

# In brief

## The R&S®ETC compact TV analyzer for digital TV transmitter measurements

**The R&S®ETC compact TV analyzer offers the full range of functions required for quality tests on digital ISDB-T, DVB-T and DVB-T2 transmitters. Network operators will benefit from this high-precision, compact and easy-to-use instrument that offers the best price/performance ratio in its class.**

The R&S®ETC mid-range, multistandard TV analyzer supports the ISDB-T, DVB-T and DVB-T2 digital terrestrial standards. It provides network operators with a cost-effective solution for testing low-power and medium-power transmitters during commissioning, maintenance and servicing. The R&S®ETC is ideal for this task – offering a wide range of functions including spectrum analysis, TV analysis, scalar network analysis and power measurement in a single instrument. The R&S®ETL TV analyzer remains the ultimate benchmark for reference measurements and for commissioning high-power transmitters.

The R&S®ETC can also be used for network coverage measurements, such as during drive tests. The extremely compact R&S®ETC has a height of only three HU and a width of ½ 19". The TV analyzer fully supports the DVB-T2 single and multiple PLP transmission modes. It provides a detailed display of constellation diagrams, channel impulse response, shoulder distance of the OFDM spectrum and MER(k) (modulation error ratio versus OFDM carriers). The R&S®ETC has an integrated preselection and preamplifier. This increases both dynamic range and sensitivity, so that even weak signals received over the air can be measured. Connecting an external power sensor turns the R&S®ETC into a high-precision RF power meter.

The core component of the R&S®ETC is an FPGA-based demodulator, which demodulates the received signal in realtime and helps to achieve high measurement accuracy. Featuring high measurement speed, the analyzer reliably detects even short-term interfering signals that occur at irregular intervals. Realtime demodulation allows continuous measurement of the bit error ratio (BER) of the received signal. The decoded transport stream is available at the analyzer's ASI output for further processing, for example to display TV pictures.

Users can save all settings for a specific measurement task as a measurement profile, which can be recalled as necessary. This saves time and helps to prevent operator errors by reducing the number of manual entries to be made. For coverage measurements, the characteristic of the test antenna must be taken into account. Antenna factors for a given test antenna can be saved in the R&S®ETC. They will then be used for the automatic compensation of the antenna's frequency response during measurements.

The R&S®ETCView PC software, which is included with the R&S®ETC, makes documentation of results easy. It also includes editors for generating channel tables, measurement profiles, transducer factors and limit-value tables, which are downloaded into the R&S®ETC. Data transfer between the R&S®ETC and the PC takes place over USB or LAN. The software also enables remote signal monitoring, for example at unattended transmitter sites.

For more information, visit [www.rohde-schwarz.com](http://www.rohde-schwarz.com) (search term: ETC)

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