

R&S®FPS Signal and Spectrum Analyzer

Compact and fast for automated tests



The perfect choice for

Fast spectrum measurement

Analog and digital modulation analysis

R&D

Manufacturing testing

Key specifications

Frequency range	10 Hz to 4 GHz (R&S®FPS4) 10 Hz to 7 GHz (R&S®FPS7) 10 Hz to 13.6 GHz (R&S®FPS13) 10 Hz to 30 GHz (R&S®FPS30) 10 Hz to 40 GHz (R&S®FPS40)
Signal analysis bandwidth	up to 160 MHz
Level measurement uncertainty	0.4 dB (up to 7 GHz)
Phase noise	-110 dBc (1 Hz) at 1 GHz carrier frequency and 10 kHz offset from carrier
Third-order intercept (TOI)	+15 dBm
Displayed average noise level (DANL)	-155 dBm

Compact and fast for automated tests

The R&S®FPS is an exceptionally fast and compact signal and spectrum analyzer for performance-oriented users. In production and in monitoring systems, only 2 HU of rack space are required – a reduction of 50 % compared with traditional instruments.

Your benefit

Ready for tomorrow's standards

High throughput for efficient production

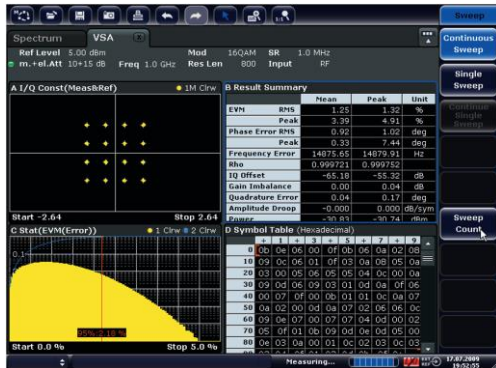
Features

Simultaneously measures signals of different standards (GSM, WCDMA, LTE, etc.) within the 160 MHz analysis bandwidth

Up to five times faster than other signal and spectrum analyzers

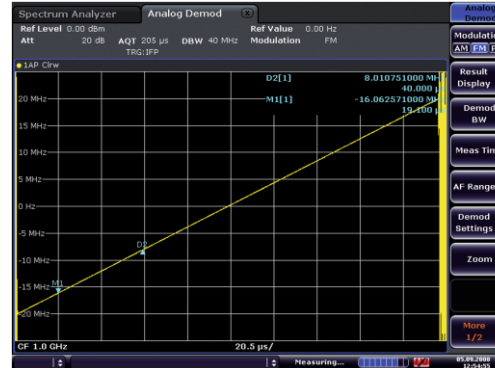
► For more information, visit www.rohde-schwarz.com/catalog/FPS

Flexible modulation analysis from MSK to 256QAM



The R&S®FPS-K70 option enables users to flexibly configure the analysis of digitally modulated single carriers down to the bit level. The clearly structured operating concept simplifies measurements despite the wide range of analysis tools.

AM/FM/φM measurement demodulator



The R&S®FPS-K7 AM/FM/φM measurement demodulator option converts the R&S®FPS into an analog modulation analyzer that measures not only characteristics of the useful modulation, but also factors such as residual FM and synchronous modulation.

High throughput for efficient production



It only takes 1.1 ms to measure the adjacent channel leakage ratio (ACLR) of a 3GPP WCDMA signal.

Multistandard radio analyzer (MSRA)



The MSRA simultaneously measures signals of different standards (GSM, WCDMA, LTE, etc.) at different frequencies within its 160 MHz analysis bandwidth.

Order information

Description	Item
Frequency range 10 Hz to 4 GHz	R&S®FPS4
Frequency range 10 Hz to 7 GHz	R&S®FPS7
Frequency range 10 Hz to 13.6 GHz	R&S®FPS13
Frequency range 10 Hz to 30 GHz	R&S®FPS30
Frequency range 10 Hz to 40 GHz	R&S®FPS40

Popular options/accessories

Hardware options	Item
RF preamplifier	R&S®FPS-B22/B24
Noise source control	R&S®FPS-B28V
40 MHz analysis bandwidth	R&S®FPS-B40
160 MHz analysis bandwidth	R&S®FPS-B160

Software options	Item
Pulse measurements	R&S®FPS-K6
Analog modulation analysis (AM/FM/φM)	R&S®FPS-K7
Vector signal analysis	R&S®FPS-K70
Noise figure and gain measurements	R&S®FPS-K30
Phase noise measurements	R&S®FPS-K40
Analysis of WLAN IEEE802.11a/b/g/j	R&S®FPS-K91
Amplifier measurements	R&S®FPS-K18
Analysis of EUTRA/LTE FDD downlink signals	R&S®FPS-K100
Analysis of EUTRA/LTE TDD downlink signals	R&S®FPS-K104
Analysis of GSM, EDGE and EDGE evolution signals	R&S®FPS-K10
Analysis of 3GPP FDD base station signals, incl. HSPA+	R&S®FPS-K72
NB-IoT downlink measurements	R&S®FPS-K106
V5G downlink measurements	R&S®FSW-K118