



Telemetry Antenna RM32

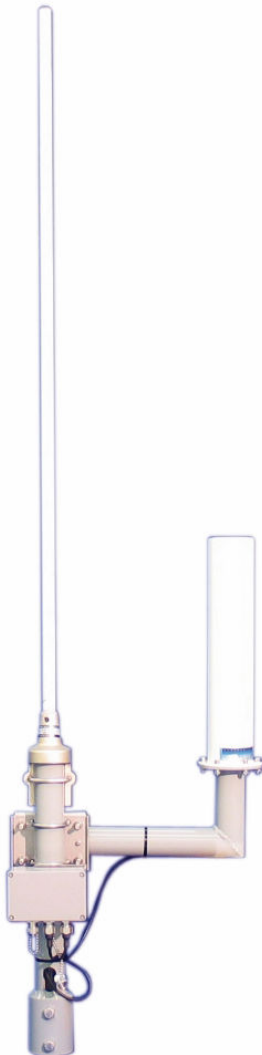
The Vaisala Telemetry Antenna RM32 is an omnidirectional UHF antenna used with the Vaisala DigiCORA® Sounding System to receive radiosonde signals in the 400 MHz meteorological band.

Optimal Performance in all Elevation Angles

RM32 has two antenna elements which have been selected to optimize the performance in all elevation angles, both near the horizon and at the zenith. The sounding system selects the antenna with the best reception through a two position antenna switch. The operating telemetry range with RS41 radiosonde family is up to 200 km.

For Fixed and Portable Systems

RM32 is well suited for fixed installations, but it can also be used in portable systems, when feasible. The mounting sleeve at the bottom of the tubular stand makes it easy to install the whole antenna assembly on top of an external mast. All the amplifier parts are housed in a watertight box at the base of the antenna mast. The amplifier runs on DC voltage, supplied by the UHF receiver.



Features

- Radiation pattern optimized for radiosonde reception
- Long telemetry range – 200 km with RS41-SG, RS41-SGP, or RS41-SGM radiosonde

Benefits

- Easy installation
- High elevation angle coverage – improved data availability

Technical Data

General

Frequency range 400 ... 406 MHz

Vertical Antenna

Directivity 5 dBi

Polarization Vertical

Horizontal pattern Omnidirectional

Helix Antenna

Gain 3dBic

Polarization Right-hand circular

Horizontal pattern Omnidirectional with hemispheric coverage

Telemetry Range

With RS41-SG, RS41-SGP, and RS41-SGM radiosonde 200 km

Amplifier

Gain 20 dB typical

Noise figure <2 dB

Power input +10 ... 12 VDC, typically 130 mA through RF cable

Output impedance 50Ω, VSWR <1.5

Mechanical Specifications

Cable connector Coaxial N-type male

Total height including mast 1760 mm

Inner diameter of mounting sleeve 61.5 mm

Weight 11.4 kg with the feeder cable

6.3 kg without the cable

Standard cable length 33 m

Operating Environment

Operating temperature -40 ... 55 °C

Operating humidity 0 ... 100 %RH

Operating precipitation Unlimited

Maximum wind speed 65 m/s



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