



Shown mounted on NTS Dampened Spring Base (see page 2 for base options)

## **Description**

- UHF SATCOM 243-380 MHz covers:
  - MUOS 300-320/360-380 MHz
  - UFO Waveform 292-318/243-270 MHz
- Quadrifilar helix groundplane independent
- Hemispherical coverage
- Good gain at low elevation
- Minimum VSWR losses
- · Removable radiating element from base assembly
- L1 and L1/L2 GPS can be included with NTS Dampened Spring Base option (see page 2)

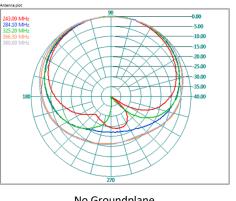
## **Electrical Specifications**

Frequency range	243-380 MHz		
VSWR	< 2:1		
Nominal impedance	50 ohm		
Power rating	60 W CW		
Gain	4 dBi Nominal		
Radiation pattern	Azimuth: Omnidirectional ±1.5 dB Elevation: See plots		
Polarization	Right Hand Circular Polarization (RHCP)		
Connector	N type female, others on request		

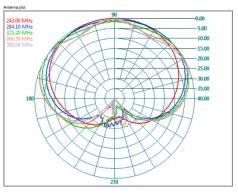
## **Mechanical Specifications**

Design	Helical radiating element fully enclosed in a GRP radome. See page 2 for base options.	
Height	See page 2	
Weight	Antenna Element 3.1 kg (6.8 lbs)  NTS Dampened Spring Base 2.7 kg (6 lbs)  NTR Rigid Base 0.9 kg (2 lbs)  Pole Mount Base 1.2 kg (2.6 lbs)	
Wind rating	55 m/s = 125 mph	
Finish	Polyurethane lacquer Standard colors: Green, Tan, Black, Grey	
Temperature range	-55 °C, +71°C; -67 °F, +160 °F	

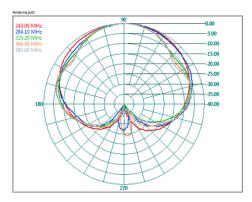
## **Typical Elevation Patterns**



No Groundplane



NTR Rigid Base mounted in the center of 4ft x 4ft groundplane



NTS Spring Base mounted in the center of a 4ft x 4ft groundplane

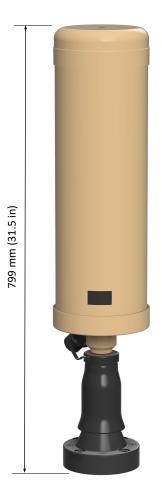
# **Mounting base options**



Radiating element



NTR Rigid Base



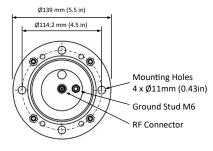
NTS Dampened Spring Base (with or without GPS)



vertical or horizontal pole -Ø14-62 mm (0.55-2.5 in)



Radiating element to base mounting thread (Comrod CEF type)



NATO 4-hole base mounting details

#### **GPS Electrical Specification (option)**

(Not available with NTK high base of Pole Mount Bracket option)		
	L1 GPS	L1/L2 GPS
Frequency Band	1575.42 ± 10 MHz	1227.60 ± 10 MHz
		1575.42 ± 10 MHz
Power Supply	2.7-5.5 V @	2.7-5.5 V @
	<60mA, + center	<60mA, + center
Amplifier Gain	25 dB, GPS	25 dB, GPS
Pre-amplifier	26.5 dB @ 5 V	26.5 dB @ 5 V
Noise Figure	2.5 dB	2.5 dB
Polarization	RHCP	RHCP



Comrod CEF connection to radiating element. N type female coaxial cable connection.

## **UHF243380S**

## **Shipboard Shock Absorbing Base Option**

- Uses the same radiating element as the vehicle version
- Shock Absorbing Base designed for shipboard applications with high shock requirements.
- L1 and L1/L2 GPS can be included in the base.



NTSA Shock Absorbing Base