

## 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:  Antenna factor electric:		
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       140 dBμV/m         electric:       140 dBμV/m         magnetic:       88.5 dBμA/m         Dynamic range:       100 dB (200 Hz IF bandwidth)         Output impedance:       50 Ω         Nominal maximum output into 50 Ω:       120 dBμV (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	Frequency range:	9 kHz to 30 MHz
magnetic: -31.5 dBs/m  Flatness: ±1.5 dB, 9 kHz - 20 kHz ±1 dB, >20 kHz - 30 MHz  Maximum field electric: 140 dBμV/m magnetic: 88.5 dBμA/m  Dynamic range: 100 dB (200 Hz IF bandwidth)  Output impedance: 50 Ω  Nominal maximum output into 50 Ω: 120 dBμV (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	Antenna factor	
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Recommended tripod: CTP 6099 or BTP 6020A + BAA 6121	Weight:	approx. 2 kg
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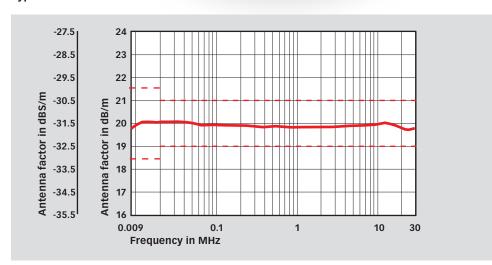


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### Typical antenna factor



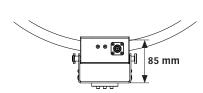
HLA 6121, mounted on tripod CTP 6099, Y position



#### **Construction details**



HLA 6121, mounted on tripod CTP 6099, Z position







## HLA 6121 60 cm LOOP ANTENNA 9 kHz TO 30 MHz



PI 6121, DC power inserter



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



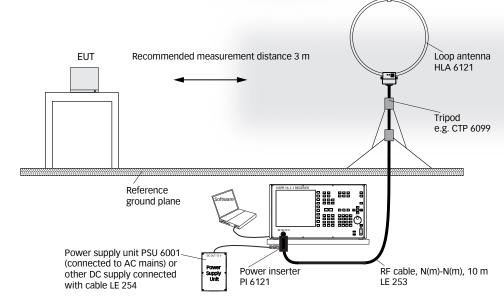
LE 254 Power cable ODU (2 pins) -Banana, 1.2 m

#### **AMETEK CTS Europe GmbH**

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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)

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