

## Specifications

<b>Frequency range</b>	100 kHz to 67 GHz (depending on analyzer model)
Measurement bandwidth	R&S®FSP 1 kHz to 10 MHz R&S®FSU/FSQ/FSUP/FSMR 1 kHz to 50 MHz
<b>Noise measurements</b>	
Level range	0 dB to 25 dB
Resolution	0.01 dB
Measurement accuracy	±0.2 dB (measurement with preamplifier (gain 20 dB, noise figure 5 dB) and 1 MHz bandwidth, valid for DUTs with noise figure 1 dB to 10 dB and gain >10 dB)
<b>Gain measurements</b>	
Level range	0 dB to 60 dB
Resolution	0.01 dB
Measurement accuracy	±0.2 dB (preamplification 20 dB, noise figure 5 dB, bandwidth 1 MHz)

## Required hardware and software

<b>Analyzers</b>	R&S®FSP3/FSP7/FSP13, R&S®FSP30/40, R&S®FSQ3/8/26/40 R&S®FSU3/8/26/43/50/67 R&S®FSUP8/26/50
Recommended noise source	NoiseCom 346 (see table at right)
Power supply	via 28 V connector for R&S®FSP/FSU/FSQ (BNC)
Preamplifier	gain approx. 20 dB, noise figure max. 5 dB

## Ordering information

Order designation	Type	Order number
Application Firmware for Noise Figure and Gain Measurement for R&S®FSP/FSU/FSQ/FSUP/FSMR	R&S®FS-K30	1300.6508.02
<b>Options</b>		
External Generator Control	R&S®FSP-B10	1129.7246.02
Electronic Attenuator, 0 dB to 30 dB, and 20 dB Preamplifier	R&S®FSU-B25	1144.9298.02
Electronic Attenuator, 0 dB to 30 dB, 5 dB steps, integrated preamplifier	R&S®FSP-B25	1129.7746.02
3.6 GHz to 26.5 GHz RF preamplifier for R&S®FSU26 <sup>1) 2) 3)</sup>	R&S®FSU-B23	1157.0907.02
3.6 GHz to 26.5 GHz RF preamplifier for R&S®FSQ26 <sup>1) 2) 3)</sup>	R&S®FSQ-B23	1157.0907.03
30 dB RF preamplifier 100 kHz to 50 GHz for R&S®FSU26/43/46/50 R&S®FSQ26	R&S®FSU-B24	1157.2100.50
Noise source	see table in document PD 0758.0839.32	

<sup>1)</sup> Factory installation only.

<sup>2)</sup> Not for retrofit.

<sup>3)</sup> R&S®FSU-B25 required.

Note: Application Firmware R&S®FS-K30 can only be installed on analyzers that run under the Windows XP operating system.