



DIVICATCH RF ISDB-T/Tb

ISDB-T/Tb





Your own world's finest Analyzer

THE **DIVICATCH RF ISDB-T/Tb** IS A POCKET ANALYZER CUMULATING ISDB-T/TB LIVE RECEPTION WITH TRANSPORT STREAM REAL-TIME ANALYSIS, RECORDING AND STREAM PLAYING.

The product provides two levels of **real-time analysis**:

- **RF**: measures key RF signal parameters (Level, MER, SNR, BER) and indicates the modulation parameters (**TMCC, Layers A/B/C**), the constellation as well as the **Channel Impulse Response** (CIR).
- Transport Stream: the 3 priority levels of ETSI TR 101 209 are implemented. Bitrate can be analyzed globally, by service, by PID. Alarm thresholds are customizable. Baseband streams can be captured using the **ASI input** or the PC's **IP input**. File-based offline analysis is also available.

The alarm events and RF measurements (trends) can be stored into report files.

In addition, the DiviCatch RF ISDB-T/Tb can be used as a **gateway** which retransmits **over ASI** or **IP** the baseband stream coming from the RF input. The TS file **player** functionality allows to have an **ASI output** on the same device, which represents a real added value.

TestTree proposes a real-time analysis application, **DiviSuite**, running on **MS Windows**, connected to the DiviCatch RF ISDB-T/Tb via **USB connectivity**, with customizable monitoring screens. The application integrates a video decoder enabling **real-time decoding** of all unencrypted services (**H.265/HEVC**, **H.264/MPEG-4 AVC**, **MPEG-1/2**, **AAC**, **MP3...**). It also features live stream capture capabilities for baseband multiplex **recording** into a TS file.

The DiviCatch RF ISDB-T/Tb, a 4-in-1 product featuring both **RF** and **baseband** analysis, and both **TS recording** and **player** capabilities, offers a cost-effective test solution for field, lab or head-end applications.



- **△ TO TEST APPLICATIONS**
- **☐ TO VALIDATE BOTH RF & BASEBAND**
- ☑ TO ACHIEVE COST-EFFICIENCY ON BROADCAST NETWORKS

CHARACTERISTICS

1x RF input for ISDB-T/Tb

1x ASI input/output

IP source analysis (from PC)

RF measurements: signal level, SNR, MER, BER per Layer A/B/C

Graphical constellation, Channel Impulse Response display

PIDs and PSI/SI parsing, PCR graphs

BTS analysis: IIP packet parsing, TMCC alarms

ETSI TS 101 290 validation (priority 1, 2, 3)

Audio/Video player (H.265/HEVC, H.264/MPEG-4 AVC, MPEG-1/2, AAC, MP3...)

TS record and playback

TS over IP forward (PC's Ethernet interface selection)

Compatible MS Windows XP/Vista/7/8/10

USB self-powered, 160 g

APPLICATIONS

- R&D Streams or Signal Analysis
- ISDB-T/Tb Broadcast Troubleshoot
- Installation & Maintenance Test Tool
- Head-End/TX site/off-air analysis
- Portable Demonstration Setup

KEY BENEFITS

- 4-in-1 product: RF + Baseband + Recorder + Player
- Compact (pocket size, 160 g) and USB self-powered
- Receive live ISDB-T/Tb signals
- Analyze/Validate TS Layer in real-time
- All modulation schemes supported (DQPSK, from QPSK to 64QAM)
- Add your own table and specifications Analysis (PSI/SI ...)



TECHNICAL CHARACTERISTICS

RF

Connector In 1x F-type female - 75 Ω Sensitivity -80 to -5 dBm / 28 to 104 dB μ V

Frequency range 40 to 1000 Mhz Channel bandwidth 6, 7 & 8 MHz

Modulation DQPSK, from QPSK to 64QAM

DVB-ASI

Connector In/Out 1x BNC female - 75 Ω

Max bitrate 140 Mbps

USB Data connector 1x USB2 B-Type

Power supply USB self-powered

Environment

Operating temperature -20 to 55 °C / -4 to 131 °F

Physical

Dimensions 135 x 62 x 27 mm / 5.3 x 2.4 x 1 in

Weight 160 g

RF MEASUREMENTS

All measurements are made in real-time

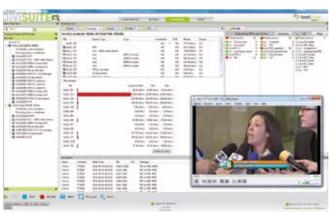
Graphical display Constellation, Channel Impulse Response

-90 to -5 dBm / 18 to 104 dBμV (0.1 dBm resolution)

SNR 0 to 40 dB (0.1 dB resolution)

MER 0 to 32 dB

BER Post-Viterbi, Post-RS PER per Layer A/B/C



BASEBAND TRANSPORT MONITORING

TS features analyzed in real-time from either source:

- RF or DVB-ASI through USB from the DiviCatch
- IP from the PC's Ethernet interface

Or analyzed offline from TS file source

ETSI TR 101 290: priorities 1, 2, 3

Service information

- PSI/SI table display for MPEG, DVB, BTS; including private tables
- Service components type and structure
- PID summary

Bitrate monitoring

• Overall, by Service (Program), by PID

PCR Accuracy graphs

BASEBAND TRANSPORT PROCESSING

Audio/video decoding (unencrypted programs): stream display
• H.265/HEVC, H.264/MPEG-4 AVC, MPEG-1/2, AAC, MP3...

Recording of the entire multiplex (MPTS/SPTS) into a TS file **Real-time forward** of the entire multiplex to **ASI** or **IP** (unicast or multicast over UDP streaming)

TS files playback:

- Loop/segment play modes
- Stream playlist handling, bitrate auto-detection with PCRs
- Null packet removal

ORDERING CODES

DiviCatch RF ISDB-T/Tb ISDB-T/Tb Pocket Analyzer
Shipped bundled with DiviSuite Base software for MS Windows XP/Vista/7/8/10

Software options RF Scope RF Analysis TS Analyzer TS Analyzer TS Analysis (includes BTS)

(48HMAX SHIPMENT

All Options Bundle (RF + TS)

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