A-Panel
Dual Polarization
Half-power Beam Width

806 – 960

X

65°

KATHREIN
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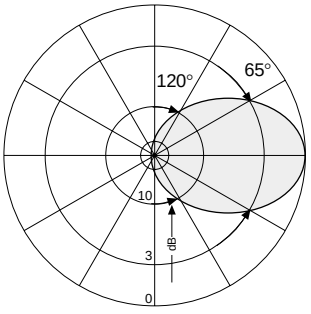
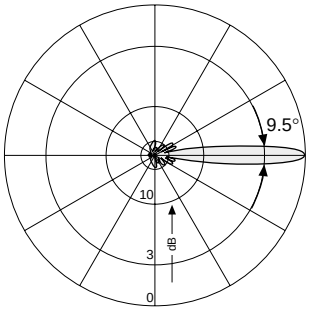
XPol A-Panel 806–960 65° 17dBi

Type No.	739 623	
Frequency range	806 – 960 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°
Gain	2 x 16.5 dBi	2 x 17 dBi
Half-power beam width Copolar +45°/–45°	Horizontal: 68° Vertical: 10°	Horizontal: 65° Vertical: 9.5°
Sidelobe suppression for first sidelobe above horizon	≥ 15 dB	
Front-to-back ratio, copolar	> 30 dB	
Isolation	> 30 dB	
Impedance	50 Ω	
VSWR	< 1.5	
Intermodulation IM3 (2 x 43 dBm carrier)	< –150 dBc	
Max. power per input	600 W (at 50 °C ambient temperature)	

880 – 960 MHz: +45°/–45° Polarization



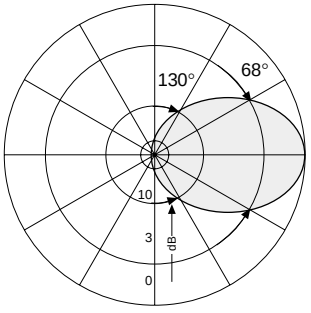
Horizontal Pattern



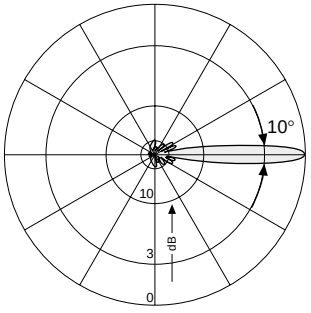
Vertical Pattern

first null-fill below horizon
better or equal –25 dB below
maximum gain

806 – 894 MHz: +45°/–45° Polarization

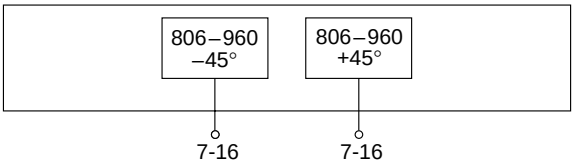


Horizontal Pattern



Vertical Pattern

first null-fill below horizon
better or equal –25 dB below
maximum gain



Mechanical specifications		
Input	2 x 7-16 female	
Connector position*	Bottom or top	
Weight	12 kg	
Wind load	Frontal: Lateral: Rearside:	330 N (at 150 km/h) 200 N (at 150 km/h) 770 N (at 150 km/h)
Max. wind velocity	200 km/h	
Packing size	2057 x 287 x 165 mm	
Height/width/depth	1936 / 262 / 116 mm	

*Inverted mounting:
Connector position top: Change drain hole screw.

Internet: http://www.kathrein.de

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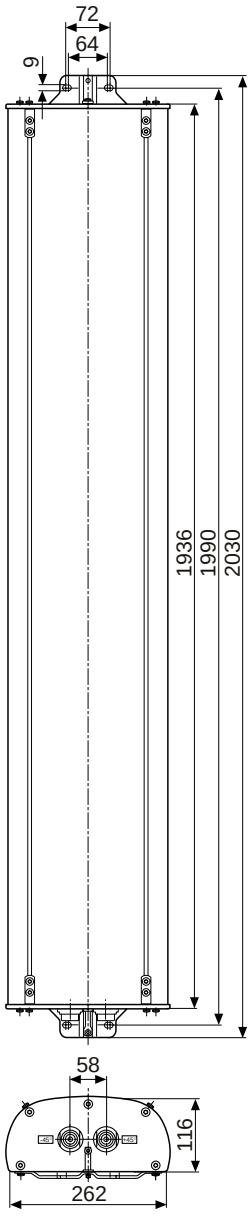
A-Panels
The Advanced Antenna Technology
For Cross Polarization

KATHREIN
Antennen · Electronic

Accessories (order separately)

Type No.	Description	Remarks	Weight approx.	Units per antenna
731 651	1 clamp	Mast: 28 – 64 mm diameter	330 g	2
738 546	1 clamp	Mast: 50 – 115 mm diameter	1.0 kg	2
733 677	1 clamp	Mast: 60 – 115 mm diameter	2.0 kg	2
733 678	1 clamp	Mast: 115 – 210 mm diameter	2.6 kg	2
733 679	1 clamp	Mast: 210 – 380 mm diameter	4.0 kg	2
733 680	1 clamp	Mast: 380 – 521 mm diameter	5.3 kg	2
737 975	1 downtilt kit	Downtilt angle: 0° – 11°	2.8 kg	1

For downtilt mounting use the clamps for an appropriate mast diameter together with the downtilt kit.
Wall mounting: No additional mounting kit needed.



Bottom view

Material:
Reflector screen: Weather-proof aluminum.
Fiberglass housing: It covers totally the internal antenna components. The special design reduces the sealing areas to a minimum and guarantees the best weather protection. Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The colour of the radome is light grey.
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.

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.

936.1523/f Subject to alteration.

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