4-Port Dual-Beam Antenna

Frequency Range
- **B1**: 1710–2200 MHz
- **B2**: 1710–2200 MHz

Dual Polarization
- X
- X

HPBW
- **B1**: 40°
- **B2**: 40°

Adjust. Electr. DT
- 2°–14°
- (-30°)

Azimuth Beam Direction
- 2°–14°/+30°
- (-30°) (+30°)

Optimized Horizontal Sidelobes
- 18dB
- 18dB

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

### Mechanical specifications

<table>
<thead>
<tr>
<th>Input</th>
<th>4 x 7-16 female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector Position</td>
<td>bottom</td>
</tr>
<tr>
<td>Adjustment Mechanism</td>
<td>2x, Position bottom continuously adjustable</td>
</tr>
<tr>
<td>Wind load (at Rated Wind Speed: 150 km/h)</td>
<td>N</td>
</tr>
<tr>
<td>Max. Wind Velocity</td>
<td>km/h</td>
</tr>
<tr>
<td>Height / Width / Depth</td>
<td>mm</td>
</tr>
<tr>
<td>Category of Mounting Hardware</td>
<td>M (Medium)</td>
</tr>
<tr>
<td>Weight</td>
<td>kg</td>
</tr>
<tr>
<td>Packing Size</td>
<td>mm</td>
</tr>
</tbody>
</table>

**Scope of Supply**
- Panel and 2 units of clamps for 42–115 mm | 1.7–4.5 inches diameter

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All specifications are subject to change without notice.
The latest specifications are available at www.kathreinusa.com

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Phone: 214.238.8800    Fax: 214.238.8801    Email: info@kathrein.com

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936.4899-3 Subject to alteration.
Accessories

General Information

Accessories (order separately if required)

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Description</th>
<th>Remarks mm</th>
<th>inches</th>
<th>Weight approx. kg</th>
<th>lb</th>
<th>Units per antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>731651</td>
<td>1 clamp</td>
<td>Mast diameter: 28 – 60</td>
<td>1.1 – 2.4</td>
<td>0.8</td>
<td>1.8</td>
<td>2</td>
</tr>
<tr>
<td>85010002</td>
<td>1 clamp</td>
<td>Mast diameter: 110 – 220</td>
<td>4.3 – 8.7</td>
<td>2.7</td>
<td>6.0</td>
<td>2</td>
</tr>
<tr>
<td>85010003</td>
<td>1 clamp</td>
<td>Mast diameter: 210 – 380</td>
<td>8.3 – 15.0</td>
<td>4.8</td>
<td>10.6</td>
<td>2</td>
</tr>
</tbody>
</table>

Accessories (included in the scope of supply)

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Description</th>
<th>Remarks mm</th>
<th>inches</th>
<th>Weight approx. kg</th>
<th>lb</th>
<th>Units per antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>738546</td>
<td>1 clamp</td>
<td>Mast diameter: 42 – 115</td>
<td>1.7 – 4.5</td>
<td>1.1</td>
<td>2.4</td>
<td>2</td>
</tr>
</tbody>
</table>

For wall mounting: Azimuth Adjustment Kit 85010016.
For 3 Panel Arrangement: 3 Sector Clamp Kit 742034.

Please note: The dual-beam antenna must not be used in combination with any downtilt kit.

Material:
- Reflectors: Aluminum
- Radiators: Tin-plated zinc
- 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.

Correlation Table

<table>
<thead>
<tr>
<th>Frequency range</th>
<th>Array</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1710–2200 MHz</td>
<td>B1</td>
<td>Beam B</td>
</tr>
<tr>
<td>1710–2200 MHz</td>
<td>B2</td>
<td>Beam A</td>
</tr>
</tbody>
</table>

Layout of interface:

All dimensions in mm | inches
Proposal for 6 Sector Deployment

Example of 6 Sectors by using 3x 80010656 and 3 Sector Clamp Kit 742034

Horizontal Patterns (top view)

Bottom view

For the above 3 Panel Arrangement please use the 3 Sector Clamp Kit 742034 (order separately).

3 Panel Arrangement

<table>
<thead>
<tr>
<th>Mechanical specifications</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Wind load (at Rated Wind Speed: 150 km/h)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frontal</td>
<td>560</td>
<td>126</td>
</tr>
<tr>
<td>Lateral</td>
<td>560</td>
<td>126</td>
</tr>
<tr>
<td>Rearside</td>
<td>560</td>
<td>126</td>
</tr>
<tr>
<td>Max. Wind Velocity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>km/h</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>mph</td>
<td>124</td>
<td></td>
</tr>
</tbody>
</table>

Any previous data sheet issues have now become invalid.
**Mounting Hardware**

**Clamp Included in the Scope of Supply**

<table>
<thead>
<tr>
<th>Suitable for mast diameter (mm)</th>
<th>42 – 115 [1.65 – 4.53]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna – mast distance (mm)</td>
<td>20 – 25 [0.79 – 0.98]</td>
</tr>
<tr>
<td>Material of clamp and screws</td>
<td>Hot-dip galvanized steel / stainless steel</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>1.1 [2.43]</td>
</tr>
</tbody>
</table>

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Please note: Kathrein does not recommend to use counter nuts. The additional nuts supplied are only meant as spares.

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All dimensions in mm and [inches]
General Instructions for Adjustment Mechanism

Description of the adjustment mechanism (protective cap removed):

1. Twist protection.
2. Downtilt spindle with integrated scale.

Optional: RCU (Remote Control Unit) for remote-controlled downtilt adjustment:

To set the downtilt angle exactly, you must look horizontally at the scale. The lower edge of the gearwheel must be used for alignment.

Manual adjustment procedure:

1. Thread for fixing the protective cap or the RCU (Remote Control Unit).
2. Gearwheel for RCU power drive.

Remove the protective cap and the twist protection completely.

Set downtilt angle by rotating the gearwheel.

Screw on the twist protection and the protective cap again.

Optional: RCU (Remote Control Unit) for remote-controlled downtilt adjustment:

For a description of RCU installation please refer to the respective data sheet.
General Instructions
for Feederline and RCU Installation
for Antennas

Please note: In order not to damage the interfaces, please make sure that only the right tools are used. Tighten the feederline connector interfaces solely by using a common torque-wrench with a suitable wrench width.

Description of bottom end cap (exemplary picture):

Installation of the feederline connector and RCU (optional):
In order to protect the adjustment mechanism, the protective caps have to be attached during feederline installation!

Carefully place the connector and fix the nut using a torque-wrench (according to the manufacturers guidelines).

After feederline installation, the optional remote control units (RCUs) can be mounted.

Kathrein installation set: Type No. 85010077
Set has to be ordered separately!
Set consists of three spanners of divers width 27, 32 and 41 mm | 1.1, 1.3 and 1.6 inches

1/2” square actuation according to DIN 3120 Form C

All dimensions in mm | inches

These tools are suitable for 7-16 connectors with a wrench size of 27 or 32 mm | 1.1 or 1.3 inches, and the RCU attachment nut with a wrench size of 41 mm | 1.6 inches.

Tighten nuts within a torque range of 25 – 33 Nm depending on connector manufacturers’ specifications, respectively the RCU nut with a torque range of 15 – 18 Nm.