BROADCAST TOOL

DVB Explorer

Advanced DVB-T/T2/C/S/S2 Analyzer

DVB Explorer is a new-generation portable analyzer that provides detailed DVB component information. It is perfect for use in the field but what really makes this product one of a kind is the fact that it covers all DVB standards - T/T2, C and S/S2. It can receive live DVB T/T2, DVB C and DVB S/S2 signals and ensures complete and advanced MPEG decoding, ETSI TR 101 290 Layers 1,2 & 3 and multi-PLP analysis including PLP allocation, PLP extraction, T2 timestamp, T2/L1 pre- and post-signaling, BB frame, PID and EIT Tables.

It also supports MPEG transport stream analysis, plus MPEG-2 TS record and playback and MPEG-2 TS over IP forward. Powerful, practical and efficient, it has a compact and elegant design coupled with great features which include a selectable wide range IF filter bandwidth, a spectrum analyzer allowing checks of the RF carrier, constellation and Echo diagram display and precise measuring of RF, SNR, BER, CBER, PER, MER, SSI, SQI, C/N, Freq offset. All RF measurements can be stored into a log file for further analysis. This product lets users select between a predefined DVB channels scan or manual tune. PCR graphs and advanced EIT display are also available.

The device supports all modulation schemes from QPSK to 64QAM for DVB-T, QPS to 256QAM for DVB-T2, QAMQPSK to 32APSK for DVB-S/S2 and from 16QAM to 256QAM for DVB-C. File-based offline analysis is provided as well. The product offers an audio/video player supporting H.265/HEVC, H.264/MPEG-4 AVC, MPEG-1/2, AAC, MP3, etc. It also provides multistream support for DVB-S2, as well as support for DVB-T, DVB-T/T2 & T2 Lite.

DVB Explorer is a solution that has no parallel on the market. Easy to power up via the USB port of your Windows laptop and available at an affordable price, which further increases its appeal, this versatile multi-standard product is your must-have portable analyzer.

FEATURES

- **DVB-T/T2/C/S/S2 Compliant Receiver**
- **High-end Frequency Agile Digital Tuner**
- **Up to 110 dBµV direct RF Antenna Input**
- **Advanced MPEG Monitoring and PID Alarms**
- **Detailed DVB-T/T2 component information**
- **TR 101 290 Monitoring, Priority 1, 2 and 3**
- **Predefined DVB channels scan or manual tune**
- **RF Spectrum & Constellation display**
- **PLP extraction and TS PLP analysis**
- **Advanced QPSK & QAM Analyzer**
- **BandScanner and RF Spectrum Analyzer**
- **SAE - Service Availability Error**
- **SDE - Service Degradation Error**
- **Very Intuitive Navigational Menu**
- **Levels measurement with data history**
- **Spectrum analyzer allowing checking of the RF Carrier**
- **Service Availability Error & Service Degradation Error**
- **Protected access to the device settings**
- **Firmware updates will ensure improved operation**
- **Easy Installation and Setup**

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SPECIFICATIONS

RF Input DVB-T/T2/C	
Tuning Range	Frequency Agile 40-1000 MHz
Tuning Step	10kHz
Tuner Sensitivity	30 dBµV
Antenna Port	BNC Connector, Female, 50Ω
RF input level	up to 120 dBµV
Supported Standards	DVB-T – ETSI EN 300 744; DVB-T2 & T2 Lite – ETSI EN 302 755 v1.3.1, ETSI TS 102 831; T2-MI – ETSI TS 102 773; DVB-C - 16/64/128/256/1024/4096QAM

