



Vehicle Antenna Set CG32

Vaisala Vehicle Antenna Set CG32 is an antenna configuration designed to be used for operation in vehicles. The antenna set can be used with GPS wind finding systems out in the field.

Designed for Field Operation Conditions

The antenna set consists of a UHF antenna, a spring base with a GPS antenna, and Antenna Amplifier and Switch RAA111 at the base of the antenna. The antenna can be attached to a vehicle wall with a mounting plate, or it can be mounted on a mast. The color of the antenna parts is adjusted for field operation conditions and the metal parts are made from stainless steel, brass and aluminum. One person can transport and assemble the antenna set.

Vaisala Vehicle Antenna Set CG32 receives radiosonde signals in 400 MHz meteorological band. The antenna set can be used in conjunction with the Vaisala MARWIN® Sounding System MW32.

Easy to Assemble

CG32 can be mounted on a vehicle-wall or mast. The antenna set is delivered with Antenna Amplifier and Switch RAA111 and the antenna cables connected.



Features

- Fixed to the vehicle - no need to erect and dismantle a tripod
- Rugged and durable
- Long telemetry range - 150 km (93.2 mi) using the RS41 series GPS radiosondes

Technical Data

UHF Antenna

Type	Centered dipole
Frequency range	400 ... 406 MHz
Gain	2 dBi
Polarization	Vertical
Horizontal pattern	Omni-directional

Telemetry range

With RS41 series GPS radiosondes	150 km (93.2 mi)
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Amplifier

Gain	20 dB typical
Noise figure	< 2 dB
Power input	+10 ... 12 VDC, typically 130 mA through RF cable
Output impedance	50 Ω, VSWR < 1.5

GPS Antenna

Primary power	2.7 - 5.5 VDC
Current consumption	< 40 mA
Frequency	L1: 1575.42 ±10 MHz
Gain	26.5 dB (preamplifier)
Noise figure	2.5 dB (nominal)

Mechanical Specifications

Total height	1048 mm (41.26 in)
Weight with cables	6.6 kg (14.55 lb)
Standard cable length	6 m (19 ft 8 in)

Connector

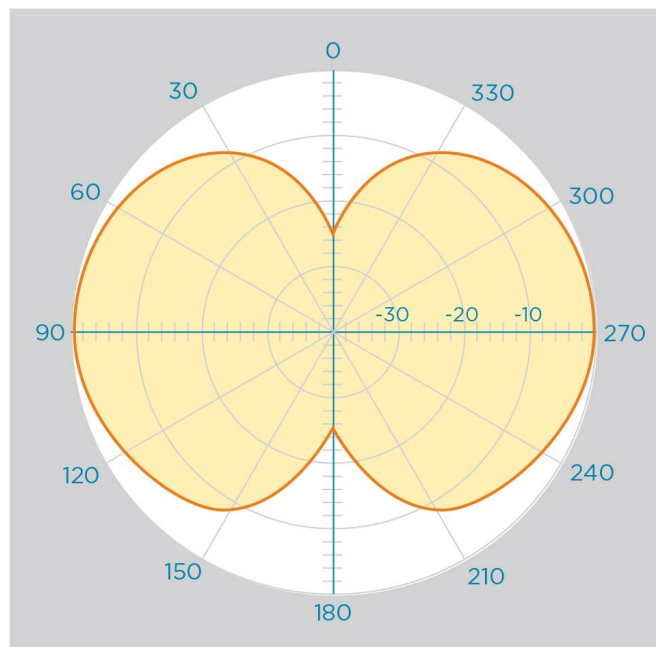
GPS Antenna	Coaxial TNC-type female
UHF Antenna	Coaxial N-type female

Operating Environment

Operating temperature	-40 ... +55 °C (-40 ... +131 °F)
Operating humidity	0 ... 100 %RH
Operating precipitation	Unlimited
Maximum wind speed	65 m/s (145 mph)
Storage temperature	-50 ... +71 °C (-58 ... +159.8 °F)
Storage humidity	0 ... 100 %RH



CG32 internal and external cables



UHF antenna radiation pattern - elevation



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