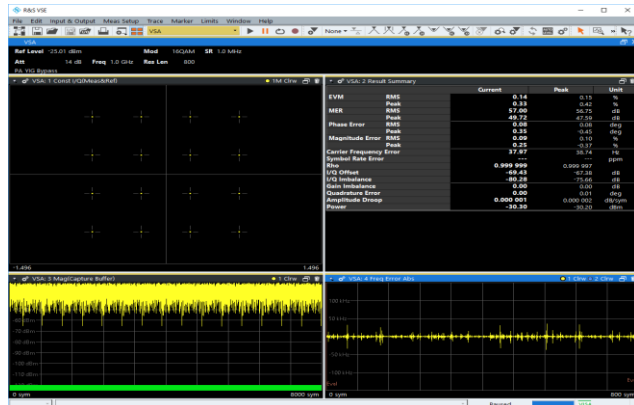


R&S®VSE-K70 Vector Signal Analysis

Flexible modulation analysis down to the bit level



Key specifications

Modulation formats

- 2FSK, 4FSK
- MSK, GMSK, DMSK
- BPSK, QPSK, offset QPSK, DQPSK, 8PSK, D8PSK, $\pi/4$ -DQPSK, $3\pi/8$ -8PSK, $\pi/8$ -D8PSK
- 16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 512QAM, 1024QAM, 2048QAM, 4096QAM
- 16APSK (DVB-S2), 32APSK (DVB-S2), 2ASK, 4ASK, $\pi/4$ -16QAM (EDGE), $-\pi/4$ -16QAM (EDGE), SOQPSK

Flexible modulation analysis down to the bit level

The R&S®VSE-K70 option digitally analyzes modulated single-carrier signals down to the bit level. The clearly structured operating concept simplifies measurements despite the wide range of analysis tools.

- The R&S®VSE-K70M multicarrier modulation analysis application allows DVB-S2X signals to be analyzed
- The R&S®VSE-K70P allows measurement of raw bit error rate (BER) on PRBS data up to PRBS23

The perfect choice for

Troubleshooting digital transmitters and signal path components

Analysis of digital modulation signals

Finding signal errors such as incorrect filtering and spurious emissions

Equalizer for filter design optimization

Signal transmitter characterization

Bit error calculation on known data sequences

Your benefit

Results automatically adapted to selected standard

Easy signal analysis of DVB-S2X signals

High flexibility

Features

A lot of standards available

Additive option available for multicarrier modulation measurements

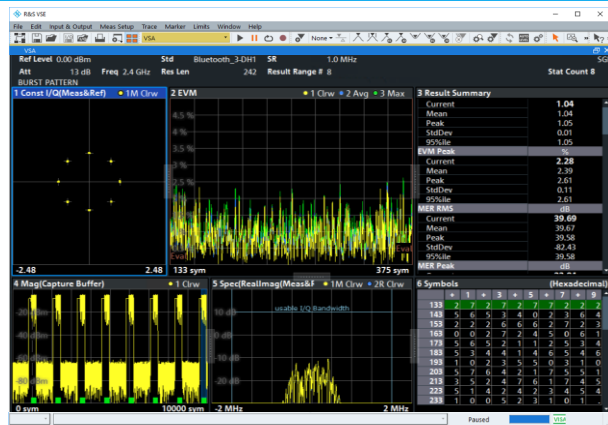
User-definable constellations and mappings

Numerous standard-specific default settings

- User-definable constellations and mappings
- GSM, GSM/EDGE
- 3GPP WCDMA, EUTRA/LTE, CDMA2000®
- TETRA, APCO25
- Bluetooth®, ZigBee
- DECT
- DVB-S2