DVB-T/T2/C Measurements and Accuracy	
RF input level	30-110 dBµV ±1 dB
MER	0 to 40 dB (±1 dB)
SNR	0 to 40 dB (±1 dB)
BER Before-Viterbi (DVB-T)	1x10-2 to 1x10-5
BER Post-Viterbi(DVB-T)	1x10-2 to 1x10-8
BER (DVB-T2)	Before/Post-LDPC, Post-BCH
Signal Lock	Lock/Unlock
Modulation parameters	L1 signaling in DVB-T2, TPS in DVB-T
SFN Monitor	Channel Impulse Response (CIR); Echoes Delay and Power Level alarms
ETSI TR 101 290 Monitor	ETSI TR 101 290 Priority 1, 2 and 3; MPEG-2 TS Monitor, TS (with MIP packet) Network Delay
T2-MI Monitor	Single/Multi-PLP support; ETSI TR 101 290 T2-MI packet, L1 pre/post signaling; T2-MI Network Delay; PLP extraction and TS PLP analysis (ETR 101 290)
QoS	SAE (Service Availability Error), SDE (Service Degradation Error)
Round-Robin Logger	Monitor sequentially multiple channel frequencies or PLPs
RF Spectrum Display	RF Spectrum with SPAN 10 MHz
Constellation Display	QPSK, 16QAM, 64QAM, 256QAM
Other Features	AV Freeze Detection, DOCSIS Monitoring

RF Input DVB-S/S2	
Tuning Range	950 to 2150 MHz (LNB down conversion required)
Antenna Port	F Connector, Female, 75Ω
Supported Standards	DVB-S, DVB-S2
DVB-S	QPSK, code rates: 1/2, 2/3, 3/4, 5/6, 7/8
DVB-S2	CCM, VCM and ACM Modes Support; QPSK code rates: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10; 8PSK code rates: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10; 16APSK code rates: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10; 32APSK code rates: 3/4, 4/5, 5/6, 8/9, 9/10
Symbol rates	DVB-S 65Msps QPSK; DVB-S2 65Msps QPSK, 60Msps 8PSK, 45Msps 16APSK

DVB-S/S2 Measurements and Accuracy	
RF input level	30-110 dBµV ±1 dB
MER	0 to 40 dB (±1 dB)
CNR	up to 40 dB ±0.5 dB
BER (DVB-S)	Pre-Viterbi, Post-Viterbi
BER (DVB-S2)	Pre-LDPC, Post-LDPC, PER; Eb/N0, link margin, modulation parameters; MultiStream support, PLS support
Signal Lock	Lock/Unlock
Modulation parameters	L1 part 2 signaling in DVB-C
ETSI TR 101 290 Monitor	ETSI TR 101 290 Priority 1, 2 and 3; MPEG-2 TS Monitor
T2-MI Monitor	Single/Multi-PLP support; PLP extraction and TS PLP analysis (ETR 101 290); SAE (Service Availability Error), SDE (Service Degradation Error); Monitor sequentially multiple channel frequencies or PLPs
QoS Monitor	ETSI TR 101 290 SAE, SDE
Round-Robin Logger	up to 40 channels
RF Spectrum Display	RF Spectrum with SPAN 10 MHz
Constellation Display	QPSK
Other Features	Audio/Video Freeze Detection, DOCSIS Monitoring

Measurement storage	
Storage	Database
Data formats	Microsoft Excel compatible format (csv)

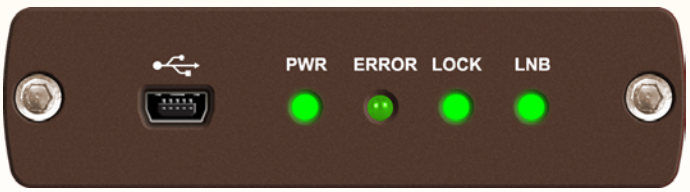
User interface	
Indicators	4 LEDs, front panel

Operating conditions	
Temperature	-15°C to 55°C
Humidity	< 95%, non-condensing
Altitude	0 to 5000m above sea level
EMC immunity	6V/m

Communication	
Type	USB 2.0 compatible
Connector	Mini USB, front panel

Power Requirement	
Power supply	USB powered
Connector	Mini USB, front panel

Size and Weight	
Dimensions (W;H;D)	86 x 25 x 125 mm
Shipping Weight	230 x 70 x 172 mm / 0.533 kg



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