



DVBT terrestrial signal analyzer

AMS-DVBT



- low weight, hand-held DVBT signal analyzer
- automatic recognition of TV channel type (digital/analog)
- automatic creation of a channel plan
- measurement of signal power level, pre- and post-BER, MER and constellation for all DVB-T modes (digital signals)
- measurement of video/audio power level, C/N and V/A ratios (analog signals)
- spectrum analyzer function
- 3-5 hours of continuous work (battery supply - depending on the operation mode)
- user-friendly interface
- power level measurement range: 30 to 120 dB μ V
- power level measurement accuracy: ± 1.5 dB
- two-year warranty

The digital television DVB-T has become a basic TV broadcasting standard in most European countries. **KABELKOM** has developed an extremely useful and reliable DVBT signal analyzer – **AMS-DVBT**. The **AMS-DVBT** can be used by technicians and engineers and has been designed for testing and adjustment of television and broadcasting distribution networks and antenna systems, especially home DVB-T receiving installations. It simplifies the DVB-T antenna/home network installation and maintenance. The reception of DVB-T signals cannot be simply verified by means of a TV receiver – the signal parameters should be measured, so a TV signal analyzer is absolutely necessary for those who install TV antennas. The **AMS-DVBT** allows the measurement of the channel power level and other parameters of TV signals with analog or digital (DVB-T) modulation. The meter can be used both in a laboratory or service center (with an external power source) and in the field (powered by its battery or using a car cigarette lighter socket).

With the AMS-DVBT you can:

- check whether the antenna direction toward a transmitter is aligned correctly
- check whether the TV signal power level is above a minimum level required for good reception (indirect TV coverage verification – E field intensity measurement)
- check whether other TV signal parameters at the antenna output, the antenna or distribution amplifier output or at a multitar output/subscriber outlet are within the accepted limits
- check cable attenuation
- check the antenna quality (gain)
- simply and quickly find a corroded connector, damaged splitters/cables/amplifiers/antennas
- verify the spectrum of the received signals and/or interfering signals.

SPECIFICATION

GENERAL

Dimensions: 193 x 94 x 53 mm
Weight: 0.46 kg
Normal operating conditions:
a) ambient temperature:
(23±5) °C
b) relative air humidity:
(55±25)%
c) atmospheric pressure:
84-106 kPa (630-795 mm Hg)

Rated operating conditions:
a) ambient temperature range:
-10 to +50 °C
b) relative air humidity:
<90% at 25 °C
c) atmospheric pressure:
84-106 kPa (630-795 mm Hg)

Storage temperature range: -20 to +50 °C

Storage humidity: <90% (at 30 °C)

POWERING

Battery type: Li-Ion
Battery capacity: 1.5 Ah (standard)
3 Ah (option)
Battery life: 3-5 hours of continuous work
(depending on the operation mode)
AC mains: AC 100/240 V 50/60 Hz
via 12 V/1.2 A charger
External DC source from 10 to 14 V and
ripple level no greater than 0.5 V

ELECTRICAL

Operating frequency range: 45 to 900 MHz
Resolution: 125 kHz

INPUT PARAMETERS:

- 🌐 **Input impedance** within operating frequency range: 75 Ω
- 🌐 **Input impedance** for frequencies up to 50 Hz: at least 200 kΩ
- 🌐 **Allowed AC input voltage** for frequencies over 5 MHz: 3 V
- 🌐 **Allowed AC and DC input voltage** for frequencies under 100 Hz: 150 V

- 🌐 **Level measurement range:** 30 to 120 dBμV
- 🌐 **Measurement level resolution:** 0.1 dB
- 🌐 **Accuracy** within 30 – 120 dBμV level range: ±1.5 dB (at 25°C)
- 🌐 **Accuracy** within operating temperature range: ±2.2 dB
- 🌐 **Measurement channel passband** for -3 dB level: 230 ± 60 kHz

INPUT TV SIGNAL MODULATION

- 🌐 **Channel bandwidth:** 8 MHz
- 🌐 **Channel modulation type:** COFDM
- 🌐 **Subcarriers modulation type:** QPSK, QAM16, QAM64
- 🌐 **Subcarriers number:** 2k, 4k, 8k
- 🌐 **Guard interval:** 1/32, 1/16, 1/8, 1/4
- 🌐 **Hierarchical modulation type:** α=1, α=2, α=4
- 🌐 **Code rate:** 1/2, 2/3, 3/4, 5/6, 7/8
- 🌐 **Operating channel power range:** 60 to 110 dBμV
- 🌐 **MER measurement range** (for QAM64, code rate 3/4): 18 to 35 dB
- 🌐 **MER measurement resolution:** 0.1 dB
- 🌐 **MER measurement accuracy** at operating channel power: ±2.0 dB
- 🌐 **BER measurement range**
- 🌐 **preBER:** 1.0x10⁻² to 1.0x10⁻⁸
- 🌐 **postBER:** 1.0x10⁻³ to 1.0x10⁻⁸
- 🌐 **Channel power threshold** (postBER less than 2x10⁻⁴)
- 🌐 **For QAM64, code rate 3/4, SNR=46 dB:** 40 dBμV
- 🌐 **Frequency auto tuning range:** ±0.500 MHz
- 🌐 **Warm-up time:** less than 5 min

IF YOU WANT TO PURCHASE THE METER OR OBTAIN MORE INFORMATION, CONTACT KABELKOM.

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