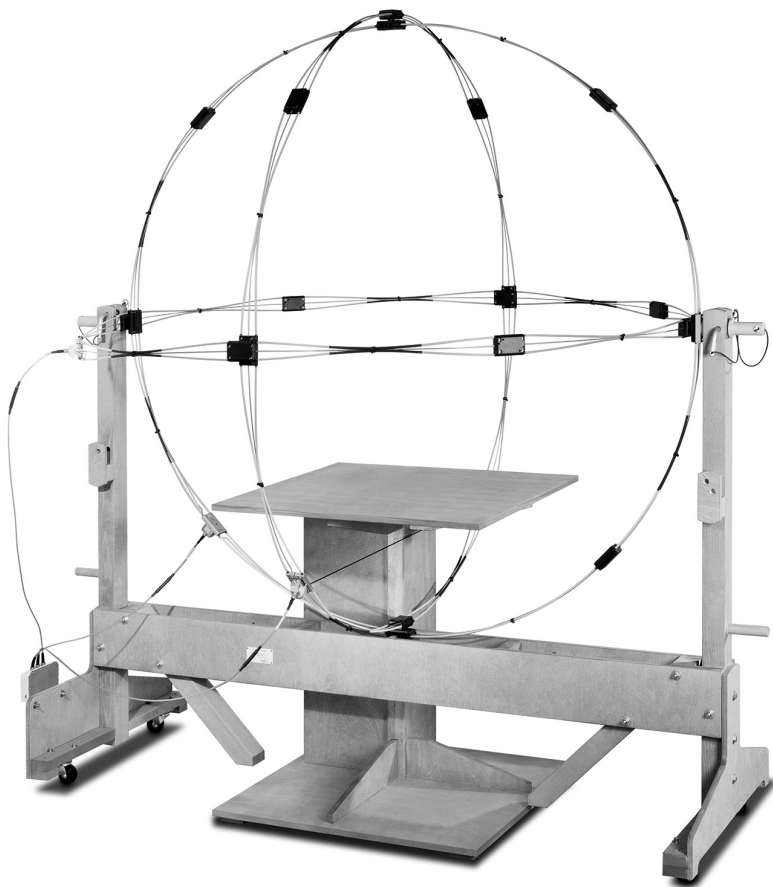


R&S® HM020E

Triple-Loop Antenna

Specifications



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Note: R&S®HM020Z1 basic pedestal is shown on cover.

Definitions

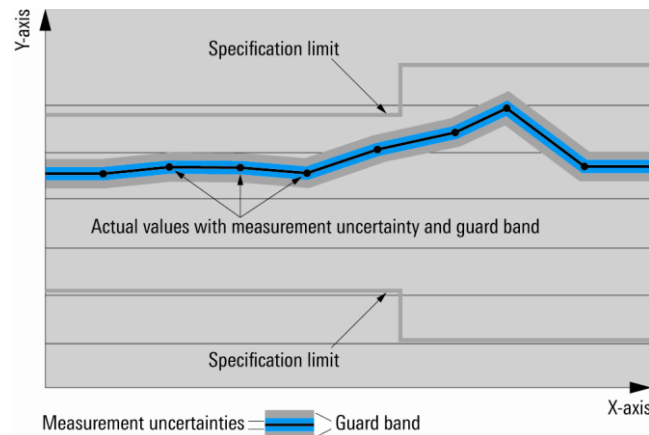
General

Product data applies under the following conditions:

- Three hours storage at ambient temperature followed by 30 minutes warm-up operation
- Specified environmental conditions met
- Recommended calibration interval adhered to
- All internal automatic adjustments performed, if applicable

Specifications with limits

Represent warranted product performance by means of a range of values for the specified parameter. These specifications are marked with limiting symbols such as $<$, \leq , $>$, \geq , \pm , or descriptions such as maximum, limit of, minimum. Compliance is ensured by testing or is derived from the design. Test limits are narrowed by guard bands to take into account measurement uncertainties, drift and aging, if applicable.



Specifications without limits

Represent warranted product performance for the specified parameter. These specifications are not specially marked and represent values with no or negligible deviations from the given value (e.g. dimensions or resolution of a setting parameter). Compliance is ensured by design.

Typical data (typ.)

Characterizes product performance by means of representative information for the given parameter. When marked with $<$, $>$ or as a range, it represents the performance met by approximately 80 % of the instruments at production time. Otherwise, it represents the mean value.

Nominal values (nom.)

Characterize product performance by means of a representative value for the given parameter (e.g. nominal impedance). In contrast to typical data, a statistical evaluation does not take place and the parameter is not tested during production.

Measured values (meas.)

Characterize expected product performance by means of measurement results gained from individual samples.

Uncertainties

Represent limits of measurement uncertainty for a given measurand. Uncertainty is defined with a coverage factor of 2 and has been calculated in line with the rules of the Guide to the Expression of Uncertainty in Measurement (GUM), taking into account environmental conditions, aging, wear and tear.

Device settings and GUI parameters are indicated as follows: "parameter: value".

