



R&S®FPL-EMI/IOT SPECTRUM ANALYZER BUNDLE FOR EMI DEBUGGING VERIFICATION

The perfect choice for



Key specifications	
Frequency range	5 kHz to 3 GHz (R&S®FPL-EMI/IOT3) 5 kHz to 7.5 GHz (R&S®FPL-EMI/IOT7)
Resolution bandwidth (-3 dB)	Sweep filters: 100 kHz to 10 MHz in 1/2/3/5 sequence FFT filters: 1 Hz to 50 kHz in 1/2/3/5 sequence
DANL at 1 GHz (preamp on)	< -163 dBm/Hz with the R&S®FPL1-B22
EMI filters (6 dB)	CISPR 16-1-1: 200 Hz, 9 kHz, 120 kHz, 1 MHz MIL-STD-461: 10 Hz, 100 Hz, 1 kHz, 10 kHz, 100 kHz, 1 MHz
EMI detectors (CISPR 16-1-1)	Quasi-peak, CISPR-average, RMS-average
Number of points	101 to 200 001 with R&S®FPL1-K54

Detecting and eliminating electromagnetic interference

The R&S®FPL-EMI measurement application adds EMI diagnostic functionality to the R&S®FPL signal and spectrum analyzer. It is the ideal tool for debugging and precompliance applications.

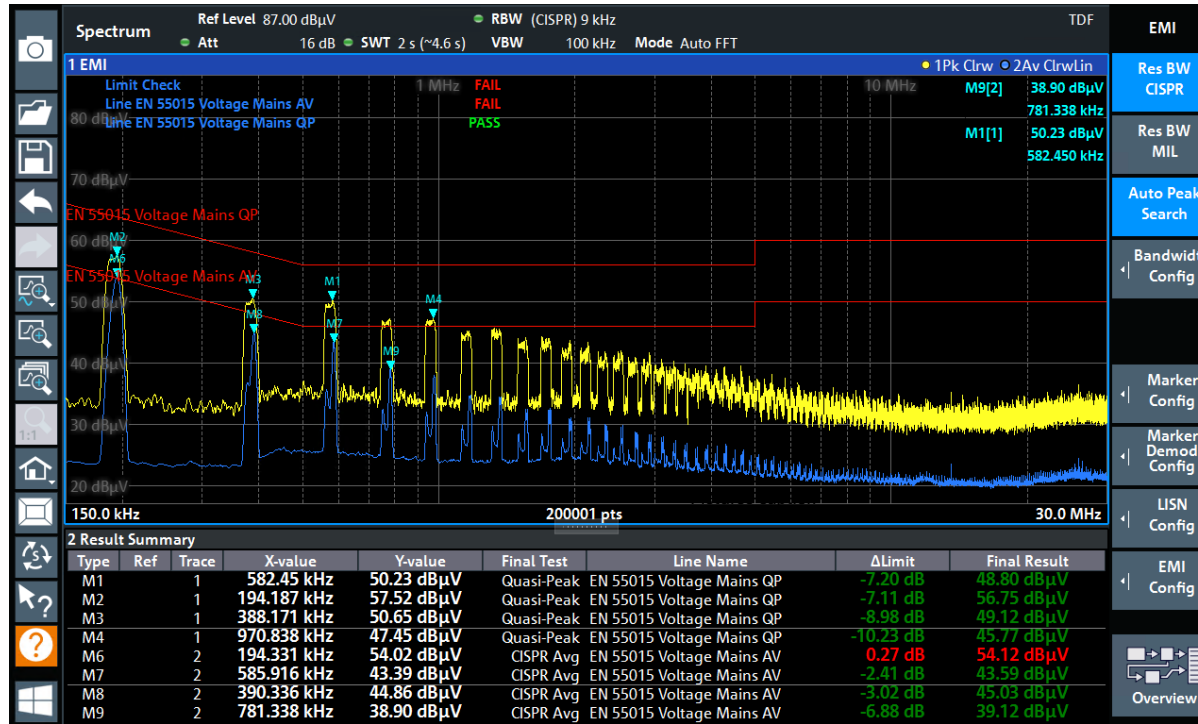
- ▶ Emission measurements in line with EMI standards
- ▶ Extensive limit line library for quick pass/fail decisions
- ▶ Transducer factor library with correction value tables for EMI accessories (antennas, clamps, line impedance stabilization networks (LISN), preamplifiers, cables and attenuators)
- ▶ Remote control of Rohde & Schwarz LISNs with the R&S®FPL1-B5 option
- ▶ Acoustic analysis using FM and AM signal demodulation with the R&S®FPL1-B5 option
- ▶ Logarithmic spectrum display
- ▶ Measurement automation: signal sweep with maximum peak detector and subsequent disturbance maxima analysis with CISPR detectors

Your benefit	Features
Fast and reliable disturbance detection	Automatic disturbance maxima detection and analysis with CISPR detectors
Smooth EMI certification process	RBWs and detectors in line with CISPR 16-1-1 and MIL-STD-461



For more information, visit
www.rohde-schwarz.com/product/FPL

Example of emission analysis: voltage mains measurement of a lamp



Two detectors are used for the sweep: positive peak (yellow curve) and average (blue curve). Pass/fail information is provided in accordance with the defined limits (red lines). The identified maxima ("Auto Peak Search") are automatically measured using the related CISPR detectors (quasi-peak and average) and listed in the results table. The final pass/fail status is clearly shown. The R&S®FPL1000 applies the correction values (transducer factor) of the LISN used to the measurement results.

Popular accessories	
Description	Type
R&S®FPL1003 signal and spectrum analyzer, 5 kHz to 3 GHz, with the following options: R&S®FPL1-K54 EMI measurement application	R&S®FPL-EMI3 (1304.0004P61)
R&S®FPL1-B5 Additional interfaces for audio demodulation and LISN remote control	R&S®FPL-IOT3 (1304.0004P64)
R&S®FPL1-B9 Internal generator	
R&S®FPL1-B22 RF preamplifier	
R&S®FPL1007 signal and spectrum analyzer, 5 kHz to 7.5 GHz, with the following options: R&S®FPL1-K54 EMI measurement application	R&S®FPL-EMI7 (1304.0004P62)
R&S®FPL1-B5 Additional interfaces for audio demodulation and LISN remote control	R&S®FPL-IOT7 (1304.0004P63)
R&S®FPL1-B9 Internal generator	
R&S®FPL1-B22 RF preamplifier	
Other recommended accessories	
Type	
Two-line V-network, 9 kHz to 30 MHz, for disturbance voltage measurements	R&S®ENV216 (3560.6550.12) Germany (3560.6550.13) UK (3560.6550.16) USA
R&S®HZ-15 probe set for E and H near field emissions, 30 MHz to 3 GHz	R&S®HZ-15 (1147.2736.02)
R&S®HZ-17 probe set for H near field emissions, 30 MHz to 3 GHz	R&S®HZ-17 (1339.4141.02)
R&S®ELEKTRA license dongle (for spectrum analyzer and EMI receiver)	R&S®EMCPC (5601.0018.02)
EMI emission test software (for spectrum analyzer and EMI receiver)	R&S®ELEMI-E (5601.0030.02)

Rohde & Schwarz representative