Bridgepoynt is a broadband, flat panel wireless LAN antenna (5-6 GHz) with an empty housing. This box is ideally suited for integration of an accesspoint or WiFi router. Due to the short cable length to the antenna the attenuation is minimal. The external connection is done with an RJ45 ethernet cable, the feed through is protected against water (IP65), as well as the box itself of course. So the electronics are always perfectly protected. Bridgepoynt is an ideal solution for the setup of WiFi hotspots or point-to-point links, where the required cable length to an external antenna is too long. The inner size of the box is sufficient to install mostly any AP or router. The power supply is done with power-over-ethernet (POE, adaptor not included). Just fit in your 5GHz wireless electronics, power up and go. Stainless mounting hardware is included for mast or wall mounting, allowing pan and tilt. Each Bridgepoynt includes an enclosure with integrated antenna and 6 movable posts with self tapping screws and double-sided tape to mount your electronics.

Features:
- Weatherproof box for outdoor use.
- Integrated 20 dBi antenna
- Insignificant RF cable losses
- Aesthetically pleasing
**Bridgepoynt 5 GHz**

20 dBi-Flachantenne mit Routerleergehäuse - Best.Nr. 18790.5
Outdoor housing for AP with 20 dBi 5GHz antenna

### Specifications

**Electrical:**
- **Gain (max)**: 21 dBi (+0.5 dB)
- **Gain (min over the band)**: 18 dBi (+0.5 dB)
- **Frequency**: 5000–6000 MHz
- **VSWR**: < 2.0:1
- **Feed power handling**: 10 W
- **E-plane 3 dB beamwidth**: 11° (± 5°)
- **H-plane 3 dB beamwidth**: 16° (± 5°)
- **Front to back (F/B ratio)**: 30 dBi (± 3 dB)
- **Nominal input impedance**: 50 Ohm
- **Polarisation**: Linear
- **DC Short**: Yes
- **Grounding**: Lug provided inside
- **Internal antenna connector**: SMA female

**Mechanical:**
- **Front to back (F/B ratio)**: 30 dB (± 3 dB)
- **Dimensions (l x w x d)**: 364 mm x 258 mm x 98 mm
- **Nominal input impedance**: 50 Ohm
- **Polarisation**: Linear
- **DC Short**: Yes
- **Grounding**: Lug provided inside
- **Internal antenna connector**: SMA female

**Environmental:**
- **Wind Loading**: 160 km/h
- **Temperature Range**: - 20° C to +70° C
- **Shock**: 40G at 10 msec
- **Thermal Shock**: - 20° C to +70° C : 10 cycles
- **Water Ingress Rating**: IP65 (NEMA 4X)

**Mechanical:**
- **Dimensions (l x w x d)**: 200 mm x 300 mm x 40 mm
- **Weight**: 2.35 kg
- **Clamp**: 40-50 mm pole
- **Mounting**: Stainless steel brackets for up to 50 mm poles
- **Material**: ABS injection moulded plastic

### Radiation Patterns

**E-Plane**

![Typical measured E-Plane Gain pattern](image)

**H-Plane**

![Typical measured H-Plane Gain pattern](image)
Bridgepoynt 5 GHz
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packliste / parts list

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bridgepoynt enclosure with integrated 20 dBi antenna</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Stand-off pillars (Inside enclosure)</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>M6 x 16mm Bolt – SS (Inside enclosure)</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>M6 external star washer – SS (Inside enclosure)</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>No.6 x 9.5mm - Self Tapping Screws – Galv. (Inside enclosure)</td>
<td>6</td>
</tr>
<tr>
<td>6.</td>
<td>M4 - Washers, Flat SS (Inside enclosure)</td>
<td>6</td>
</tr>
<tr>
<td>7.</td>
<td>M16 Gland with nut (attached to enclosure)</td>
<td>1</td>
</tr>
<tr>
<td>8.</td>
<td>Universal Bracket (Aluminium)</td>
<td>1</td>
</tr>
<tr>
<td>9.</td>
<td>M6 x 90mm U-Bolt SS</td>
<td>2</td>
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<tr>
<td>10.</td>
<td>Econo bracket</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>M6 Flat Washer SS</td>
<td>4</td>
</tr>
<tr>
<td>12.</td>
<td>M6 Nut SS</td>
<td>4</td>
</tr>
</tbody>
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Installation Instructions

Installing Electronics

- Unscrew the back of the enclosure and carefully lift off the lid containing the integrated antenna (refer to figure 1).
- Use the provided screws and washers (items 5 and 6) to secure the stand-off pillars to the electronics you wish to install. Be sure that the height of electronics and pillars does not exceed 40mm (refer to figure 2).
- Peel off the adhesive backing paper from the base of the pillars and secure the pillars to the back of the lid (refer to figure 3). Ensure that the electronics is located such that the antenna cable can be connected easily.
- Connect the antenna to the electronics either directly with the SMA(f) connector of by means of an adaptor cable (not provided) as necessary (refer to figure 4).

Figure 1. Unscrew enclosure
Figure 2. Secure the stand-off pillars
Figure 3. Attach electronics to back of lid and connect the antenna
Installing CAT-5 cable
- The enclosure is provided with a watertight gland that allows the installation of CAT-5 cable (not provided) as necessary.
- Insert one end of the desired length of CAT-5 cable through the gland and into the enclosure with the locking nut loosened.
- Ensure a sufficient length of cable is available in the enclosure to allow connection to the electronics as necessary before tightening the locking nut on the gland to secure and water seal the cable. (Hint: allow enough cable inside the enclosure to facilitate maintenance and replacement of electronics in future).
- Using a crimping tool, secure the appropriate connector to the CAT-5 cable inside the enclosure and connect to the electronics.
- Power over ethernet (POE) can be sent through the CAT-5 cable using the appropriate injector and DC supply (both not provided) for the chosen electronics.

Attaching to mast
- The enclosure can be mounted for either vertical or horizontal polarisation. Refer to polarisation sticker on the back of the enclosure.
- Attach the L bracket to the antenna by means of the four M6 x 16mm bolts provided. The figure 8 illustrates this for vertical polarisation.
- Attach the enclosure to a mast (diameter 40-50mm) using the Econo-bracket assembly as shown in figure 8.
- The Econo-bracket can be mounted through different holes to achieve the desired tilt angle of the antenna. (see figure 9).