



HLA 6121 60 cm LOOP ANTENNA 9 kHz TO 30 MHz



HLA 6121, mounted on tripod CTP 6099, X position

- Mounting head for X, Y and Z positioning
- Low flat antenna factor
- DC supply via RF cable with included power inserter and external power supply
- Overload warning LED

The active loop antenna HLA 6121 is designed for operation in the frequency range 9 kHz to 30 MHz. It is ideally suited for magnetic field measurements as required by several standards (e.g. CISPR 11, CISPR 16-1-4, CISPR 16-2-3, FCC 18 and others). The built-in preamplifier matches the extremely low impedance of the loop to the measuring receiver. The HLA 6121 has a constant factor over the whole of its frequency range, making it ideal for swept measurement systems.

The antenna is powered by an external DC supply like the EMI receiver's transducer supply, battery pack or with the included power supply unit PSU 6001. The delivery of the HLA 6121 includes an adapter which offers the DC supply of the HLA 6121 via the coaxial cable. It allows most flexible operation and the location of the power supply unit outside the chamber.

Technical specifications

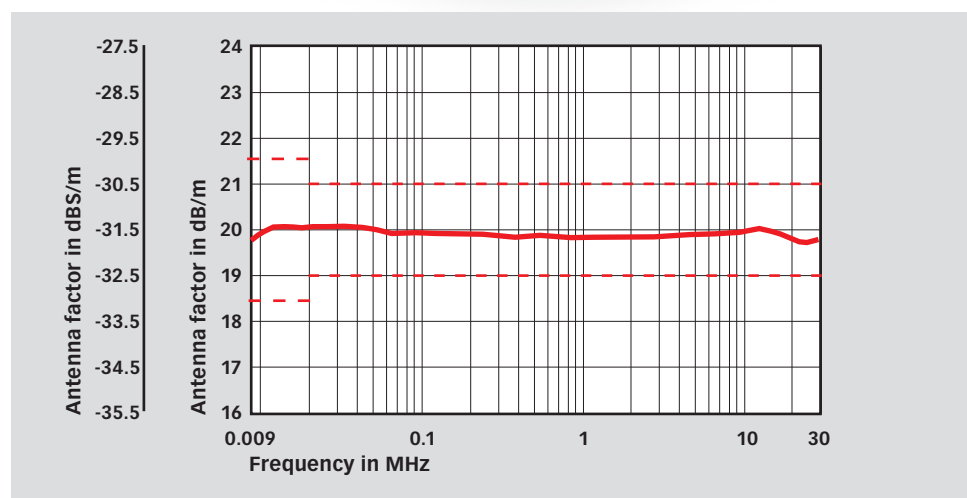
| | |
|---|---|
| Frequency range: | 9 kHz to 30 MHz |
| Antenna factor | |
| electric: | 20 dB/m |
| magnetic: | -31.5 dBs/m |
| Flatness: | ±1.5 dB, 9 kHz - 20 kHz ±1 dB, >20 kHz - 30 MHz |
| Maximum field | |
| electric: | 140 dB μ V/m |
| magnetic: | 88.5 dB μ A/m |
| Dynamic range: | 100 dB (200 Hz IF bandwidth) |
| Output impedance: | 50 Ω |
| Nominal maximum output into 50 Ω : | 120 dB μ V (2 V p-p) |
| Power supply requirements (at 12 V DC): | 60 mA quiescent current 80 mA at 2 V p-p output 100 mA at overload (warning LED on) |
| Voltage supply range: | 12 V to 15 V DC, regulated |
| Power supply input: | via the coaxial cable |
| Warning (LED): | signal overload |
| RF connector: | N |
| Operating temperature range: | 0 °C to 50 °C |
| Mounting thread: | 5/8"-11 UNC |
| Loop diameter: | 600 mm |
| Size L x W: | 620 mm (outer casing diameter) x 700 mm (including tiltable mounting facility at the base, otherwise 660 mm) |
| Weight: | approx. 2 kg |
| Recommended tripod: | CTP 6099 or BTP 6020A + BAA 6121 |

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Typical antenna factor



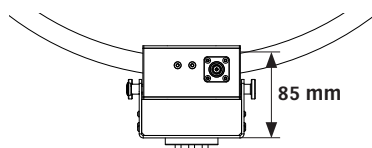
HLA 6121, mounted on tripod CTP 6099, Y position



Construction details



HLA 6121, mounted on tripod CTP 6099, Z position



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PI 6121, DC power inserter



PSU 6001 Power supply unit country version Euro, UK, US, JP, AUS



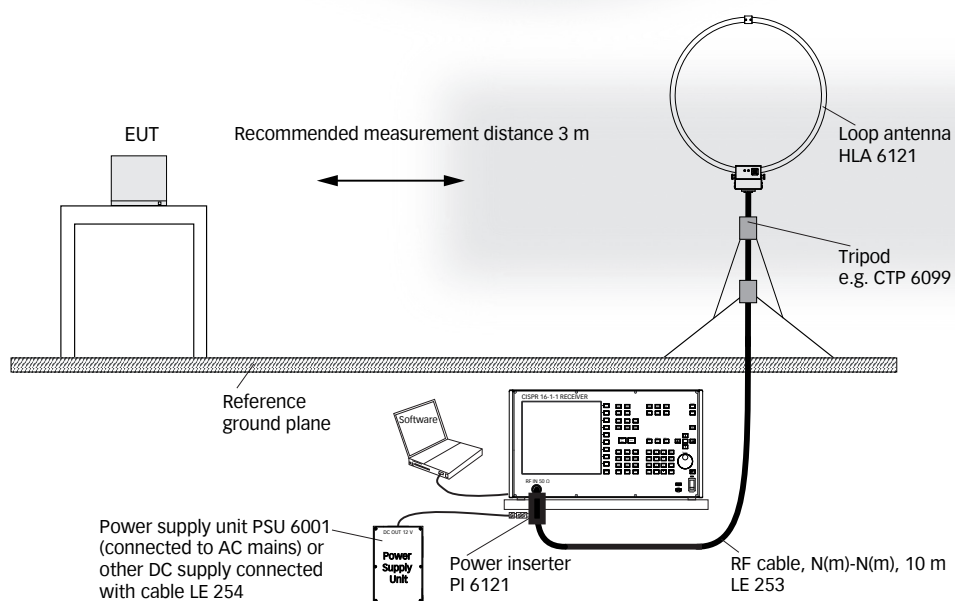
LE 254 Power cable ODU (2 pins) - Banana, 1.2 m

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Test setup



Model No. and options

| Part number | Description |
|-------------|---|
| 255900 | HLA 6121 60 cm loop antenna acc. CISPR 16-1-4, 9 kHz - 30 MHz, RF cable (LE 253) N(m)-N(m) 10 m RG223, DC power inserter (PI 6121), power supply unit (PSU 6001) country version Euro, UK, US, JP, AUS, cable LE 254, mounting head for X, Y and Z positioning |
| 97-255900 | HLA 61xx-TC Traceable calibration (ISO17025), order only with the device |
| 348-053 | CTP 6099 Tripod (special for outdoor applications), suitable for HLA 6121 and HLA 6121A (IPX4) |