R&S®HM020E TRIPLE-LOOP ANTENNA

9 kHz to 30 MHz

Fully automatic measurement of magnetic field strength



The R&S[®]HM020E is a large loop antenna system (LLAS) as defined in CISPR 16-1-4. It allows fully automatic measurement as described in CISPR 16-2-3. The product standards CISPR 15 and CISPR 14-1 as well as others require these measurements.

The EUT is placed on a wooden pedestal in the center of the loops.

The loop construction using a cut coaxial line provides excellent screening against the electric components of the interfering signals so that unambiguous test results are obtained.

Individual calibration in line with CISPR standards available.

Key facts

- ► Fully automatic measurements of the magnetic field strength in the X, Y and Z planes of an EUT placed at the antenna center
- ► Remote control via a Rohde&Schwarz EMI receiver
- Loop system suitable for mobile use and foldable into one plane
- Wooden pedestal for 100 kg load available permitting the loops to be moved freely
- Measuring method in line with CISPR 15 (refers to CISPR 16-1-4) and CISPR 16-2-3





Specifications		
Frequency range		9 kHz to 30 MHz
Loop planes		switchable between X, Y and Z plane
Nominal impedance		50 Ω
RF connector		N female
Control connector		9-contact D-Sub female
MTBF		> 100 000 h
Operating temperature range		+5°C to +40°C
Dimensions (W \times L \times H)	loops set up	approx. 2.49 m × 2.07 m × 2.57 m (98 in × 82 in × 101 in)
	loops in transport crate	approx. 2.50 m × 0.43 m × 2.13 m (98 in × 17 in × 84 in)
	basic pedestal	approx. 0.9 m × 0.9 m × 1.0 m (35 in × 35 in × 39 in)
	adapter pedestal	approx. 0.9 m \times 0.9 m \times 0.5 m (max.) (35 in \times 35 in \times 20 in (max.))
Load capacity of pedestal		100 kg (221 lb)
Weight	loop system	approx. 45 kg (99 lb)
	basic pedestal	approx. 40 kg (88 lb)
	adapter pedestal	approx. 30 kg (66 lb)

Ordering information	Туре	Order No.
Triple-loop antenna	R&S [®] HM020E	4108.9003.02
Recommended extras		
Basic pedestal	R&S [®] HM020Z1	4023.5504.02
Adapter pedestal	R&S°HM020Z2	4023.5604.02
Calibration dipole (LLAS verification dipole)	R&S®HM020Z3	4023.5704.02
Control unit (required for EMC receivers without user port)	R&S®BG020	4024.1002.02

Validation factor (meas.)