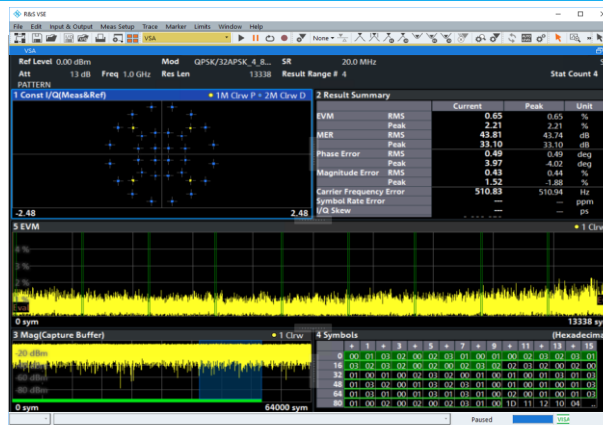
► For more information, visit www.rohde-schwarz.com/catalog/VSE

Analysis of Bluetooth 3-DH1 signal



Analysis of a Bluetooth 3-DH1 signal. Constellation diagram, EVM, result summary, magnitude, spectrum and symbols with pattern detection all in one view.

Analysis of a multi-modulation signal



Demodulation of a DVB-SX2 multi-modulation signal with the R&S®VSE-K70M option (R&S®VSE-K70 option required).

Model configuration information

Description	Type
VSE base software	R&S®VSE
Vector signal analysis	R&S®VSE-K70
Multicarrier modulation analysis application	R&S®VSE-K70M ¹⁾
Measurement of the raw bit error rate (BER) on PRBS data	R&S®VSE-K70P ¹⁾
License dongle	R&S®FSPC
VSE software maintenance	R&S®VSE-SWM

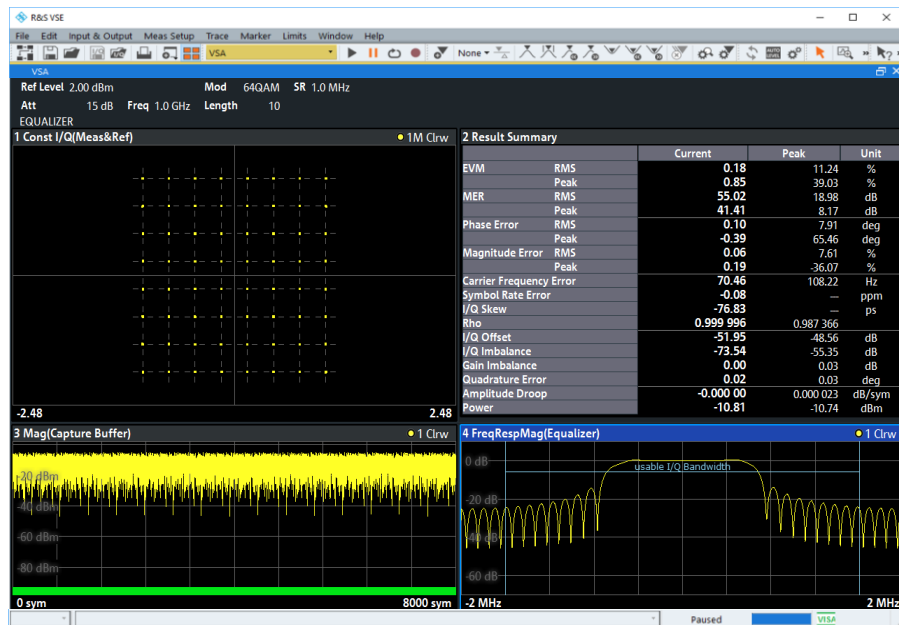
¹⁾ requires option R&S®VSE-K70

Instruments supported by VSE-K70

Description	Type
Spectrum analyzer 5 kHz to 3 GHz	R&S®FPL1003 ²⁾
Signal and spectrum analyzer, 5 kHz to 7.5 GHz	R&S®FSL1007 ²⁾
Vector network analyzer, two ports, 3 GHz	R&S®ZNL3 (requires R&S®ZNL-B1 option)

²⁾ 40 MHz analysis bandwidth R&S®FPL1-B4 option recommended

Analysis of a 64QAM signal



Analysis of a 64QAM signal with the R&S®VSE-K70 vector signal analysis option

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