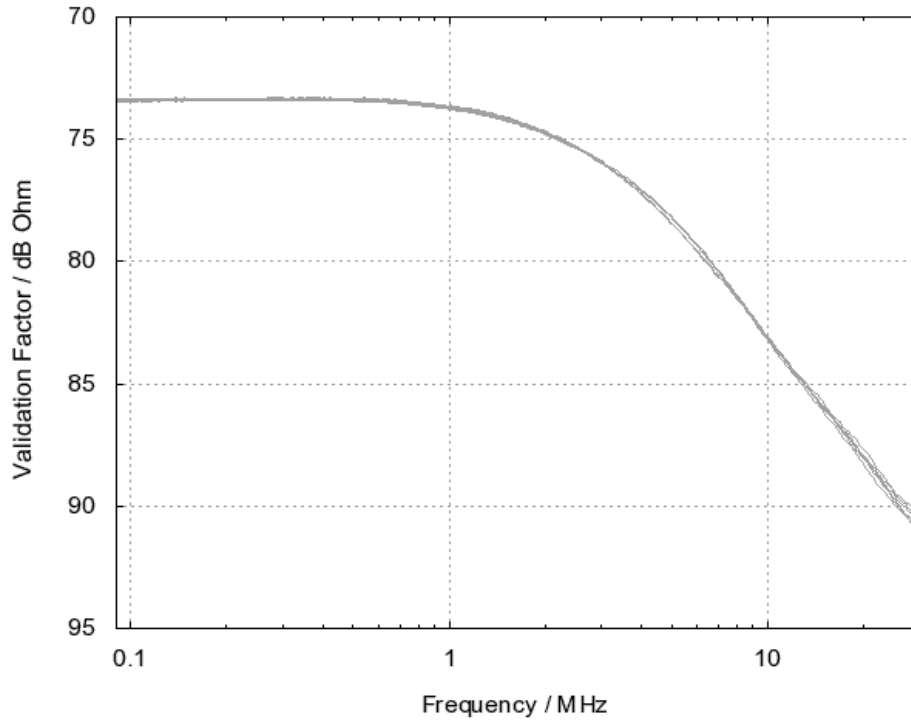
Typical data as well as nominal and measured values are not warranted by Rohde & Schwarz.

In line with the 3GPP/3GPP2 standard, chip rates are specified in Mcps (million chips per second), whereas bit rates and symbol rates are specified in Mbps (million bits per second), kbps (thousand bits per second) or ksps (thousand symbols per second), and sample rates are specified in Msample/s (million samples per second). Mcps, kbps, ksps and Msample/s are not SI units.

Specifications

Electrical data

Frequency range		9 kHz to 30 MHz
Nominal impedance		50 Ω
RF connector		N female
Control connector		9-contact, D-Sub, female
Ground connector		terminal strip for copper foil
MTBF		> 1 000 000 h



Validation factor measured (batch of six antennas).

Environmental data

Temperature	operating temperature range	+5 °C to +40 °C
Damp heat		+40 °C, 95 % rel. humidity, steady state

General data

Product conformity		RoHS,CE
Calibration	interval for general test and measurement applications	24 months
	equipment	R&S®HM020Z3
Dimensions		
Loops set up	W × L × H	approx. 2.49 m × 2.07 m × 2.57 m (98.0 in × 81.5 in × 101.2 in)
Loops in transport crate	W × L × H	approx. 2.50 m × 0.43 m × 2.13 m (98.4 in × 16.9 in × 83.85 in)
Basic pedestal (load capacity 100 kg)	W × L × H	approx. 0.9 m × 0.9 m × 1.0 m (35.4 in × 35.4 in × 39.4 in)
Adapter pedestal (load capacity 100 kg)	W × L × H	approx. 0.9 m × 0.9 m × 0.5 m (max.) (35.4 in × 35.4 in × 19.7 in (max.))
Weight		
Loop system		approx. 45 kg (99.2 lb)
Basic pedestal		approx. 40 kg (88.2 lb)
Adapter pedestal		approx. 30 kg (66.1 lb)

Ordering information

Designation	Type	Order No.
Triple-Loop Antenna	R&S®HM020E	4108.9003.02
Recommended extra		
Basic Pedestal	R&S®HM020Z1	4023.5504.02
Adapter Pedestal	R&S®HM020Z2	4023.5604.02
Calibration Dipole	R&S®HM020Z3	4023.5704.02
Control Unit (required for EMC receivers without user port)	R&S®BG020	4024.1002.02

Service that adds value

- | Worldwide
- | Local and personalized
- | Customized and flexible
- | Uncompromising quality
- | Long-term dependability

Rohde & Schwarz

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Sustainable product design

- | Environmental compatibility and eco-footprint
- | Energy efficiency and low emissions
- | Longevity and optimized total cost of ownership

Certified Quality Management

ISO 9001

Certified Environmental Management

ISO 14001

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R&S®HM020E Triple-Loop Antenna

Data without tolerance limits is not binding | Subject to change

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