

**Aumictech**

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Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde and Schwarz HFH2-Z2 Broadband Active Loop Antenna, 30 MHz

The Rohde & Schwarz HFH2-Z2 is a loop antenna designed for direction finding and monitoring applications in the HF frequency range. It features a compact design, high sensitivity, and solid construction for reliable performance in various environments.

**MODEL****Rohde & Schwarz HFH2-Z2****CALIBRATION****Available on request****CONDITION****Used****STATUS****In stock****RFQ / SKU****HFH2-Z2****LISTING**<https://aumictechlabs.com/products/hfh2-z2-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Rohde & Schwarz HFH2-Z2 is a broadband active loop antenna engineered for magnetic field strength measurements across the LF, MF, and HF bands from 8.3 kHz to 30 MHz. It delivers high sensitivity down to $\leftarrow 70 \text{ dB}(\mu\text{A/m/Hz})$ above 1.5 MHz, enabling detection of extremely weak fields while maintaining a wide dynamic range up to 85 dB($\mu\text{A/m}$) in normal mode. The antenna exhibits virtually constant antenna factor across its entire operating range, ensuring precise and repeatable measurements in EMI testing per CISPR, MIL, FCC, ANSI, and ETSI standards. An integrated attenuator mitigates distortion in strong-field environments, while an internal RF detector with threshold circuit has overload protection. The 590 mm loop diameter balances sensitivity and portability. Source impedance is 50 Ω with current draw $< 40 \text{ mA}$ at $\pm 10 \text{ V}$. Operating temperature range spans -10°C to $+55^\circ\text{C}$, with storage capability to -25°C to

+70°C. Technical Specifications Frequency Range: 8.3 kHz to 30 MHz Loop Diameter: 590 mm Source Impedance: 50 Ω Current Drain (± 10 V): <40 mA Minimum Field Sensitivity: 1.5 MHz to 30 MHz) Maximum Field Strength: 85 dB(μ A/m) (normal mode) Operating Temperature: -10°C to +55°C Storage Temperature: -25°C to +70°C Dimensions: 596 mm $\times$ 90 mm $\times$ 822 mm Key Features Virtually constant antenna factor for accurate field measurements across the full frequency range Integrated attenuator for operation in high-field environments RF detector with threshold circuit for overload indication Individually calibrated with supplied calibration certificate Typical Applications EMI compliance testing and measurement Magnetic field strength assessment per CISPR, MIL, FCC, ANSI, and ETSI standards Low-level field detection and characterization Compatibility & Integration R&S IN600 bias unit for coaxial cable power supply R&S HFH2-Z8 tripod for two-axis antenna positioning R&S HFH2-Z9 3D adapter for X, Y, and Z plane measurements R&S HFH2-Z11 height adaptation set (from ~90 cm working height) Feeder cables HZ-3 and HZ-4; coaxial cables HZ-5 (3 m) and HZ-6 (10 m)

Features & description

From manufacturer datasheet

Polarization: linear

Nominal Impedance: 50 ohm Antenna Connector: N female VSWR 8.3 kHz to 20 kHz: less than 1.8 VSWR 20 kHz to 30 MHz: less than 1.6 Antenna Factor Normal 8.3 kHz to 20 kHz: 20 dB (1/m) plus/minus 2 dB Antenna Factor Normal 20 kHz to 30 MHz: 20 dB (1/m) plus/minus 1.5 dB Antenna Factor Attenuation 8.3 kHz to 20 kHz: 30 dB (1/m) plus/minus 2 dB Antenna Factor Attenuation 20 kHz to 30 MHz: 30 dB (1/m) plus/minus 1.5 dB Lower Limit Magnetic Field 1.5 to 30 MHz Normal: less than minus 70 dB(uA/m/Hz) measured Upper Limit Magnetic Field Normal: 85 dB(uA/m) typical Upper Limit Magnetic Field Attenuation: 95 dB(uA/m) typical (8.3 kHz to 8 MHz on some tables) Destructive Field 8.3 kHz to 30 MHz: greater than 30 V/m Destructive Field 30 MHz to 2 GHz: greater than 10 V/m Power Supply: plus 24 V DC minus 3 V / plus 1 V, max 150 mA via coax MTBF: greater than 250000 h (SN29500, GB, plus 45 C) Operating Temperature: plus 5 C to plus 40 C Storage Temperature: minus 25 C to plus 70 C Damp Heat: plus 40 C, 95 percent RH (EN 60068 2 78) EMC: EN 61326 1 Electrical Safety: EN 61010 1 DimensionsWDH: approximately 596 mm x 90 mm x 822 mm Loop Diameter: approximately 600 mm Weight: approximately 3 kg Bias Unit: IN600 4094.3004.13

