The 'Classic' BiLog® Antenna

The CBL 6111D is a high performance ultra wideband BiLog® antenna for emission and immunity EMC testing. This is the original ‘classic’ BiLog® combining two antennas in one, making savings of at least 20 - 30% on test time and reducing measurement errors due to cable and connector wear.

Optimized for Emission Measurements

The CBL 6111D has been accepted worldwide for emission measurements. The CBL 6111D, although used primarily as an emission measuring antenna, can handle CW powers up to 300 watts, making it suitable for most immunity measurements requiring fields up to 10 V/m, or even greater. The CBL 6111D is linearly polarized and exhibits excellent balance (< 1 dB) and cross polarization performance (> 20 dB).

Technical specifications

- Frequency range: 30 MHz to 1 GHz
- Typical gain: 5 dB
- Impedance (nominal): 50 Ω
- Maximum continuous power: 300 W
- Connector: N type female
- VSWR: Average 2:1
- Size antenna (L x H x W in mm): approx. 1310 X 1390 X 630 (see drawing)
- Weight: approx. 3.5 kg
- Recommended tripod: BTP 6020A

Typical E field polar patterns for 30, 300, 650 and 1000 MHz

![Typical E field polar patterns](image-url)
CBL 6111D
BILOG® ANTENNA 30 MHz to 1 GHz

Typical VSWR

Typical drive power for 10 V/m at 3 m, ••• CW power, — power with 80% modulation
Typical antenna factor

![Graph of typical antenna factor](image1)

Typical gain

![Graph of typical gain](image2)
CBL 6111D
BILOG® ANTENNA 30 MHz to 1 GHz

Typical gain ratio

![Gain Ratio Graph]

Typical cross polarisation

![Cross Polarisation Graph]
**CBL 6111D**

**BILOG® ANTENNA 30 MHz to 1 GHz**

**Delivery information**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>346-000</td>
<td>CBL 6111D</td>
</tr>
<tr>
<td></td>
<td>BiLog antenna 30 MHz to 1 GHz</td>
</tr>
<tr>
<td>97-244570</td>
<td>Ant Cert-TC</td>
</tr>
<tr>
<td></td>
<td>Traceable calibration (ISO17025), order only with the antenna, free space calibration (horizontal), other calibrations on request</td>
</tr>
<tr>
<td>248504</td>
<td>BTP 6020A-0880</td>
</tr>
<tr>
<td></td>
<td>EMC Tripod with tube 880 mm and mounting head for antennas with 22 mm tube</td>
</tr>
<tr>
<td>248505</td>
<td>BTP 6020A-0680</td>
</tr>
<tr>
<td></td>
<td>EMC Tripod with tube 680 mm and mounting head for antennas with 22 mm tube</td>
</tr>
<tr>
<td>248523</td>
<td>BTP 6020A-1370</td>
</tr>
<tr>
<td></td>
<td>EMC Tripod with tube 1370 mm and mounting head for antennas with 22 mm tube</td>
</tr>
<tr>
<td>346-199</td>
<td>MTC 9011</td>
</tr>
<tr>
<td></td>
<td>Metal transit case for CBL 6111, 6112, 6141 or 6143</td>
</tr>
</tbody>
</table>