



$$e = \sum_{n=0}^{\infty} \frac{1}{n!} = \lim_{n \rightarrow \infty} \left(\frac{1}{0!} + \frac{1}{1!} + \frac{1}{2!} + \dots + \frac{1}{n!} \right)$$

Unmanned Vehicle 4000 Series



UVNP4001-27, 4.9 – 5.4 GHz

UVNP4005-27, 2.2 – 2.5 GHz

HT-OFDM MESH Ad-Hoc IP Radio

The **MobiRake** HYC-UVNP4001 & 4005 Series is a 2.4 or 5 GHz range HT-OFDM tactical MESH Ad-Hoc IP Radio.

The HYC-UVNP4000-27 is designed to be light and easy to carry and install. The built-in mesh ad-hoc software can quickly communicate with existing MobiRake-MIMO fixed stations and mobile vehicle models to complete a tactical MESH Networks. Also equipped with The 2x2 MIMO antenna system design makes the transmission distance can be efficient increase, and multipath issues of harsh environment can be effectively overcome.

Unmanned robots, unmanned aerial vehicles, handheld and any quick installation demands are all applications of this device.

Operating Frequency	4900 – 5400 MHz (UVNP4001) 2200 – 2560 MHz (UVNP4005)
Modulation	HT-OFDM
Output power	27 dBm 33 dBm (Advanced version)
Channel Bandwidth	2.5 ~ 40 MHz
Antenna System	2x2 MIMO
Antenna Connectors	Type SMA – Female x 2 (UVNP4001) Type TNC – Female x 2 (UVNP4005)
Interfaces of UVNP4001R	3 pins (DC In) 9 pins (Ethernet) 6 pins (RS232 Data Traffics & Reset)
Operating mode of OFDM	PTP/PTMP/Mesh Ad-Hoc
IP Throughput of OFDM	100 Mbps in 20 MHz BW
GPS	GPS coordinates and internet map database
Security	128 AES Encryption / proprietary protocol / MAC address control
Management & setup	Web-based
SNMP agents	MIB II
Dimension / Weight	144 x 85.5 x 46, mm / 340 g
Power Consumption	Max. 12 W (UVNP4001/4005)
Power feed	DC 12 – 24 V (UVNP4001/4005)
Waterproof	IP67
Ordering information	UVNP4005R-27, 2.2 – 2.56 GHz 0.5 W Unmanned Vehicle radio UVNP4001R-27, 4.9 – 5.4 GHz 0.5 W Unmanned Vehicle radio ANTM2225GD6-M-NF, 2 GHz 6 dBi 2x2 MIMO Omni-directional ant. ANTM2225GD9-M-NF, 2 GHz 9 dBi 2x2 MIMO Omni-directional ant. ANTM4954GD10-M-NF, 5 GHz 10 dBi 2x2 MIMO Omni-directional ant.

Notes: All Specifications are typical values and subject to change without prior notice.

S Band 2200 MHz – 2500 MHz Omni-Directional Gooseneck Antenna

ANTV222502V-MGN-TM, Electrical Specification

Frequency Band	2200 – 2500 MHz
Gain	2 dBi
Nominal Impedance	50 Ω
VSWR	≤2.0:1
Polarization	Linear, Vertical
HPBW - Azimuth	360°
HPBW - Elevation	70°
Max. Power Handling	50 W
Operating Temperature	-40 °C~ +70 °C

Mechanical Specification

Connector	TNC, Male (Non-Rotating)
Length	210 ±5.0 mm
Diameter	Φ 14.8 ± 1.0 mm
Weight	78 g
Color	Matte Black
Mounting	Connector mode locking

