



R&S® Spectrum Rider FPH Spectrum Analyzer

Small form factor to handle big tasks



The perfect choice for

| | |
|-------------------------------|--|
| Spectrum clearance (5G ready) | Interference hunting |
| Pulse measurement | EMI debugging and RF design validation |

| Key specifications | |
|-----------------------------|---------------------------|
| Frequency | 5 kHz to 44 GHz |
| Resolution bandwidths | 1 Hz to 3 MHz |
| DANL at 3 GHz (preamp on) | < -163 dBm |
| Phase noise, 100 kHz offset | 105 dBc/Hz at f = 500 MHz |
| Battery operation time | > 4.5 hours |
| Weight | ≥ 2.5 kg |

The three key Ps for lab and field environments

Performance – excellent DANL and phase noise

- ▶ Weak signals can be easily captured

Portability – weighs as little as 2.5 kg

- ▶ Carrying holster (R&S®HA-Z322) to free up hands
- ▶ Side strap included for easy transportation
- ▶ Selection of carrying cases available

Price – low starting price and optional software keycode upgrades

- ▶ Competitive and attractive price
- ▶ No downtime, no recalibration needed

| Models | Supporting frequency range | |
|------------------------|----------------------------|------------|
| | Default range | Upgrade to |
| R&S®Spectrum Rider FPH | | |
| Model .02 | 5 kHz to 2 GHz | 3/4 GHz |
| Model .06 | 5 kHz to 6 GHz | 8 GHz |
| Model .13/.23 | 5 kHz to 13.6 GHz | 20 GHz |
| Model .26/.36 | 5 kHz to 26.5 GHz | 31 GHz |
| Model .44/.54 | 5 kHz to 44 GHz | n.a. |

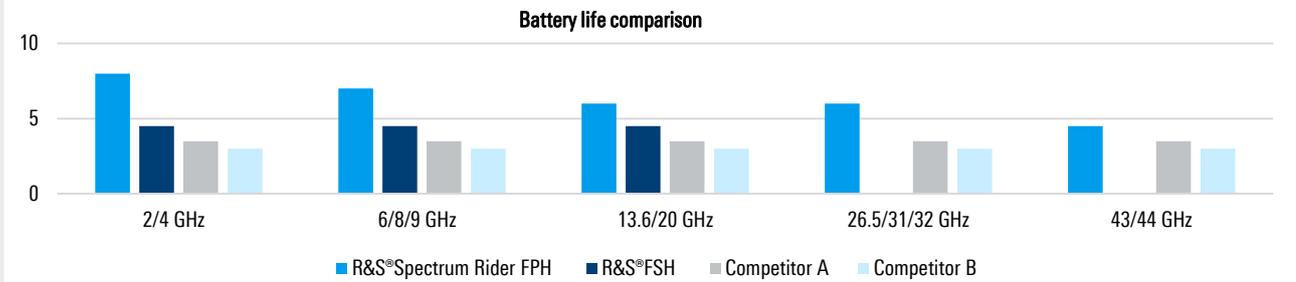
| Models | Tracking generator frequency range | |
|------------------------|------------------------------------|-------------------------------|
| | Min. frequency | Max. frequency |
| R&S®Spectrum Rider FPH | | |
| Model .23 | 30 kHz | 13.6 GHz/20 GHz (R&S®FPH-B20) |
| Model .36 | 30 kHz | 26.5 GHz/31 GHz (R&S®FPH-B31) |
| Model .54 | 30 kHz | 44 GHz |

| Your benefit | Features |
|--|--|
| Battery life twice that of current handheld spectrum analyzers | <ul style="list-style-type: none"> ▶ > 6 hours battery life (models .02/.06/.13/.26) ▶ 4.5 hours battery life (models .23/.36/.44/.54) |
| Smartphone style capacitive touchscreen; also available with traditional interface | <ul style="list-style-type: none"> ▶ 7" antiglare capacitive color touchscreen ▶ On-screen keyboard ▶ Smartphone-like gestures ▶ Adjustable display brightness ▶ Large backlit button keypad ▶ Multifunction rotary knob |
| Buy only what you need; upgrade later without returning analyzer for servicing | <ul style="list-style-type: none"> ▶ Selection of 2/6/13.6/26.5 GHz base models ▶ Frequency upgrade keycode options available for each base model ▶ Keycode options for function upgrades |



