Dual-band Panel
Dual Polarization
Half-power Beam Width
Adjust. Electr. Downtilt

	790–862	880–960
Dual Polarization	X	X
Half-power Beam Width	65°	65°
Adjust. Electr. Downtilt	0°–12°	0°–12°

set by hand or by optional RCU (Remote Control Unit)

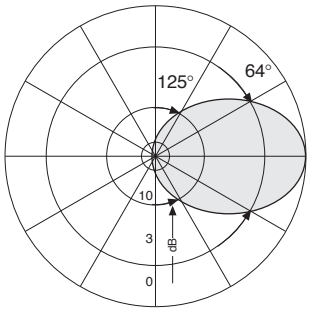
KATHREIN
Antennen · Electronic

XXPol Panel 790–862/880–960 65°/65° 14.5/15dBi 0°–12°/0°–12°T

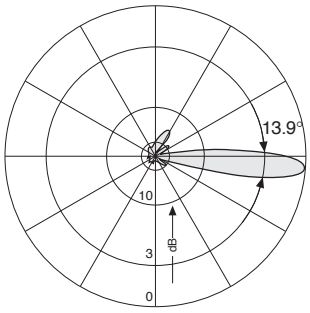
Type No.	80010667	
Frequency range	**790–862** 790 – 862 MHz	**880–960** 880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°
Average gain (dBi) Tilt	14.3 ... 14.4 ... 14.1 0° ... 6° ... 12°	14.8 ... 15.0 ... 14.6 0° ... 6° ... 12°
Horizontal Pattern:		
Half-power beam width	68°	64°
Front-to-back ratio, copolar (180°±30°)	> 25 dB	> 25 dB
Cross polar ratio Maindirection 0° Sector ±60°	 20 dB > 10 dB	 20 dB > 10 dB
Vertical Pattern:		
Half-power beam width	15.2°	13.9°
Electrical tilt, continuously adjustable	0°–12°	0°–12°
Min. sidelobe suppression for first sidelobe above main beam	0° ... 6° ... 12° T ≥ 17 ... 16 ... 15 dB	0° ... 6° ... 12° T ≥ 17 ... 15 ... 15 dB

Impedance	50 Ω
VSWR	< 1.5
Isolation: Intrasystem	> 28 dB, Typ. > 30 dB
Isolation: Intersystem	> 28 dB, Typ. > 30 dB (790–862 // 880–960 MHz)
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)
Max. power per input	350 W (at 50 °C ambient temperature)

880 – 960 MHz: +45°/–45° Polarization

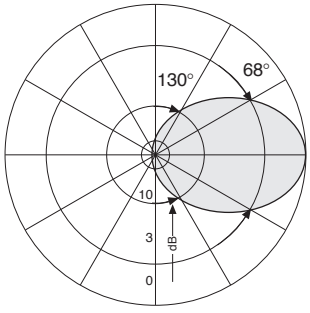


Horizontal Pattern

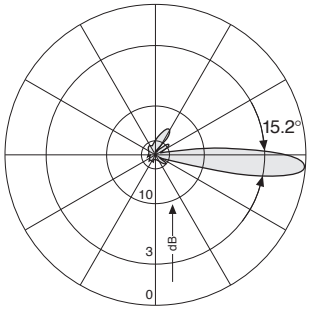


Vertical Pattern
0°–12° electrical downtilt

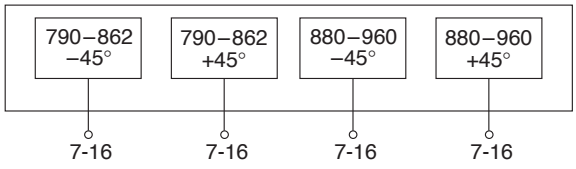
790 – 862 MHz: +45°/–45° Polarization



Horizontal Pattern



Vertical Pattern
0°–12° electrical downtilt



Mechanical specifications	
Input	4 x 7-16 female
Connector position	Bottom
Adjustment mechanism	2x, Position bottom continuously adjustable
Wind load	Frontal: 630 N (at 150 km/h) Lateral: 220 N (at 150 km/h) Rearside: 730 N (at 150 km/h)
Max. wind velocity	200 km/h
Height/width/depth	1355 / 303 / 99 mm
Category of mounting hardware	M (Medium)
Weight	14 kg / 16 kg (clamps incl.)
Packing size	1681 x 317 x 127 mm
Scope of supply	Panel and 2 units of clamps for 50 – 115 mm diameter

936.4041/b Subject to alteration.

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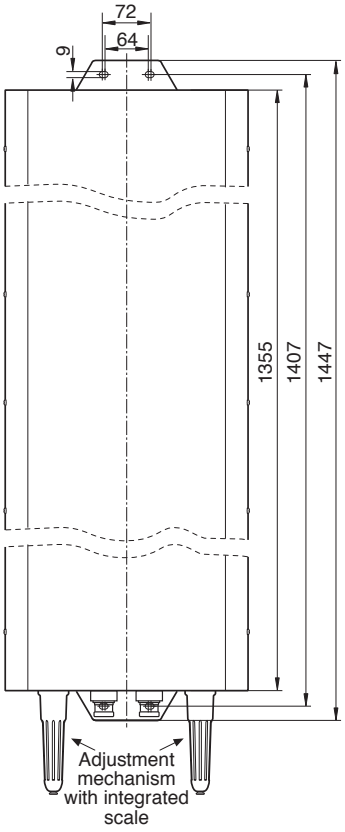
Accessories

Type No.	Description	Remarks	Weight approx.	Units per antenna
738546	**1 clamp**	**Mast: 50 – 115 mm diameter**	**1.0 kg**	**2 (included in the scope of supply)**
731651	1 clamp	Mast: 28 – 60 mm diameter	0.8 kg	2 (order separately if required)
85010002	1 clamp	Mast: 110 – 220 mm diameter	2.7 kg	2 (order separately if required)
85010003	1 clamp	Mast: 210 – 380 mm diameter	4.8 kg	2 (order separately if required)
737978	1 downtilt kit	Downtilt angle: 0° – 15°	2.8 kg	1 (order separately if required)

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: 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.

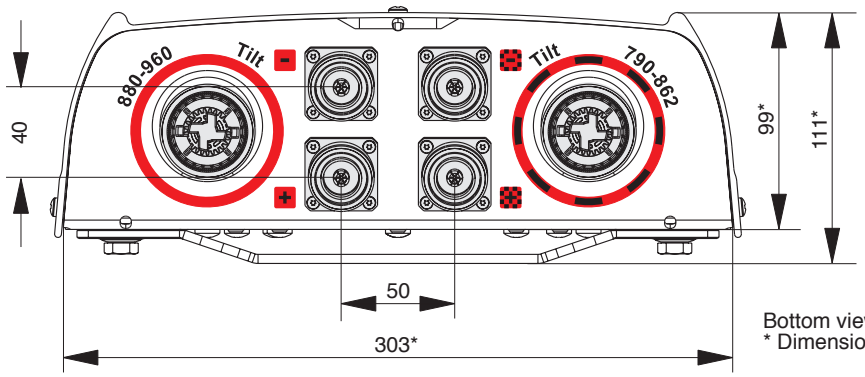
Grounding:
The metal parts of the antenna including the mounting kit and the inner conductors are DC grounded.

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.

Layout of interface:



Bottom view
* Dimensions refer to radome

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 and thereby respects the static mechanical load imposed on an antenna by wind at maximum velocity. Wind loads are calculated according to DIN 1055-4. 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.

936.4041/b Subject to alteration.