60506 Navilock NL-69AT SMA GPS Antenna 3 m

Technical Details

Specification

- Frequency range: 1575.42 MHz ± 1.023 MHz
- Polarization: RHCP
- Gain: Zenith 5.0 dBic, typ. 10° -1.0 dBic
- C/A code resolution accuracy: 2 MHz
- Bandwidth: 15 MHz min. return loss -10 dB
- Axial ratio: 3.0 dB max.
- RF cable: RG 174
- RF connector: SMA (plug)
- Operation voltage: 2.5 V - 5.5 V
- Current consumption: 11 mA, max.: 15 mA at 3.0 V
- Antenna : 25 mm x 25 mm
- VSWR: 2.0 max.
- Gain with ground plane 70 mm x 70 mm, 33 dBic minus cable loss max. (-1.3 dB/m)

LNA

- Frequency range: 1575.42 MHz ± 1.023 MHz
- Gain: 28 dB ± 2 dB (+ 25 °C ± 5 °C)
- Noise figure (NF/F): 1.6 dB max. (+ 25 °C ± 5 °C) at 3.0 V
- Output impedance: 50 Ω

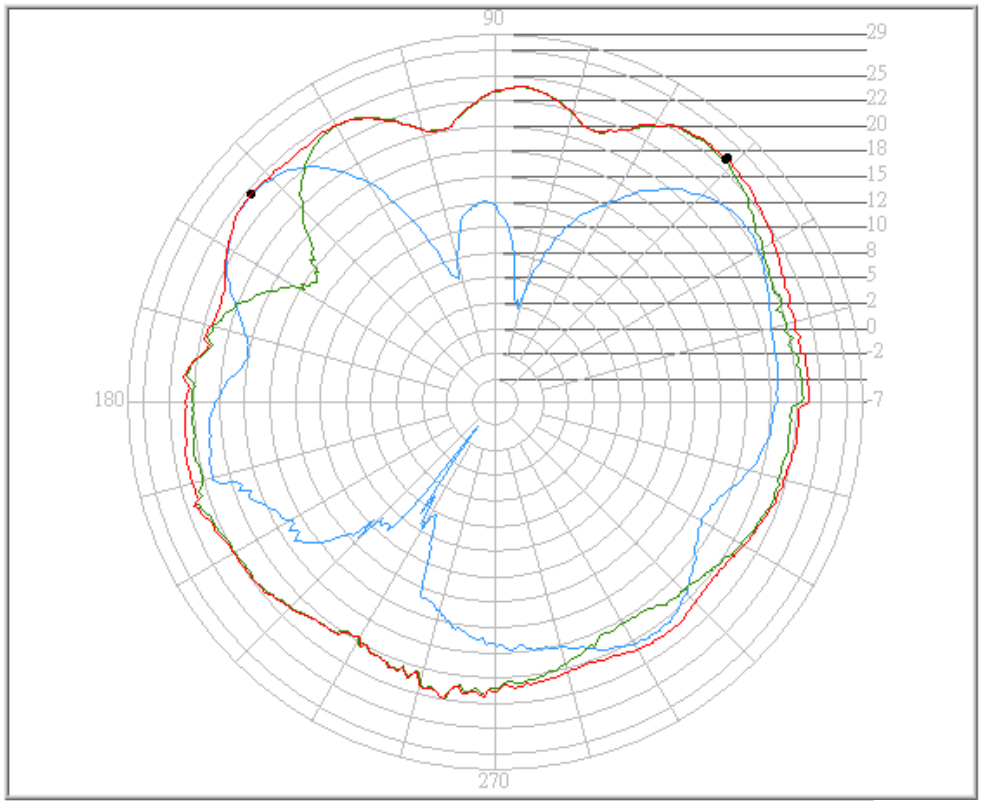
ENVIRONMENTAL CONDITIONS

- Operation temperature: -40 °C ~ 85 °C
- Storage temperature: -40 °C ~ 100 °C
- Humidity: 40 % - 95 %

