



R&S® FPL1000 SPECTRUM ANALYZER

Experience high performance wherever you take it

The perfect choice for

Research, education, service and maintenance

General purpose signal analysis and demodulation

Fast and easy integration for automated tests

Basic function tests and EMI debugging in R&D



Benchtop performance from a portable analyzer

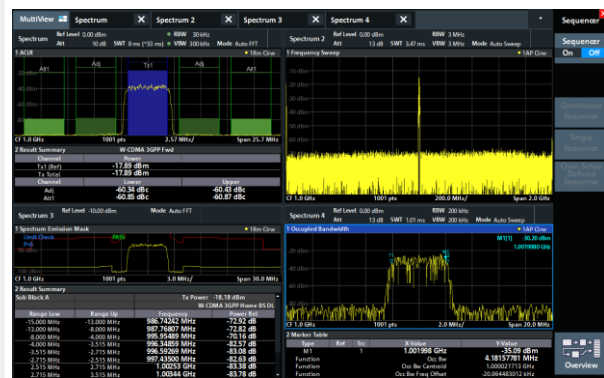
The R&S®FPL1000 spectrum analyzer combines excellent RF performance with a small footprint. The light weight and optional battery/DC power make it the ideal instrument for the lab and in the field. Operating the multipoint touchscreen instrument is intuitive and fun. The R&S®FPL1000 performs multiple tasks in a single instrument at an attractive price.

Key specifications	
Frequency	5 kHz to 7.5 GHz
DANL at 1 GHz	typ. -166 dBm
Spurious response	typ. < -70 dBc
Analysis bandwidth	10 MHz, opt. 40 MHz
Phase noise at 1 GHz (10 kHz offset)	typ. -108 dBc (1 Hz)
Phase noise at 1 GHz (1 MHz offset)	typ. -135 dBc (1 Hz)
Overall amplitude accuracy	0.8 dB
TOI at 1 GHz	typ. +20 dBm
Standard attenuator range	45 dB
Attenuator step options	5 dB, opt. 1 dB

Models	
R&S®FPL1003	5 kHz to 3 GHz
R&S®FPL1007	5 kHz to 7.5 GHz

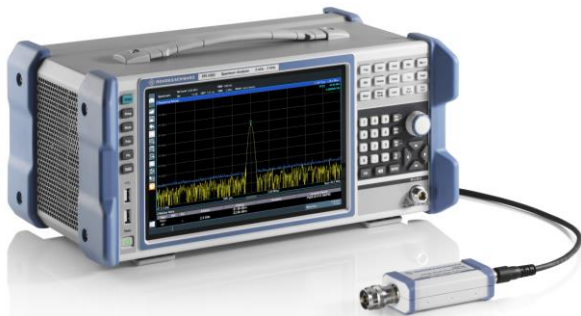
Your benefit	Features
One instrument for multiple tasks	<ul style="list-style-type: none"> ▶ Spectrum analysis ▶ Power meter ▶ Analog and digital signal analysis
More space on your test bench	<ul style="list-style-type: none"> ▶ Smallest footprint in its class (depth of only 23.5 cm)
Portability	<ul style="list-style-type: none"> ▶ Carrying handle and low weight ▶ Optional battery pack for over 3 hours of operation ▶ Optional 12 V/24 V DC power supply

Flexible user interface



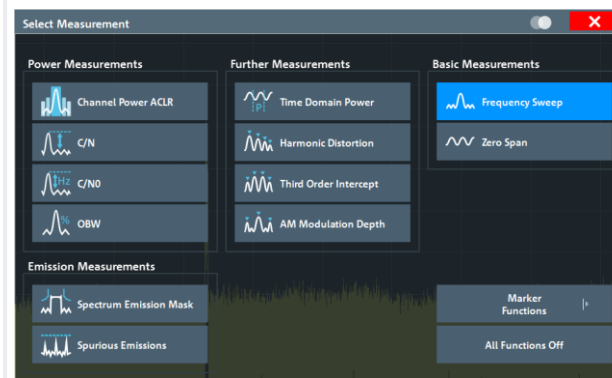
Configure your result windows the way you want. Display multiple measurement channels at once. Sequential channel updating allows e.g. parallel measurement of the spectrum, spectrogram and analog demodulation together with I/Q analysis.

Use as a power meter

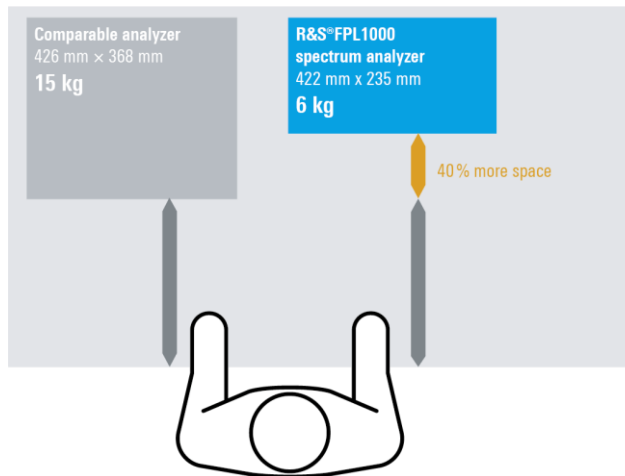


Turn the R&S®FPL1000 into a power meter with R&S®NRP power sensors and the R&S®FPL1-K9 option.

Many predefined measurements



Fast and easy access to a wealth of measurement and marker functions in the base model, including spectrogram measurements and I/Q analysis. Quick configuration through clear menus and touchscreen operation.



The R&S®FPL1000 takes up 40 % less space than comparable analyzers on a typical 80 cm workbench. It is the most portable benchtop analyzer, weighing 60 % less.

Popular accessories

Hardware	Type
OCXO reference frequency	R&S®FPL1-B4
Additional interfaces	R&S®FPL1-B5
Internal generator	R&S®FPL1-B9
GPIO interface	R&S®FPL1-B10
Second hard disk (SSD)	R&S®FPL1-B19
RF preamplifier	R&S®FPL1-B22
1 dB steps for electronic attenuator	R&S®FPL1-B25
DC power supply, 12 V/24 V	R&S®FPL1-B30
Internal li-ion battery with charging unit	R&S®FPL1-B31
40 MHz analysis bandwidth	R&S®FPL1-B40
Firmware	
Analog modulation analysis for AM/FM/ϕM	R&S®FPL1-K7
Power measurements with R&S®NRP power sensors	R&S®FPL1-K9
Noise figure measurements	R&S®FPL1-K30
EMI measurements	R&S®FPL1-K54
Vector signal analysis	R&S®FPL1-K70
Multi-modulation analysis	R&S®FPL1-K70M
BER measurements with PRBS data	R&S®FPL1-K70P

R&S®FPL1000 unique features in its class

- Portability, optional battery and 12 V/24 V DC power
- High-resolution (1280 x 800 pixel) multi-touch screen
- 40 MHz analysis bandwidth (option)
- 1 dB attenuator steps (option)
- MultiView with sequencer
- Spectrum analysis from 5 kHz
- Class-leading RF performance
 - ▶ Low phase noise
 - ▶ Low DANL
 - ▶ High TOI
 - ▶ Low spurs