HFH2Z2 Characteristics / Specifications

PARAMETER	VALUE
Accessories	HFH2 Z7 case, HFH2 Z8 tripod, HFH2 Z9 3D adapter, HFH2 Z11 height set Technical Specifications
Model	HFH2 Z2 / HFH2 Z2E
Manufacturer	Rohde & Schwarz
Instrument Type	Broadband Active Loop Antenna (magnetic field)
Alias	R&S HFH2-Z2; HFH2-Z2E; 4110.2002.02
Frequency Range OEM	8.3 kHz to 30 MHz
Frequency Range Typical Listing	9 kHz to 30 MHz
Polarization	linear
Nominal Impedance	50 ohm
Antenna Connector	N female
VSWR 8.3 kHz to 20 kHz	less than 1.8
VSWR 20 kHz to 30 MHz	less than 1.6
Antenna Factor Normal 8.3 kHz to 20 kHz	20 dB (1/m) plus/minus 2 dB
Antenna Factor Normal 20 kHz to 30 MHz	20 dB (1/m) plus/minus 1.5 dB
Antenna Factor Attenuation 8.3 kHz to 20 kHz	30 dB (1/m) plus/minus 2 dB
Antenna Factor Attenuation 20 kHz to 30 MHz	30 dB (1/m) plus/minus 1.5 dB
Lower Limit Magnetic Field 1.5 to 30 MHz Normal	less than minus 70 dB(uA/m/Hz) measured
Upper Limit Magnetic Field Normal	85 dB(uA/m) typical
Upper Limit Magnetic Field Attenuation	95 dB(uA/m) typical (8.3 kHz to 8 MHz on some tables)
Destructive Field 8.3 kHz to 30 MHz	greater than 30 V/m
Destructive Field 30 MHz to 2 GHz	greater than 10 V/m
Power Supply	plus 24 V DC minus 3 V / plus 1 V, max 150 mA via coax

PARAMETER	VALUE
MTBF	greater than 250000 h (SN29500, GB, plus 45 C)
Operating Temperature	plus 5 C to plus 40 C
Storage Temperature	minus 25 C to plus 70 C
Damp Heat	plus 40 C, 95 percent RH (EN 60068 2 78)
EMC	EN 61326 1
Electrical Safety	EN 61010 1
DimensionsWDH	approximately 596 mm x 90 mm x 822 mm
Loop Diameter	approximately 600 mm
Weight	approximately 3 kg
Bias Unit	IN600 4094.3004.13
Calibration	individual certificate supplied Notes Numeric table is the current R&S HFH2-Z2E data sheet. Legacy HFH2-Z2 listings quote 9 kHz to 30 MHz typical; OEM lower edge is 8.3 kHz. Requires IN600 or equivalent 24 V coax bias. Confirm Z2 versus Z2E label on the antenna.
Attenuation	mode, and integrated overload warning. Powered by plus 24 V DC on the coaxial cable (R&S IN600 bias unit); no batteries. Each antenna ships with an individual calibration certificate.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 25 C to plus 70 C
Operating temperature	plus 5 C to plus 40 C
Operating Temperature	plus 5 C to plus 40 C
Damp Heat	plus 40 C, 95 percent RH (EN 60068 2 78)
EMC	EN 61326 1
Electrical Safety	EN 61010 1
DimensionsWDH	approximately 596 mm x 90 mm x 822 mm
Loop Diameter	approximately 600 mm
Weight	approximately 3 kg
Bias Unit	IN600 4094.3004.13
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Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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PARAMETER	VALUE
Model	HFH2 Z2 / HFH2 Z2E
Manufacturer	Rohde & Schwarz
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Alias	R&S HFH2-Z2; HFH2-Z2E; 4110.2002.02
Frequency Range OEM	8.3 kHz to 30 MHz
Frequency Range Typical Listing	9 kHz to 30 MHz
Polarization	linear
Nominal Impedance	50 ohm
Antenna Connector	N female
VSWR 8.3 kHz to 20 kHz	less than 1.8
VSWR 20 kHz to 30 MHz	less than 1.6
Antenna Factor Normal 8.3 kHz to 20 kHz: 20 dB (1/m) plus/minus 2 dB Antenna Factor Normal 20 kHz to 30 MHz: 20 dB (1/m) plus/minus 1.5 dB Antenna Factor Attenuation 8.3 kHz to 20 kHz: 30 dB (1/m) plus/minus 2 dB Antenna Factor Attenuation 20 kHz to 30 MHz: 30 dB (1/m) plus/minus 1.5 dB Lower Limit Magnetic Field 1.5 to 30 MHz Normal: less than minus 70 dB(uA/m/Hz) measured	
Specifications	
PARAMETER	VALUE
Upper Limit Magnetic Field Normal	85 dB(uA/m) typical
Upper Limit Magnetic Field Attenuation	95 dB(uA/m) typical (8.3 kHz to 8 MHz on some tables)
Destructive Field 8.3 kHz to 30 MHz	greater than 30 V/m
Destructive Field 30 MHz to 2 GHz	greater than 10 V/m
Power Supply	plus 24 V DC minus 3 V / plus 1 V, max 150 mA via coax
MTBF	greater than 250000 h (SN29500, GB, plus 45 C)
Operating Temperature	plus 5 C to plus 40 C
Storage Temperature	minus 25 C to plus 70 C
Damp Heat	plus 40 C, 95 percent RH (EN 60068 2 78)

PARAMETER	VALUE
EMC	EN 61326 1
Electrical Safety	EN 61010 1
DimensionsWDH	approximately 596 mm x 90 mm x 822 mm
Loop Diameter	approximately 600 mm
Weight	approximately 3 kg
Bias Unit	IN600 4094.3004.13
Calibration	individual certificate supplied

Notes

Numeric table is the current R&S HFH2-Z2E data sheet. Legacy HFH2-Z2 listings quote 9 kHz to 30 MHz typical; OEM lower edge is 8.3 kHz. Requires IN600 or equivalent 24 V coax bias. Confirm Z2 versus Z2E label on the antenna.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.