



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



IP67, HYC-UVNP4006-27 For Unmanned Vehicle Mobile

HYC-ATHN(V)4006 Station 0.5 or 2W

## HYC-UVNP4006-27, Handheld 2x2 MIMO MESH Ad-Hoc IP Radio

The MobiRake HYC-UVNP4006-27 is a NATO band IV range (4.43 – 4.9 GHz) HT-OFDM tactical MESH Ad-Hoc IP Radio.

The UVNP4006-27 is designed to be light and easy to carry and install. The built-in mesh ad-hoc software can quickly communicate with existing Athena-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.

<b>Operating Frequency</b>	<b>4430 – 4900 MHz</b>
Modulation	HT-OFDM
Output power	27 dBm
Channel Bandwidth	2.5 ~ 40 MHz
Sensitivity	-92 dBm
Antenna System	2x2 MIMO
Antenna Connectors	Type SMA – Female x 2 or Type N - Female
Interfaces	3 pins (DC In) 9 pins (Ethernet) 6 pins (RS232 Data & Reset)
Operating mode	PTP/PTMP/Mesh Ad-Hoc
IP Throughput	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	n/a
Power Consumption	Max. 25 W
Power feed	DC 10 – 30 V
Waterproof	IP67

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

# ATHNV4066-27, Station Dual 2x2 MIMO MESH Ad-Hoc IP Radio



## 2 RADIO NATO Band IV FREQUENCIES - 1 DEVICE

The HYC-ATHNV4066-27 is a 2 NATO band IV (4.43 – 4.9 GHz) combination HT-OFDM tactical MESH Ad-Hoc IP Radio in 1 device.

The ATHNV4066-27 provides a robust and highly scalable MANET to fixed station, mobile vehicle and unmanned vehicle to meet network requirements. The dual 2x2 MIMO wireless chains dynamically selects the best performing radio to maximize performance in congested or contested environments.

Operating Frequency	4430 – 4900 MHz (Wireless 1)	4430 – 4900 MHz (Wireless 2)
Modulation	HT-OFDM	HT-OFDM
Output power	27 dBm	27 dBm
Channel Bandwidth	2.5 ~ 40 MHz	2.5 ~ 40 MHz
Sensitivity	-92 dBm	-92 dBm
Antenna System	2x2 MIMO	2x2 MIMO
Antenna Connectors	Type N Female x 4 Type TNC Female x 1 (GPS receiver)	
Interfaces	M12 Ethernet ports x 2	
IP Throughput	100 Mbps in 20 MHz BW	100 MHz in 20 MHz BW
Operating mode	PTP Hops-Relay (Supports dual directional connectivity) MESH OTM (On the Move)	
GPS	GPS coordinates and internet map database	
Security	128 AES Encryption / proprietary protocol / MAC address control	
Management & setup	Web-based	
SNMP agents	MIB II	
Power consumption	65 W	
Input Voltage	DC 36 – 72 V	
Dimension / Weight	300 x 200 x 100, mm; 5.8 kgW	

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

# ANTM4450GD10-M-NF, Omni-Directional Antenna Vehicle Mount

## ANTM4450GD10-M-NF, Electrical Specification

Frequency Band	4400 ~ 5000 MHz
Gain	2 x 9 dBi
Nominal Impedance	50 $\Omega$
VSWR	$\leq 2.0 : 1$
Polarization	Linear, Vertical & Horizontal
HPBW-Azimuth	360°
HPBW- Elevation	10° (Approx.)
Port to Port Isolation	> 30 dB
Max. Power Handling	20 W
Operating Temperature	-40 °C~ +70 °C
Lightning Protection	DC Grounded

## Mechanical Specification

Connector	2 x N Type Female for C Band SMA Female for GPS (Optional)
Dimensions	700 $\pm$ 10 (L) x 140 $\pm$ 1.0 (OD) mm
Radome Diameter	$\Phi$ 80 $\pm$ 5 mm
Weight	1.6 Kg $\pm$ 50 g
Material	Stainless Steel, Brass
Radome Material	FRP or ASA
Wind Survival	200 Km/h
Wind Load @ 150 Km/h	Side: 80 N (Approx.)
Color	NATO GREEN # 5864A & Matte Black
Mounting	Standard NATO 4-hole, fixed with 4 x M10 or 3/8" Bolts

## Accessories

Waterproof Gasket, 1 PCS
M10 x 55L Blackened Screw, 4 PCS
M10 Blackened Nut, 4 PCS
M10 Blackened Spring Washer, 4 PCS
Ground Strap, 1 PCS



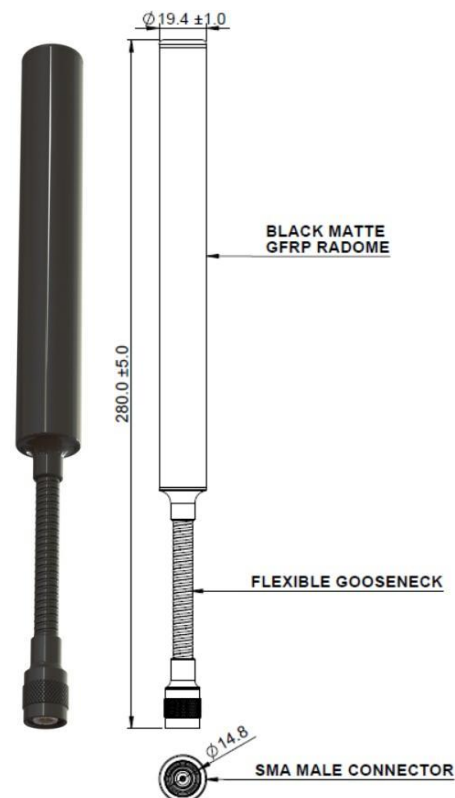
# ANTV444904M-MGN-SM , Omni-Directional Gooseneck Antenna

## ANTV444904M-MGN-SM, Electrical Specification

Frequency Band	4430 – 4900 MHz
Gain	$\geq 4$ dBi
Nominal Impedance	50 $\Omega$
VSWR	$\leq 2.0 : 1$
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) N, Male (Option)
Length	280 $\pm$ 5 mm
Diameter	$\Phi$ 19.4 $\pm$ 0.5 mm
Weight	$\leq$ 100 g
Radome Materials	GFRP
Color	Matte Black
Mounting	Connector mode locking



## Ordering information:

- ANTV44494V-MGN-SM, C Band Vertical Polarized Omni-Directional Gooseneck Antenna, SMA Male connector
- ANTV44494V-MGN-NM, C Band Vertical Polarized Omni-Directional Gooseneck Antenna, N Male connector