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Data Sheet

August 12, 2026

ROHDE & SCHWARZ

Rohde & Schwarz HMF2550 function/arbitrary waveform generator

Rohde & Schwarz HMF2550 Arbitrary Function Generator The R&S HMF2550 (ex-Hameg) is a single-channel arbitrary function generator with sine/square to 50 MHz, 250 MSa/s / 14-bit / 256 kSa arbitrary memory, and AM/FM/PM/FSK/PWM modulation. Fanless bench instrument with 3.5" TFT display. Electronic design stimulus; sensor simulation; functional test; pulse characterization with variable edges. The R&S HMF2550 (ex-Hameg) is a single-channel arbitrary function generator with sine/square to 50 MHz, 250 MSa/s / 14-bit / 256 kSa arbitrary memory, and AM/FM/PM/FSK/PWM modulation. Fanless bench instrument with 3.5" TFT display. Electronic design stimulus; sensor simulation; functional test; pulse characterization with variable edges.



MODEL

**Rohde & Schwarz
HMF2550**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

HMF2550

LISTING

<https://aumictechlabs.com/products/hmf2550-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Rohde & Schwarz HMF2550 is a single-channel arbitrary function generator delivering precision waveform synthesis from 10 μ Hz to 50 MHz. Built on Digital Signal Synthesis (DDS) principles, it generates standard waveforms - sine, square, triangle/ramp, and pulse - plus user-defined arbitrary signals at 250 MSa/s with 14-bit resolution and 256 kPts memory depth. Output

ranges from 5 mVpp to 10 Vpp into 50 Ω loads, with steplessly adaptable impedance from 1 Ω to 10 k Ω and programmable DC offset to ± 5 V. Harmonic distortion stays below -70 dBc up to 100 kHz, with phase noise of -115 dBc/Hz (typ.) at 10 kHz offset. The pulse generator produces outputs from 100 μ Hz to 25 MHz with pulse widths as narrow as 15 ns and fixed 8 ns rise/fall times. Advanced capabilities include AM, FM, PM, PWM, and FSK modulation; linear and logarithmic sweep; burst and gating functions; and both internal and external triggering. A 3.5" QVGA TFT display provides real-time waveform visualization and parameter control.

Technical Specifications

Frequency Range:	10 μ Hz to 50 MHz
Output Voltage (50 Ω load):	5 mVpp to 10 Vpp
Output Voltage (open circuit):	10 mVpp to 20 Vpp
Output Impedance:	1 Ω to 10 k Ω (steplessly adaptable)
DC Offset:	± 5 mV to ± 5 V
Amplitude Resolution:	1 mV into 50 Ω
THD:	0.04% ($f < 100$ kHz)
Phase Noise:	-115 dBc/Hz (typ., SSB, 10 kHz offset, 1 Vpp)
Arbitrary Waveform:	250 MSa/s, 14-bit, 256 kPts memory
Pulse Frequency:	100 μ Hz to 25 MHz
Pulse Width:	15 ns to 999 s (5 ns resolution)
Rise/Fall Time:	8 ns (fixed)
Jitter:	< 1 nsrms (typ.)
Ramp Linearity:	$< 0.1\%$ typ. up to 250 kHz; $< 2\%$ typ. above 250 kHz
Display:	8.9 cm (3.5") QVGA TFT
Power Supply:	105–253 V, 50/60 Hz $\pm 10\%$

Key Features

- Pre-defined arbitrary waveforms including $\sin(x)/x$, white noise, pink noise, cardiac, and exponential rise/fall
- Ramp symmetry adjustment: 0% to 100% (0.1% resolution)
- AM, FM, PM, PWM, FSK modulation with internal and external sources
- Linear and logarithmic sweep modes
- Burst and gating functionality
- 10 MHz reference clock with ± 1 ppm TCXO
- USB/RS-232 dual interface standard

Typical Applications

- Research and development laboratories
- Industrial test and measurement environments
- Production facility validation
- Educational and training institutions

Compatibility & Integration

- Standard connectivity via USB/RS-232 dual interface.
- Optional Ethernet/USB dual interface available.

