

# AD-18/G-50300 Antenna *product datasheet*

## Product Overview

The AD-18/G-50300 antenna is a wideband UHF antenna designed for frequencies ranging from 500 to 3000 MHz. It is ideally suitable for use in heavy-duty mobile or vehicle-mounted applications. The antenna is composed of two main parts: the antenna base and the radiating element.

The base is made of aluminium and durable plastic materials. Inside the base, an optional GPS antenna can be mounted, with a separate SMA connector supplied on the base. A stainless steel spring absorbs shocks and vibrations. Radiating elements are made of aluminium alloy and enclosed inside an epoxy composite tube, enabling outstanding strength in even in the harshest conditions. The antenna base has four mounting holes, equally spaced on a 4.5" (114.3 mm) circle complying with NATO standards. Different base plate dimensions are available on request. The antenna radiator is painted with a black PU two-component UV resistant paint.

## Technical Specification

### Electrical Specification – UHF

Frequency range	500 - 3000 MHz
Impedance	50 ohms
VSWR	< 2:5
Gain	-2.5 to +2 dBi
Polarization	Vertical
Maximum power	500 W (450 MHz) to 200 W (3 GHz) CW
Connector	N female

### Mechanical Specification

Design	Dipole (center-fed) Antenna
Height	465 mm
Weight	3.3 kg
Max Radiator Diameter	89 mm
Temperature range - in use	-50 to +55 °C
Temperature range - in stock	-55 to +75 °C
Wind rating	45 m/s (160 km/h)
Colour	Black

### Electrical Specification – GPS

Frequency range	L1 1575.42 +/- 10 MHz
Impedance	50 ohms
VSWR	<2
LNA Gain / Voltage / Current	18 dB (+/- 2 dB) / 5 V / 19 mA 16 dB (+/- 2 dB) / 3.5 V / 13 mA 10 dB (+/- 2 dB) / 2 V / 7 mA
Polarization	RHC
Noise fig.	<1.5 dB
Connector	SMA female

### VERSIONS:

AD-18/G-50300-N: UHF Antenna

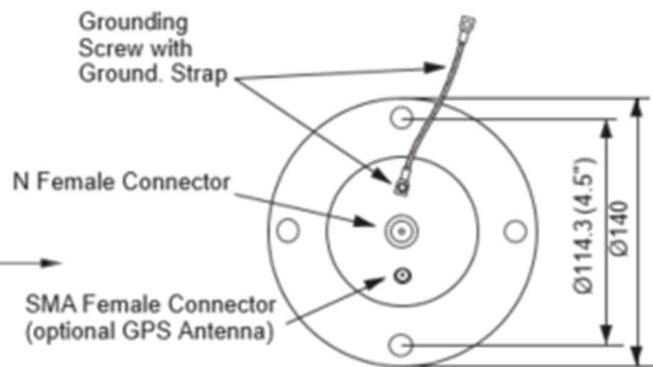
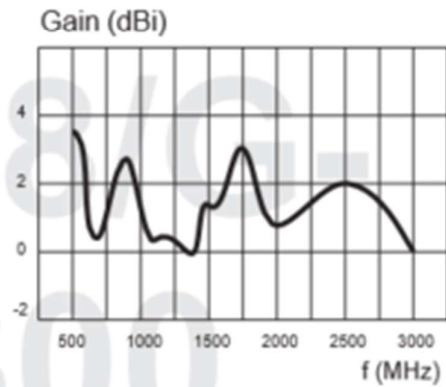
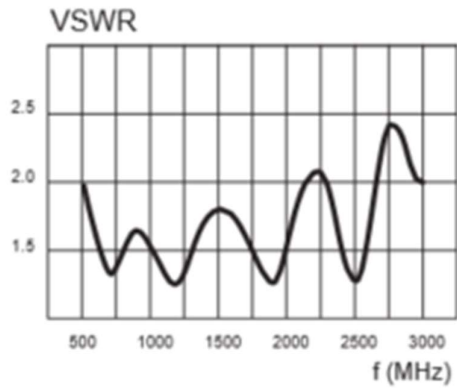
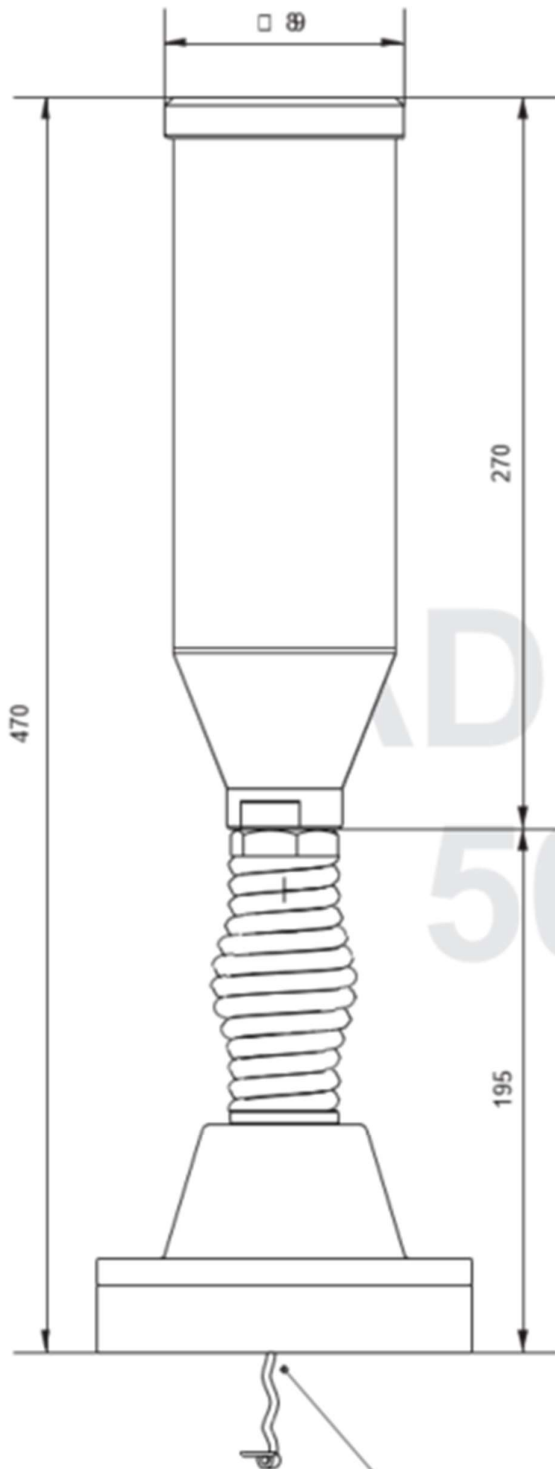
AD-18/G-50300-G-N: combined UHF and GPS Antenna (L1 band as standard)  
 (L2 band – contact us for details)

### Distributed in the UK by PPM Systems

Please contact us for further information.

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ANTENNA BASE -  
BOTTOM VIEW