

Panel Dual Polarization Half-power Beam Width

380–500

X

65°

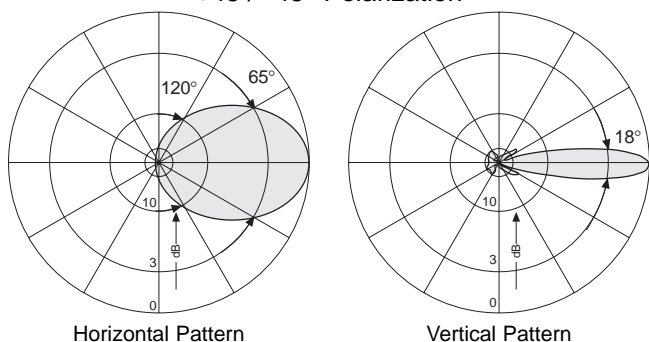
KATHREIN
Antennen · Electronic

XPoI Panel 380–500 65° 15dBi

Type No.	741 516	
Frequency range	380–500 380 – 430 MHz 430 – 500 MHz	
Polarization	+45°, –45° +45°, –45°	
Gain	14.5 dBi	15 dBi
Half-power beam width Copolar +45°/–45°	Horizontal: 65° Vertical: 18°	
Front-to-back ratio, copolar	> 25 dB	
Isolation	> 30 dB	
Impedance	50 Ω	
VSWR	< 1.5	
Intermodulation IM3 (2 x 43 dBm carrier)	< –150 dBc	
Max. power per input	500 W (at 50 °C ambient temperature)	

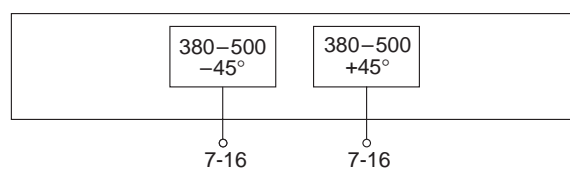


+45°/–45° Polarization



Horizontal Pattern

Vertical Pattern



Mechanical specifications

Input	2 x 7-16 female
Connector position	Rearside
Weight	19 kg
Wind load	Frontal: 1100 N (at 150 km/h) Lateral: 440 N (at 150 km/h) Rearside: 1540 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	2060 x 562 x 274 mm
Height/width/depth	2000 / 492 / 190 mm

936.1824/d Subject to alteration.

Accessories (order separately)

Type No.	Description	Remarks	Weight approx.	Units per antenna
733 736	2 clamps	Mast: 50 – 125 mm diameter	6.2 kg	1
K 61 14 03	2 clamps	Mast: 116 – 210 mm diameter	4.6 kg	1
K 61 14 04	2 clamps	Mast: 210 – 380 mm diameter	6.5 kg	1
K 61 14 05	2 clamps	Mast: 380 – 521 mm diameter	9.4 kg	1
733 695	1 downtilt kit	Downtilt angle: 0° – 12°	3.4 kg	1

For downtilt mounting use the clamps for an appropriate mast diameter together with the downtilt kit.

Material:

Radiator: Tin-plated copper.

Reflector screen: Weather-proof aluminum.

Fiberglass radome: The grey fiberglass radomes of these antennas are very stable and extraordinarily stiff. They are resistant to ultraviolet radiation and can also be painted to match their surroundings.

All screws and nuts: Stainless steel.

Grounding:

The metal parts of the antenna including the mounting kit and the inner conductors are DC grounded.

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.

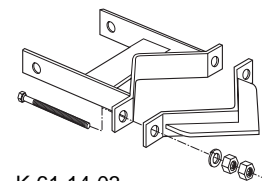
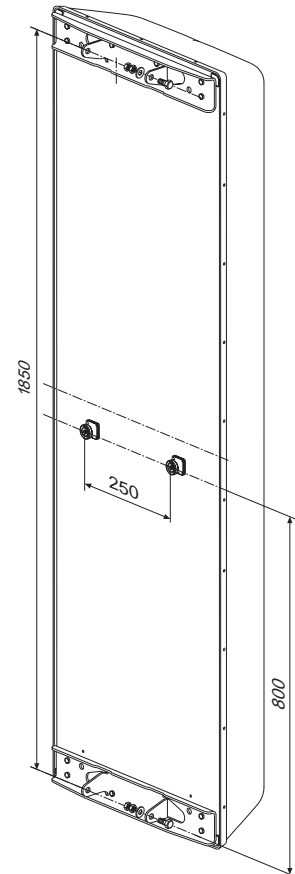
The antennas exceed this standard with regard to the following items:

- Low temperature: –55 °C
- High temperature (dry): +60 °C

Ice protection: Due to the very sturdy antenna construction and the protection of the radiating system by the radome, the antenna remains operational even under icy conditions.

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.



K 61 14 03

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.

