-Plane: 915MHz**



**H-Plane: 928MHz**



**V-Plane: 928MHz**