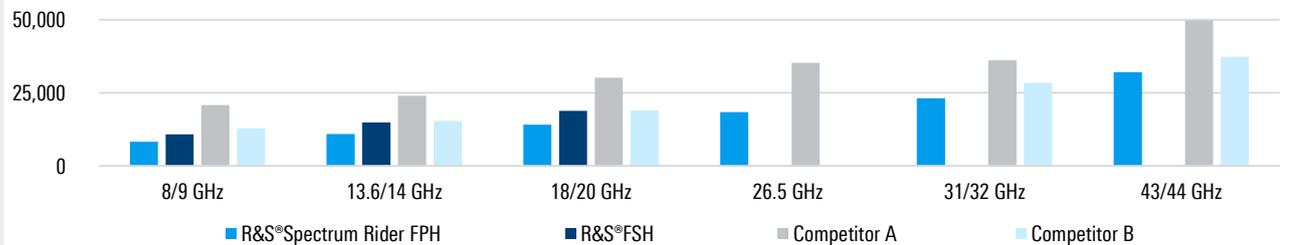
For prices and more information, visit www.rohde-schwarz.com/product/FPH

Operation time (battery life comparison)



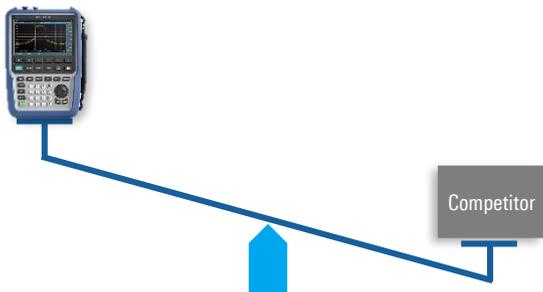
The analyzer has an innovative fanless concept – part of a rugged design that protects it from dust and water. Designed with power optimization in mind, the R&S Spectrum Rider FPH consumes less power than competitor products and can be operated for a full working day without recharging.

Price comparison (EUR)



The R&S Spectrum Rider FPH is a high-quality spectrum analyzer. Its favorable price tag lowers the barrier to entry for prospective premium analyzer owners. The unique frequency upgrade concept and software keycode options make it easy to upgrade the instrument.

Lightweight



Every additional gram adds to user fatigue in the field. Thanks to the state-of-the-art design, the analyzer weighs as little as 2.5 kg.

Performance and features

The R&S Spectrum Rider FPH has exceptional phase noise and DANL to capture known and unknown signals. R&S Spectrum Rider FPH easily measures a wide range of parameters such as total harmonic distortion, occupied bandwidth, output power and channel power, making it the ideal tool for field work.

Other products to consider

- ▶ R&S NRP power sensors – all models up to 110 GHz supported
- ▶ R&S FSH – when you need digital modulation analysis

Ordering information

| Choose your model and frequency | |
|--|-------------|
| Base model | |
| R&S Spectrum Rider handheld spectrum analyzer, 5 kHz to 2/6/13.6/26.5/44 GHz | R&S FPH |
| Frequency and preamplifier upgrade for 2 GHz model | |
| Spectrum analyzer frequency upgrade, 2 GHz to 3 GHz | R&S FPH-B3 |
| Spectrum analyzer frequency upgrade, 2 GHz to 4 GHz | R&S FPH-B4 |
| Preamplifier, 5 kHz to 4 GHz | R&S FPH-B22 |
| Frequency and preamplifier upgrade for 6 GHz model | |
| Spectrum analyzer frequency upgrade, 6 GHz to 8 GHz | R&S FPH-B8 |
| Preamplifier, 5 kHz to 8 GHz | R&S FPH-B23 |
| Frequency and preamplifier upgrade for 13.6 GHz model | |
| Spectrum analyzer frequency upgrade, 13.6 GHz to 20 GHz | R&S FPH-B20 |
| Preamplifier, 5 kHz to 20 GHz | R&S FPH-B24 |
| Frequency and preamplifier upgrade for 26.5 GHz model | |
| Spectrum analyzer frequency upgrade, 26.5 GHz to 31 GHz | R&S FPH-B31 |
| Preamplifier, 5 kHz to 31 GHz | R&S FPH-B25 |
| Preamplifier upgrade for 44 GHz model | |
| Preamplifier, 5 kHz to 44 GHz | R&S FPH-B26 |
| Popular options/accessories | |
| Description | |
| Power sensor support | R&S FPH-K9 |
| Channel power meter | R&S FPH-K19 |
| Pulse measurements with power sensor | R&S FPH-K29 |
| Interference analysis | R&S FPH-K15 |
| Signal strength mapping | R&S FPH-K16 |

Accessories: all models include a lithium-ion battery pack, side strap for hand, USB cable, power cord and three-year warranty.

Languages supported: English, German, French, Spanish, Russian, simplified and traditional Chinese, Korean and Japanese.

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