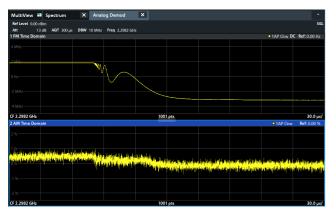
R&S®FPL1-K7 Analog Modulation Analysis Simple-to-use AM/FM/φM demodulator



The perfect choice for	
Analysis of AM and FM audio signals	Transient and settling measurements of oscillators such as VCOs and PLLs
Troubleshooting AM/FM transmitters	Simple chirp analysis of pulsed or continuous wave signals

100 Hz to 40 MHz
158 ms to 83184 s
20 Hz, 50 Hz, 300 Hz
3 kHz, 15 kHz, 23 kHz, 150 kHz; 5/10/25 % of demodulation bandwidth
25 µs, 50 µs, 75 µs, 750 µs
0.1 % (RF ≤ 3 GHz)
130 Hz (RF \leq 3 GHz)

Your benefit	Features
All necessary results on one screen	Parallel indication of e.g. spectrum, time domain, result summery
Detailed analysis of transmitters	Powerful analysis of AM, FM and ϕM audio signals
Measurement of VCO's (e.g. during switching phase)	Analysis of frequency and amplitude transients

Simple-to-use AM/FM/qM demodulator

The R&S®FPL1-K7 AM/FM/ ϕ M demodulation option converts the R&S®FPL1000 into an analog modulation analyzer for amplitude, frequency and phase modulated signals. It measures characteristics of the useful modulation and factors such as residual FM and synchronous modulation. Users can choose from a set of low-pass, high-pass, deemphasis and weighting filters.

R&S®FPL1-K7 functions includes:

Demodulation of AM, FM and φM signals
Simultaneous viewing of:

- Modulation signal versus time
- FFT spectrum of the modulation signal
- RF signal power versus time
- FFT spectrum of the RF signal
- Table with numeric display of:
 - Deviation or modulation depth, RMS weighted, +peak, -peak, ± peak/2
 - Modulation frequency
 - Carrier frequency offset
 - Carrier power
 - Total harmonic distortion (THD) and SINAD

▷ For more information, visit

www.rohde-schwarz.com/catalog/FPL1000



Option Sheet | 01.10 R&S°FPL1-K7 Analog modulation analysis

Modulation depth and total harmonic distortion (THD)



Measurement of modulation depth, SINAD and THD of a test signal, AM modulated with a 1 kHz sine wave at a modulation depth of 0.8 $\,$

Frequency deviation measurement



Frequency deviation measurement: display of modulation signal together with peak and RMS deviation, carrier frequency offset and carrier power

Model configuration information		
Description	Туре	
Signal and spectrum analyzer, 5 kHz to 3 GHz	R&S®FPL1003	
Signal and spectrum analyzer, 5 kHz to 7.5 GHz	R&S [®] FPL1007	
Vector network analyzer, two ports, 3 GHz	R&S®ZNL3	
Vector network analyzer, two ports, 6 GHz	R&S®ZNL6	
Options		
AM/FM/φM measurement demodulator	R&S®FPL1-K7	
40 MHz analysis bandwidth	R&S®FPL1-B40	
Spectrum analyzer function for R&S®ZNL3	R&S®ZNL3-B1	

MultiView 📰 Spectrum X Analog Demod X Frequency and amplitude Ref Level 0.00 dBm SGL transient of a VCO during 13 dB AQT 300 μs DBW 10 MHz Freq 2.2982 GHz Att 1 FM Time Domain • 1AP Clrw DC Ref: 0.00 Hz switching phase CF 2.2982 GHz 1001 pts 30.0 µs/ 2 AM Time Domain • 1AP Clrw Ref: 0.00 % ty dalah bada dalah badala da alima dati bira da pikuna da sakun di ahar da bana garan da piri da sina b alled any distant party in the state way, have been any built in a said CF 2.2982 GHz 1001 pts 30.0 µs/

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VCO transient measurement