# R&S®HMF25xx Arbitrary Function Generator

## Accurate, versatile and affordable

**The perfect choice for**

- Engineering lab
- Maintenance & repair
- Education
- General purpose

### Key features

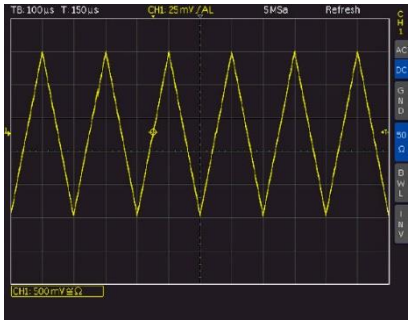
- Two versions: R&S®HMF2525 with 25 MHz and R&S®HMF2550 with 50 MHz maximum frequency
- 14-bit resolution and 8 ns rise time
- As well as standard waveforms such as sine, rectangle and triangle, the instruments provide powerful arbitrary signal functionality. In addition to predefined signal shapes such as sin(x)/x, white or pink noise, it can also output customer-specific, arbitrary curve shapes with a signal length of up to 256 ksamples.
- The burst, sweep, gating, internal and external triggering operating modes and the AM, FM, PM, PWM and FSK modulation functions (in each case internal and external) can be applied on all signals

| Key specifications | |
|---|---|
| Frequency range<br>R&S®HMF2525<br>R&S®HMF2550 | <br>10 µHz to 25 MHz<br>10 µHz to 50 MHz |
| Output voltage | 5 $mV_{pp}$ to 10 $V_{pp}$ (into 50 Ω)<br>10 $mV_{pp}$ to 20 $V_{pp}$ (open circuit) |
| Total harmonic distortion | 0.04 % typ. (f < 100 kHz) |
| DC offset | ±5 mV to 5 V |
| Arbitrary waveform length | up to 256 ksamples |
| Arbitrary waveform resolution | 14 bit |

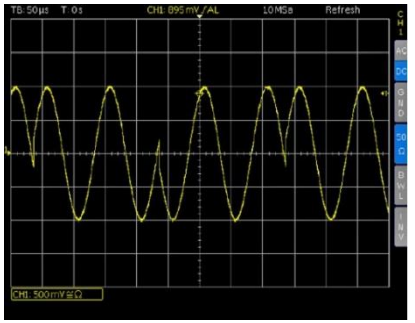
| Your benefit | Features |
|---|---|
| Powerful pulse generator | Provides pulses with a recurrence rate of up to 12.5 MHz/25 MHz; the pulse width can be set from 15 ns to 999 s with a resolution of 5 ns. Rise/fall time can be selected from 8 ns to 500 ns – a very useful feature when characterizing input hysteresis of semiconductor devices |
| Easily create arbitrary waveforms | Arbitrary waveforms can be developed with PC software. Stored waveforms can be loaded via front USB port or imported via the complimentary HMExplorer software (available for download) |

▷ For more information,
see www.rohde-schwarz.com/product/HMF

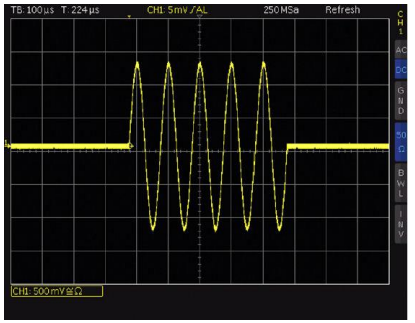
## Signal examples



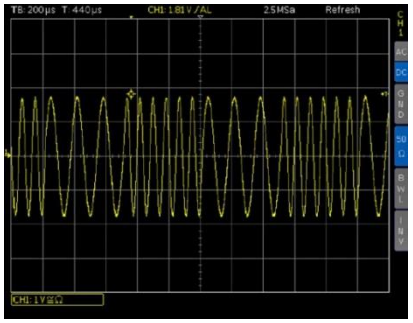
Triangle signal.



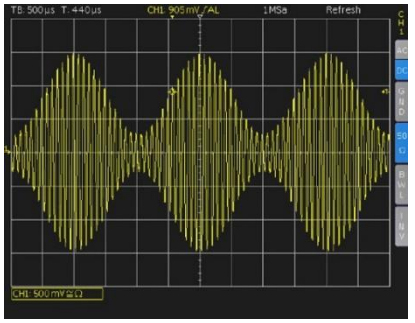
Phase modulation (PM).



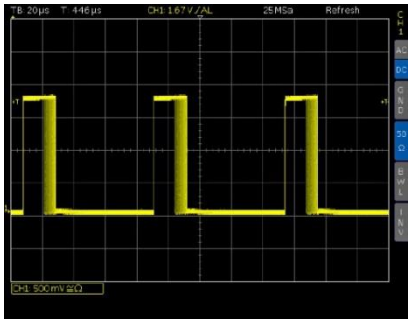
Burst example.



Frequency shift keying (FSK).



Amplitude modulation (AM).



Pulse width modulation (PWM).

## Ordering information

| Base units | |
|---|---|
| **Frequency Range** | **Model** |
| 10 µHz to 25 MHz | R&S®HMF2525 |
| 10 µHz to 50 MHz | R&S®HMF2550 |

| Options/system components | |
|---|---|
| **Description** | **Type** |
| Dual Ethernet/USB interface | R&S®HO732 |
| IEEE-488 (GBIP) interface | R&S®HO740 |
| 19" rackmount kit, 2 HU | R&S®HZ42 |

**Included accessories:**
All models include operating manual, power cable and three-year warranty.

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