MECHANICAL SPECIFICATIONS

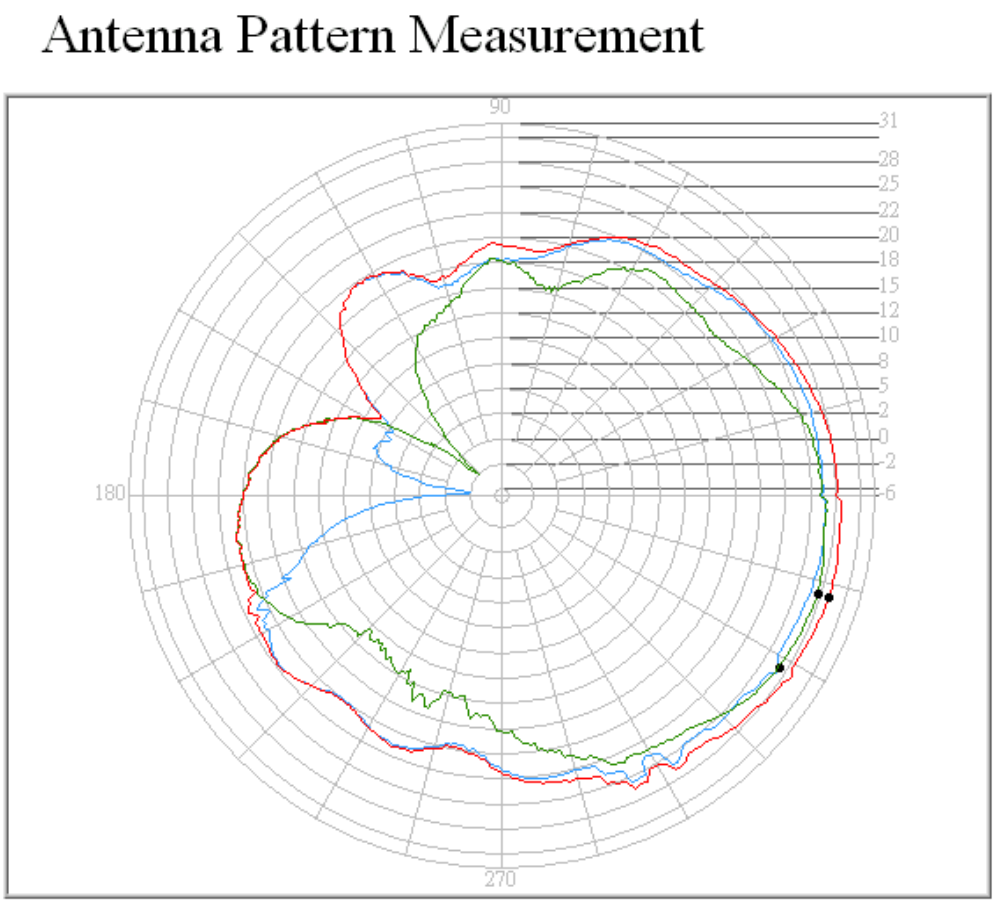
- Shockproof: 10 g (m/s²)
- Vibration: 10 Hz - 200 Hz vibration frequency, 15 min, 3 axes
- Dust and water IP 67, waterproof 50 cm for 30 min
- Size (L x W x H): 40.5 mm x 38 mm x 13 mm
- Weight: 0.15 kg
- Cable length: 3 m
- Mounting magnet

Horizontal Pattern:



Model No.	Test Mode	Freq(MHz)	Source Polarization	Peak Gain(dBi)	Avg. Gain(dBi)	Peak Angle
GA31 GND	01	1575	Horizontal	24.38	19.13	139.52
GA31 GND	01	1575	Vertical	25.82	22.00	46.40
GA31 GND	01	1575	H+V	26.05	22.80	46.51

Vertical pattern:



Model No.	Test Mode	Freq(MHz)	Source Polarization	Peak Gain(dBi)	Avg. Gain(dBi)	Peak Angle
GA31 GND	02	1575	Horizontal	26.90	22.57	328.13
GA31 GND	02	1575	Vertical	27.21	21.56	342.82
GA31 GND	02	1575	H+V	28.37	23.78	342.78