

Omnidirectional Antenna
Vertical Polarization
Fixed Electrical Downtilt

1710–1880

V

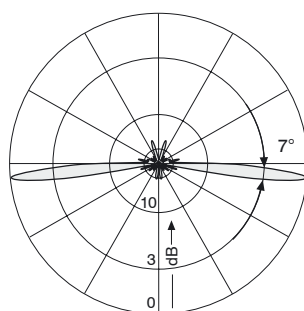
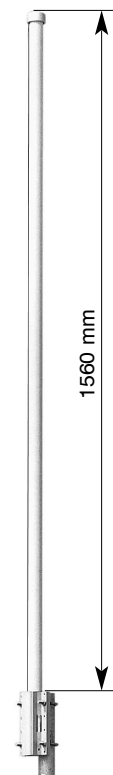
6°

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VPol Omni 1710–1880 360° 11dBi 6°T

Type No.	737 190
Frequency range	1710 – 1880 MHz
Polarization	Vertical
Gain	11 dBi
Electrical tilt	6°, fixed
Impedance	50 Ω
VSWR	< 1.3
Intermodulation IM3 (2 x 43 dBm carrier)	< –150 dBc
Max. power	200 W (at 50 °C ambient temperature)



Vertical Pattern
6° electrical downtilt

Mechanical specifications

Input	7-16 female
Connector position	Bottom
Weight	5.5 kg
Radome diameter	51 mm
Wind load	130 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	1846 mm x 148 mm x 112 mm
Height	1560 mm

936.1 038/f Subject to alteration.

Omnidirectional Antennas

Solid, reliable construction

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Accessories (order separately)

Type No.	Description	Remarks	Weight approx.	Units per antenna
738 908	2 clamps	Mast: 94 – 125 mm diameter	2.8 kg	1
737 398	Side-mounting bracket	Mast: 40 – 105 mm diameter	6.4 kg	1

Mounting: The antenna can be attached laterally at the tip of a tubular mast of 50 – 94 mm diameter with two U-bolt brackets supplied with the antenna (connecting cable runs outside the mast).

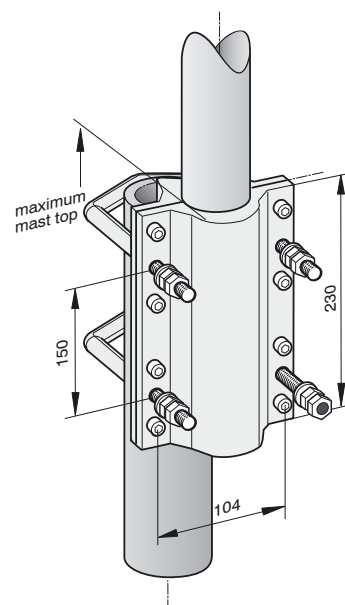
Material: **Radiator:** Copper and brass. **Radome:** Fiberglass, colour: Grey.
Base: Weather-proof aluminum.
Mounting kit, screws and nuts: Stainless steel.

Solid, reliable construction: Omnidirectional antennas are often installed at exposed sites on the top of masts, so special attention has been paid to their mechanical construction.
The exceptionally stiff fiberglass tube with low tip deflection will withstand wind velocities of up to 200 km/h.

Excellent grounding: From the solid metal tip right down to the base of the high gain antennas the grounding cross-section is 22 mm² copper or more, exceeding EN 50083-1. The inner conductor is coupled capacitively.

Environmental conditions: Kathrein cellular antennas are designed to operate under the environmental conditions as described in ETS 300 019-1-4 class 4.1 E.
The antennas exceed this standard with regard to the following items:
– Low temperature: –55 °C
– High temperature (dry): +60 °C

Environmental tests: Kathrein antennas have passed environmental tests as recommended in ETS 300 019-2-4. The homogenous design of Kathrein's antenna families use identical modules and materials. Extensive tests have been performed on typical samples and modules.



Please note: As a result of more stringent legal regulations and judgements regarding product liability, we are obliged to point out certain risks that may arise when products are used under extraordinary operating conditions.

The mechanical design is based on the environmental conditions as stipulated in ETS 300 019-1-4, which includes the static mechanical load imposed on an antenna by wind at maximum velocity.
Extraordinary operating conditions, such as heavy icing or exceptional dynamic stress (e.g. strain caused by oscillating support structures), may result in the breakage of an antenna or even cause it to fall to the ground. These facts must be considered during the site planning process.

The installation team must be properly qualified and also be familiar with the relevant national safety regulations.

The details given in our data sheets have to be followed carefully when installing the antennas and accessories.

The limits for the coupling torque of RF-connectors, recommended by the connector manufacturers must be obeyed.

Any previous datasheet issues have now become invalid.

