4-Port Antenna 790–960/1710–2170 65°/60° 12/14dBi 0°/0°

<table>
<thead>
<tr>
<th>Type No.</th>
<th>742226v01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowband</td>
<td>R1</td>
</tr>
</tbody>
</table>

### Frequency Range

<table>
<thead>
<tr>
<th>MHz</th>
<th>790 – 862</th>
<th>824 – 894</th>
<th>880 – 960</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polarization</td>
<td>+45, –45</td>
<td>+45, –45</td>
<td>+45, –45</td>
</tr>
<tr>
<td>Gain</td>
<td>2 x 11.1</td>
<td>2 x 11.4</td>
<td>2 x 11.8</td>
</tr>
</tbody>
</table>

### Horizontal Pattern:

<table>
<thead>
<tr>
<th>Half-power beam width</th>
<th>68</th>
<th>67</th>
<th>65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front-to-back ratio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(180°±30°) dB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copolar</td>
<td>&gt; 23</td>
<td>&gt; 20</td>
<td>&gt; 23</td>
</tr>
<tr>
<td>Total power</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Cross polar ratio     |   |   |   |
| Main direction 0°     |   |   |   |
| Sector ±60° dB        |   |   |   |
| Typical: 25           | > 10 | > 10 | > 10 |
| Total power           |   |   |   |

| Tracking, Avg. dB     | 1.0 |
| Squint °              | ±3.0 |

### Vertical Pattern:

| Half-power beam width | 34 | 33 | 30 |
| Electrical tilt °     |   |   |   |

| Impedance Ω           | 50 |
| VSWR °                | < 1.5 |
| Isolation: Intrasyncm dB | > 30 |
| Isolation: Intersysmc dB | > 42 (790–960 // 1710–2170 MHz) |
| Intermodulation IM3 dBc | < –150 (2 x 43 dBm carrier) |
| Max. power per input W | 250 (at 50 °C ambient temperature) |
4-Port Antenna

<table>
<thead>
<tr>
<th>Highband</th>
<th>B1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range MHz</td>
<td>1710 – 1880</td>
</tr>
<tr>
<td>Polarization °</td>
<td>+45, –45</td>
</tr>
<tr>
<td>Gain dBi</td>
<td>2 x 12.8</td>
</tr>
</tbody>
</table>

**Horizontal Pattern:**

<table>
<thead>
<tr>
<th>Half-power beam width °</th>
<th>66</th>
<th>60</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total power: &gt; 22</td>
<td>Total power: &gt; 22</td>
<td>Total power: &gt; 22</td>
</tr>
<tr>
<td>Cross polar ratio Main direction 0° dB</td>
<td>Typically: 16 &gt; 10</td>
<td>Typically: 18 &gt; 10</td>
<td>Typically: 20 &gt; 10</td>
</tr>
<tr>
<td>Sector ±60° dB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tracking, Avg. dBi</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squint °</td>
<td>±1.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vertical Pattern:**

<table>
<thead>
<tr>
<th>Half-power beam width °</th>
<th>20</th>
<th>18</th>
<th>17.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical tilt °</td>
<td>0, fixed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impedance Ω</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VSWR</td>
<td>&lt; 1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolation: Intrasystem dB</td>
<td>&gt; 42 (790–960 MHz // 1710–2170 MHz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolation: Intersystem dB</td>
<td>&gt; 30 (2 x 43 dBm carrier)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermodulation IM3 dBC</td>
<td>&lt; –150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. power per input W</td>
<td>200 (at 50 °C ambient temperature)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 or top</td>
</tr>
<tr>
<td>Wind load (at Rated Wind Speed: 150 km/h) N</td>
<td>125</td>
</tr>
<tr>
<td>Max. wind velocity km/h mph</td>
<td>200</td>
</tr>
<tr>
<td>Height/width/depth mm inches</td>
<td>579 / 262 / 139</td>
</tr>
<tr>
<td>Category of mounting hardware</td>
<td>M (Medium)</td>
</tr>
<tr>
<td>Weight kg lb</td>
<td>7.5 / 9.5 (clamps incl.)</td>
</tr>
<tr>
<td>Packing size mm inches</td>
<td>756 x 282 x 172</td>
</tr>
<tr>
<td>Scope of supply</td>
<td>Panel and 2 units of clamps for 42–115 mm</td>
</tr>
</tbody>
</table>

* Inverted mounting:
  Connector position top: Change drain hole screw.
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. Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The color 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.

### Accessories (order separately if required)

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Description</th>
<th>Remarks mm / inches</th>
<th>Weight approx. kg</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>
</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>
</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>
</tr>
<tr>
<td>737978</td>
<td>1 downtilt kit</td>
<td>Downtilt angle: 0° – 20°</td>
<td></td>
<td>2.3</td>
</tr>
</tbody>
</table>

### Accessories (included in the scope of supply)

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Description</th>
<th>Remarks mm / inches</th>
<th>Weight approx. kg</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>
</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.

Correlation Table

<table>
<thead>
<tr>
<th>Frequency range</th>
<th>Array</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>790 – 960 MHz</td>
<td>R1</td>
<td>1–2</td>
</tr>
<tr>
<td>1710–2170 MHz</td>
<td>B1</td>
<td>3–4</td>
</tr>
</tbody>
</table>

### Layout of interface:

Bottom view
All dimensions in mm | inches

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

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
<th>72 [2.83]</th>
<th>20–25 [0.79–0.98]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (in)</td>
<td>4.8</td>
<td>0.79–0.98</td>
</tr>
</tbody>
</table>

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

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938.3200c - Subject to alteration.

All dimensions in mm and [inches]