Omnidirectional Antenna Vertical Polarization Fixed Electrical Downtilt

1670–1675	
V	1
1.5°	1

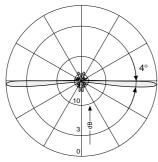
KATHREIN
Antennen · Electronic

Preliminary Issue

VPol Omni 1670-1675 360° 13dBi 1.5°T

Type No.	750 10074	
Frequency range	1670 – 1675 MHz	
Polarization	Vertical	
Gain	13 dBi	
Electrical tilt	1.5°, fixed	
Impedance	50 Ω	
VSWR	< 1.2	
Max. power	200 W (at 50 °C ambient temperature)	





	Vertical Pattern
1	5° electrical downtilt

Mechanical specifications					
Input	7-16 female				
Connector position	Bottom				
Weight	8 kg				
Radome diameter	51 mm				
Wind load	190 N (at 150 km/h)				
Max. wind velocity	200 km/h				
Packing size	2900 x 148 x 112 mm				
Height	2650 mm				

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Omnidirectional Antennas Solid, reliable construction



Preliminary Issue

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 mechnical

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.

Environmental conditions: Kathrein cellular antennas are designed to operate under the environ-

mental conditions as described in ETS 300 019-1-4 class 4.1 E. The antennas exceed this standard with regard to the following items:

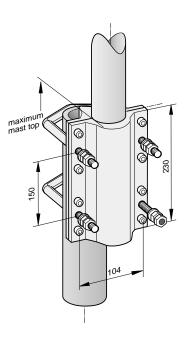
- Low temperature: -55 °C

- 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.