ANTV222502H-MGN-TM, Electrical Specification

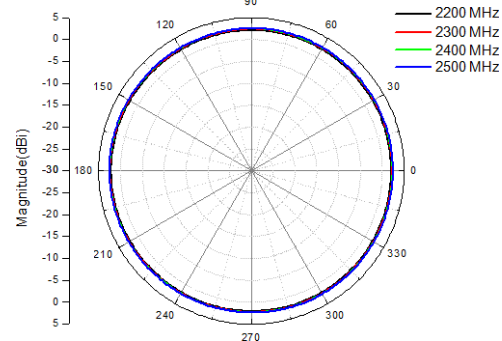
Frequency Band	2200 – 2500 MHz
Gain	2 dBi
Nominal Impedance	50 Ω
VSWR	≤2.0 : 1
Polarization	Linear, Horizontal
HPBW-Azimuth	360°
HPBW- Elevation	75° (Approx.)
Max. Power Handling	10 W
Operating Temperature	-40 °C~ +70 °C

Mechanical Specification

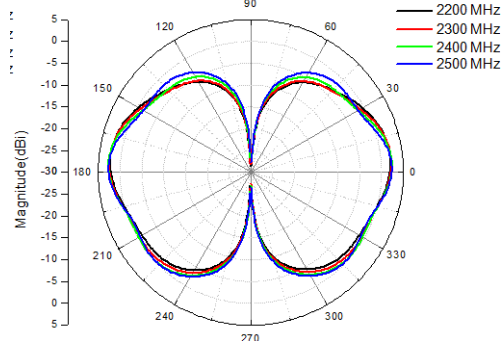
Connector	TNC, Male (Non-Rotating)
Length	≤220 mm
Diameter	19.4 ± 1.0 mm
Weight	≤100 g
Radome Materials	GFRP
Color	Matte Black (or customer specified)
Mounting	Connector mode locking



Azimuth Plane Radiation Pattern



Elevation Plane Radiation Pattern



ANT222502V-MGS-TF

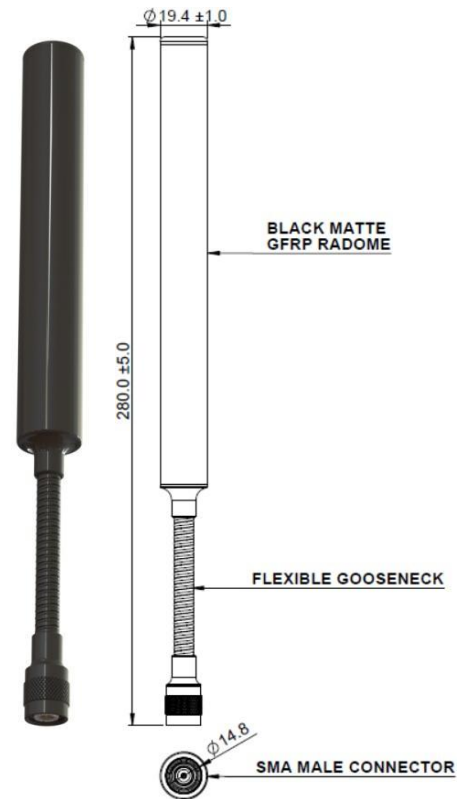
C Band 5000 MHz – 5900 MHz Omni-Directional Gooseneck Antenna

ANTV505905M-MGN-SM, Electrical Specification

Frequency Band	5000 – 5900 MHz
Gain	≥ 5 dBi 5.2 dBi @ 5000 MHz 6.1 dBi @ 5500 MHz 5.4 dBi @ 5900 MHz
Nominal Impedance	50 Ω
VSWR	≤ 2.0 : 1
Polarization	Linear, Horizontal
HPBW-Azimuth	360°
HPBW- Elevation	40° (Approx.)
Max. Power Handling	10 W
Operating Temperature	-40 °C ~ +70 °C

Mechanical Specification

Connector	SMA, Male (Non-Rotating)
Length	280 ± 5 mm
Diameter	Φ 19.4 ± 0.5 mm
Weight	≤ 100 g
Radome Materials	GFRP
Color	Matte Black
Mounting	Connector mode locking



Ordering info:

ANTV50595V-MGN-SM, C Band Vertical Polarized Omni-Directional Gooseneck Antenna

