ROHDE&SCHWARZ
Make ideas real

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

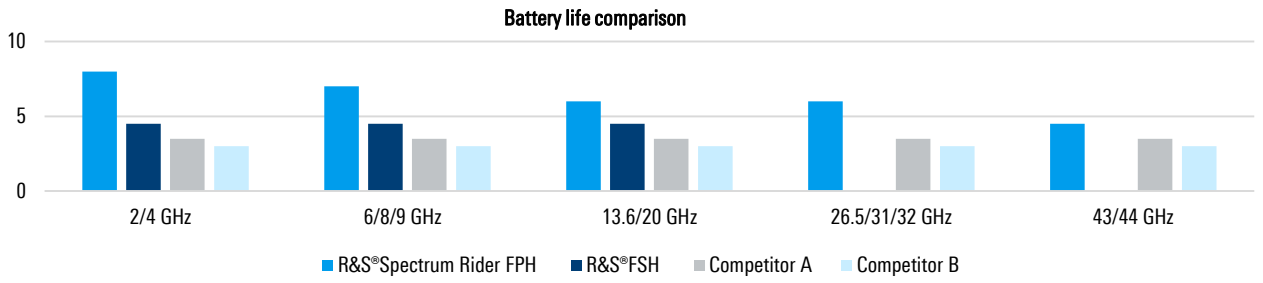
Models	Supporting frequency range	
R&S®Spectrum Rider FPH	Default range	Upgrade to
Model .02	5 kHz to 2 GHz	3/4 GHz
Model .06	5 kHz to 6 GHz	8 GHz
Model .13/.23	5 kHz to 13.6 GHz	20 GHz
Model .26/.36	5 kHz to 26.5 GHz	31 GHz
Model .44/.54	5 kHz to 44 GHz	n.a.

Models	Tracking generator frequency range	
R&S®Spectrum Rider FPH	Min. frequency	Max. frequency
Model .23	100 kHz	13.6 GHz/20 GHz (R&S®FPH-B20)
Model .36	100 kHz	26.5 GHz/31 GHz (R&S®FPH-B31)
Model .54	100 kHz	44 GHz

Your benefit	Features
Battery life twice that of current handheld spectrum analyzers	► > 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	► 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	► 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

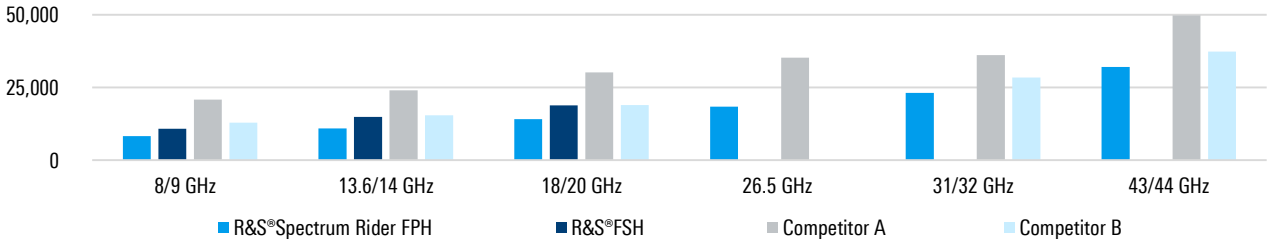
For prices and more information, visit
www.rohde-schwarz.com/product/FPH

Operation time (battery life comparison)



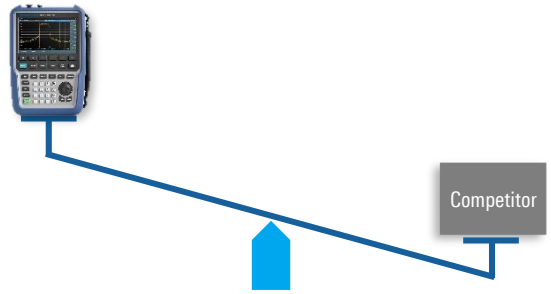
The analyzer has an innovative fanless concept – part of a rugged design that protects it from dust and water. Designed with power optimization in mind, the R&S®Spectrum Rider FPH consumes less power than competitor products and can be operated for a full working day without recharging.

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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