Features & description

From manufacturer datasheet

Features

- Frequency (sine/square): 10 μ Hz to 50 MHz • Pulse: 100 μ Hz to 25 MHz; width min 15 ns, 5 ns resolution; rise/fall 8–500 ns variable • Ramp/triangle: 10 μ Hz to 10 MHz • Arbitrary: 100 μ Hz to 25 MHz; 250 MSa/s; 14 bit; up to 256 kSa; up to 4 MB NVM • Output: 5 mVpp–10 Vpp into 50 Ω (10 mVpp–20 Vpp open); accuracy $\pm 1\%$ ± 1 mVpp @ 1 kHz • DC offset: ± 5 mV to 5 V into 50 Ω • THD: 0.04% typ. (f < 100 kHz); harmonics < –70 dBc to 100 kHz • Square rise/fall: 8 ns fixed; overshoot < 3% typ.; jitter < 1 ns rms typ. • Pulse jitter: < 500 ps rms typ. • Modes: continuous, modulate, sweep, burst; int/ext trigger • Modulation: AM, FM, PM, FSK, PWM (int/ext); int mod 10 μ Hz–50 kHz • Timebase: ± 1 ppm TCXO class; 10 MHz ref in/out • Interfaces: front USB host; HO720 RS-232/USB; optional Ethernet (HO732), GPIB (HO740) • Display: 8.9 cm (3.5") QVGA TFT • Power: 105–253 V, 50/60 Hz; ~ 30 W typ.
- Size/weight: 285 $\times$ 75 $\times$ 365 mm; 3.6 kg • Operating temp: +5 $^{\circ}$ C to +40 $^{\circ}$ C

HMF2550 Characteristics / Specifications

PARAMETER	VALUE
Model	HMF2550
Manufacturer	Rohde & Schwarz
Instrument Type	Arbitrary Function Generator
Alias	HMF2550; R&S HMF2550; Hameg HMF2550 Frequency
Sine/square	10 μ Hz–50 MHz
Pulse	100 μ Hz to 25 MHz; width min 15 ns, 5 ns resolution; rise/fall 8–500 ns variable
ARB	to 25 MHz @ 250 MSa/s, 14 bit, 256 kSa Output 5 mVpp–10 Vpp (50 Ω); offset $\pm$ 5 mV–5 V Notes Specs from R&S/Hameg HMF25xx datasheet (HMF2550 column). Confirm firmware $\geq$ 2.145 and installed options on the unit.
Frequency (sine/square)	10 μ Hz to 50 MHz
Ramp/triangle	10 μ Hz to 10 MHz
Arbitrary	100 μ Hz to 25 MHz; 250 MSa/s; 14 bit; up to 256 kSa; up to 4 MB NVM
Output	5 mVpp–10 Vpp into 50 Ω (10 mVpp–20 Vpp open); accuracy $\pm$ 1% $\pm$ 1 mVpp @ 1 kHz
DC offset	$\pm$ 5 mV to 5 V into 50 Ω
THD	0.04% typ. (f < 100 kHz); harmonics <–70 dBc to 100 kHz
Square rise/fall	8 ns fixed; overshoot <3% typ.; jitter <1 ns rms typ.
Pulse jitter	<500 ps rms typ.
Modes	continuous, modulate, sweep, burst; int/ext trigger
Modulation	AM, FM, PM, FSK, PWM (int/ext); int mod 10 μ Hz–50 kHz
Timebase	$\pm$ 1 ppm TCXO class; 10 MHz ref in/out
Interfaces	front USB host; HO720 RS-232/USB; optional Ethernet (HO732), GPIB (HO740)
Display	8.9 cm (3.5") QVGA TFT
Power	105–253 V, 50/60 Hz; $\sim$ 30 W typ.
Size/weight	285 $\times$ 75 $\times$ 365 mm; 3.6 kg

PARAMETER	VALUE
Operating temp	+5 °C to +40 °C

HMF2550 Specifications

PARAMETER	VALUE
Key Features	- Frequency (sine/square): 10 µHz to 50 MHz
Technical Specifications	Model: HMF2550
Frequency	Sine/square: 10 µHz–50 MHz
Notes	Specs from R&S/Hameg HMF25xx datasheet (HMF2550 column). Confirm firmware ≥2.145 and installed options on the unit.

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

Specifications

PARAMETER	VALUE
Model	HMF2550
Manufacturer	Rohde & Schwarz
Instrument Type	Arbitrary Function Generator
Alias	HMF2550; R&S HMF2550; Hameg HMF2550

Frequency

Frequency

PARAMETER	VALUE
Sine/square	10 µHz–50 MHz
Pulse	100 µHz–25 MHz
ARB	to 25 MHz @ 250 MSa/s, 14 bit, 256 kSa

Output

5 mVpp–10 Vpp (50 Ω); offset ±5 mV–5 V

Notes

Specs from R&S/Hameg HMF25xx datasheet (HMF2550 column). Confirm firmware ≥2.145 and installed options on the unit.

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.