

Panel Dual Polarization Half-power Beam Width

806–960

X

65°

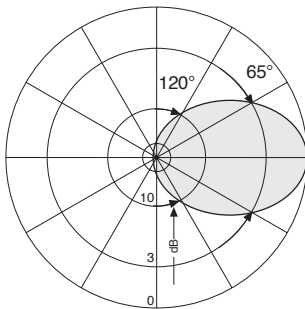
KATHREIN
Antennen · Electronic

XPol Panel 806–960 65° 12.5dBi

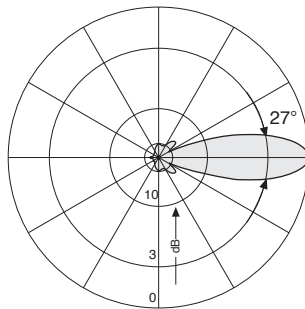
| | | |
|--|--------------------------------------|----------------------------------|
| Type No. | 739 620 | |
| Frequency range | 806–960 | |
| | 806 – 880 MHz | 880 – 960 MHz |
| Polarization | +45°, –45° | +45°, –45° |
| Gain | 2 x 12 dBi | 2 x 12.5 dBi |
| Half-power beam width Copolar +45°/–45° | Horizontal: 68° Vertical: 29° | Horizontal: 65° Vertical: 27° |
| Front-to-back ratio, copolar | > 30 dB | |
| Isolation | > 30 dB | |
| Impedance | 50 Ω | |
| VSWR | < 1.5 | |
| Intermodulation IM3 | < –150 dBc (2 x 43 dBm carrier) | |
| Max. power per input | 500 W (at 50 °C ambient temperature) | |



880 – 960 MHz: +45°/–45° Polarization

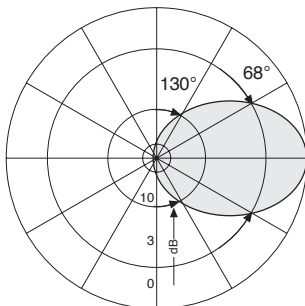


Horizontal Pattern

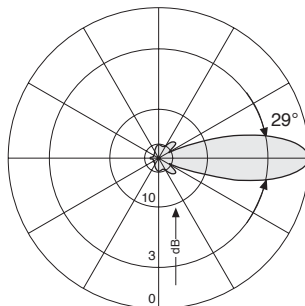


Vertical Pattern

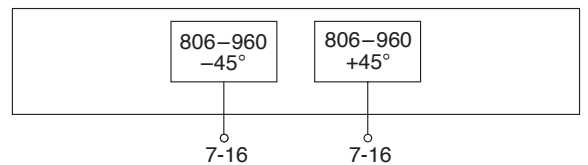
806 – 880 MHz: +45°/–45° Polarization



Horizontal Pattern



Vertical Pattern



Mechanical specifications

| | |
|---------------------|--|
| Input | 2 x 7-16 female |
| Connector position* | Bottom or top |
| Weight | 6 kg |
| Wind load | Frontal: 110 N (at 150 km/h) Lateral: 60 N (at 150 km/h) Rearside: 240 N (at 150 km/h) |
| Max. wind velocity | 200 km/h |
| Packing size | 782 x 287 x 165 mm |
| Height/width/depth | 656 / 262 / 116 mm |

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

936.1557/d Subject to alteration.

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 |
| 850 10002 | 1 clamp | Mast: 110 – 220 mm diameter | 2.7 kg | 2 |
| 850 10003 | 1 clamp | Mast: 210 – 380 mm diameter | 4.8 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 |
| 737 972 | 1 downtilt kit | Downtilt angle: 0° – 30° | 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.

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.

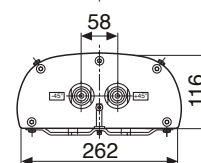
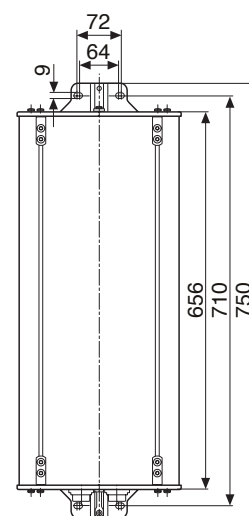
The mechanical design is based on the environmental conditions as stipulated in ETS 300 019-1-4, which includes the static mechanical load imposed on an antenna by wind at maximum velocity. Extraordinary operating conditions, such as heavy icing or exceptional dynamic stress (e.g. strain caused by oscillating 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.



Bottom view

