**Multi-band Panel**

**Dual Polarization**

**Half-power Beam Width**

**Fixed Electrical Downtilt**

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### XPol Panel 1710–2690 65° 12dBi 4° T

<table>
<thead>
<tr>
<th>Type No.</th>
<th>80010761</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency range</strong></td>
<td>1710 – 1990 MHz</td>
</tr>
<tr>
<td><strong>Polarization</strong></td>
<td>+45°, –45°</td>
</tr>
<tr>
<td><strong>Gain</strong></td>
<td>2 x 11 dBi</td>
</tr>
</tbody>
</table>

### Horizontal Pattern:

- **Half-power beam width**: 67°, 65°, 60°, 58°
- **Front-to-back ratio, copolar**: > 30 dB, > 28 dB, > 28 dB, > 27 dB
- **Cross polar ratio**
  - Main direction: 0°, typically: > 20 dB, > 28 dB, > 28 dB, > 27 dB
  - Sector: ±60°, typically: > 20 dB, > 28 dB, > 28 dB, > 27 dB

### Vertical Pattern:

- **Half-power beam width**: 36°, 31°, 25°, 25°
- **Electrical tilt**
  - Main direction: 3°, fixed, 4°, fixed
  - Sector: 3°, fixed, 4°, fixed

### Impedance

- 50 Ω

### VSWR

- < 1.5

### Isolation, between ports

- > 28 dB

### Intermodulation IM3

- < –150 dBc (2 x 43 dBm carrier)

### Max. power per input

- 150 W (at 50 °C ambient temperature)

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**Mechanical specifications**

<table>
<thead>
<tr>
<th>Input</th>
<th>2 x 7-16 female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector position</td>
<td>Bottom</td>
</tr>
</tbody>
</table>

- **Wind load**
  - Frontal: 75 N (at 150 km/h)
  - Lateral: 17 N (at 150 km/h)
  - Rearside: 75 N (at 150 km/h)

- **Max. wind velocity**: 200 km/h

- **Height/width/depth**: 278 / 154 / 69 mm

- **Category of mounting hardware**: L (Light)

- **Weight**: 1.8 kg (tension bands incl.)

- **Packing size**: 375 x 172 x 92 mm

- **Scope of supply**: Panel and 1 unit of tension bands for 45 – 125 mm diameter
## Accessories

### General Information

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Description</th>
<th>Remarks</th>
<th>Weight approx.</th>
<th>Units per antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>734365</td>
<td>2 tension bands Mast: 45 – 125 mm diameter</td>
<td>0.08 kg</td>
<td>1 (included in the scope of supply)</td>
<td></td>
</tr>
<tr>
<td>734360</td>
<td>2 tension bands Mast: 34 – 60 mm diameter</td>
<td>0.06 kg</td>
<td>1 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>734361</td>
<td>2 tension bands Mast: 60 – 80 mm diameter</td>
<td>0.07 kg</td>
<td>1 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>734362</td>
<td>2 tension bands Mast: 80 – 100 mm diameter</td>
<td>0.08 kg</td>
<td>1 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>734363</td>
<td>2 tension bands Mast: 100 – 120 mm diameter</td>
<td>0.09 kg</td>
<td>1 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>734364</td>
<td>2 tension bands Mast: 120 – 140 mm diameter</td>
<td>0.11 kg</td>
<td>1 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>731651</td>
<td>1 clamp Mast: 28 – 60 mm diameter</td>
<td>0.8 kg</td>
<td>2 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>738546</td>
<td>1 clamp Mast: 42 – 115 mm diameter</td>
<td>1.1 kg</td>
<td>2 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>85010002</td>
<td>1 clamp Mast: 110 – 220 mm diameter</td>
<td>2.7 kg</td>
<td>2 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>85010003</td>
<td>1 clamp Mast: 210 – 380 mm diameter</td>
<td>4.8 kg</td>
<td>2 (order separately if required)</td>
<td></td>
</tr>
<tr>
<td>732327</td>
<td>1 downtilt kit Downtilt angle: 0° – 36°</td>
<td>1.0 kg</td>
<td>1 (order separately if required)</td>
<td></td>
</tr>
</tbody>
</table>

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

**Please note:**

- **Material:**
  - **Reflector screen:** Aluminum.
  - **Radiator:** Tin-plated zinc.
  - **Flat fiberglass radome:** The max. radome depth is only 69 mm. fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The color of the radome is grey.
  - **All nuts and bolts:** 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 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.