R&S®FSV3000 ET FSVA3000

Applications pour l'Aérospatiale et la Défense

Les principales caractéristiques

Spécifications	R&S®FSV3000	R&S®FSVA3000
Plancher de bruit	Standard : -151 dBm/Hz	Standard : -152 dBm/Hz
	Option Préampl. : < -164 dBm/Hz	Option Préampl. : < -165 dBm/Hz
IP3 à 1 GHz	+15 dBm	+18 dBm
Bruit de phase à 1 GHz, 10 kHz offset	Standard : < -107 dBc/Hz	Standard : <-120 dBc/Hz
	Optionnel B710 : < -114 dBc/Hz	Optionnel B710 : < -127 dBc/Hz
Bande I/Q interne	Standard : 28 MHz Jusqu'à 200 MHz	Standard : 28 MHz Jusqu'à 1 GHz
Profondeur mémoire	Standard : 100 M échantillons Optionnel B114 : 800 M échantillons	Standard : 100 M échantillons Optionnel B114 : 800 M échantillons
Autre	- Compact Flash contenant toutes les données extractibles (R&S®FSV3-B20) - Format Compact : 19'' - 4 U - Ecran Multitouch 10,1''	

Les fonctions standards :

Enregistreur SCPI	Création automatique d'un script (CVI, C++, Python, Matlab) après une configuration manuelle de la mesure
Fonctions de mesures	TOI, Harmonique, Densité de bruit, C/N, Channel Power, Time Domain Power, Spectrogramme (2D/3D)
Support des commandes SCPI	856x, 859x,71xxx, PSA, PXA, FSx

Les modèles :

► R&S®FSV3004 - R&S®FSVA3004 : 10 Hz* – 4 GHz
► R&S®FSV3007 - R&S®FSVA3007 : 10 Hz* – 7.5 GHz
► R&S®FSV3013 - R&S®FSVA3013 : 10 Hz* – 13.6 GHz
► R&S®FSV3030 - R&S®FSVA3030 : 10 Hz* – 30 GHz
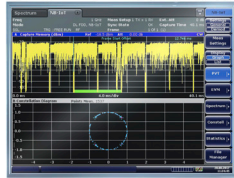► R&S®FSV3044 - R&S®FSVA3044 : 10 Hz* – 44 GHz

*2 Hz en option sur les modèles R&S®FSVA3000

R&S®FSV3-K6 Analyse d'impulsion

- **Timing:** pulse width, pulse repetition interval, duty cycle, rise/fall time, settling time, timestamp, off time
- **Frequency:** carrier frequency, pulse-to-pulse frequency difference, chirp rate, frequency deviation, frequency error
- **Power:** peak power, average power, peak-to-average power ratio, pulse-to-pulse power ratio
- **Phase:** carrier phase, pulse-to-pulse phase difference, phase deviation, phase error
- **Amplitude:** droop, ripple, overshoot width, top/base power, average on power, average transmitted power, minimum/peak power, peak-to-average/peak-to-min power ratio, pulse-to-pulse power ratio
- **Point-in-pulse measurements:** frequency, amplitude, phase versus pulse, trend charts and histograms for all parameters
- **Pulse statistics:** standard deviation, average, maximum, minimum

R&S®FSV3-K60 Analyse de signaux FMCW (Chirp) ou saut de fréquences (Hopping)

- **Frequency hopping signals:** dwell time, settling time, switching time, frequency deviation, power, phase deviation, power ripple
- **Chirp signals:** frequency deviation, chirp begin, chirp length, chirp rate, chirp state deviation, phase deviation, power, power ripple
- Spectrogram and section of spectrogram, tabular display, frequency, frequency error, phase and amplitude versus time, FFT spectrum
- Pan and zoom functions to select analysis region using touch gestures; supported in spectrogram, spectrum and time domain trace display
- Trends and histograms for all parameters
- Hop/chirp statistics: standard deviation, average, maximum, minimum

R&S®FSV3-K70 Analyse de signaux vectoriels
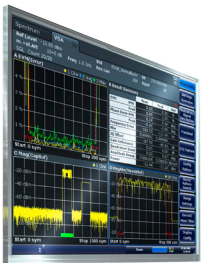
- Analysis of digitally modulated single carriers down to bit level: EVM, MER, Phase error, Magnitude error, Carrier frequency error, Symbol rate error, I/Q skew, Rho, I/Q offset, I/Q imbalance, quadrature error, Amplitude droop, Power
- Eye diagram, Constellation diagram, Vector diagram, Histogram, Equalizer,
- Multiple modulation formats e.g.: 2FSK to 64FSK, MSK, GMSK, DMSK, Multiple PSKs (e.g. BPSK, QPSK, 8PSK, 3π/8-8PSK and more), 16QAM to 1024QAM, 16APSK (DVB-S2), 32APSK (DVB-S2), 2ASK, 4ASK, User-definable constellations
- BER (Bit Error Rate) of known data streams and bit streams generated with PRBS shift registers (R&S®FSV3-K70P)
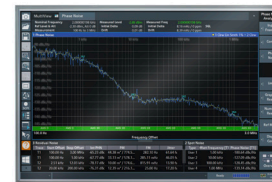- Analysis of vector modulated signals with multiple modulations, e.g. DVB-S2(X) (R&S®FSV3-K70M)

R&S®FSV3-K30 et R&S®FSV3-K40 Mesure de facteur de bruit et bruit de phase

- **Noise figure, Gain,** Noise temperature, Y factor, ENR
- Measurements on non-frequency-converting DUTs and frequency-converting DUTs (SSB and DSB)
- **SSB phase noise,** Residual FM and residual φM, Jitter
- 1 Hz to 10 GHz offset range
- Definable evaluation ranges for residual FM/φM
- Signal tracking, Optional suppression of spurious emissions

R&S®FSV3-K544 Compensation de la réponse en fréquence par fichier Touchstone SnP
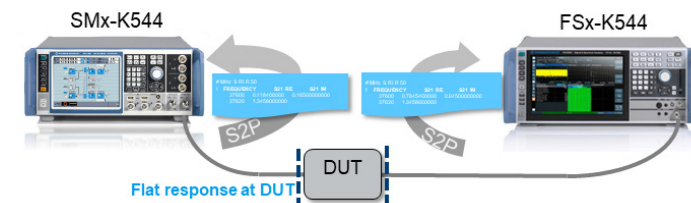
- Frequency Response Correction (amplitude and phase) of the measurement setup
- Cascading multiple SnP files
- Mismatch correction with s1p file

Découvrez également :

- R&S®FSV3-K7 : Modulation AM/FM/φM
- R&S®FSV3-K18 : Amplifier measurements
- R&S®FSV3-K9 : Power Sensors support
- R&S®FSV3-K54 : EMI measurements