

DIVIDUAL



DIVIDUAL T2MI™

DVB-T2®

The world most advanced Analyzer for DVB T2-MI!

THE **DIVIDUAL T2MI** IS A **POCKET ANALYZER** PROVIDING DVB T2-MI AND MPEG-2 TS REAL-TIME ANALYSIS, RECORDING AND STREAM PLAYING.

The DiviDual T2MI provides **real-time analysis** at different levels:

- **T2-MI**: complete multi-PLP analysis: T2 L1 pre/post signaling, PLP allocation (BB frame, TS, padding/overflow), T2 timestamp, BB frame, ISSY field, PLP extraction.
- **MPEG-2 TS**: the 3 priority levels of ETSI TR 101 290 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 **player** functionality allows to have an **ASI output** on the same device, which represents a real added value.

ENENSYS TESTSYSTEMS has implemented a new and very intuitive GUI, DiviSuite, which provides customizable monitoring screens. The application integrates a video decoder enabling **real-time decoding** of all unencrypted services (**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 DiviDual T2MI, a 3-in-1 product featuring **baseband analysis, recording** and **player** capabilities, offers a cost-effective test and stream player solution for lab or head-end applications.



- **MOST COMPLETE T2-MI MULTI-PLP ANALYZER**
- **TO VALIDATE T2-MI PACKETS**
- **TO MONITOR BY PLP**
- **TO ACHIEVE COST-EFFICIENCY ON T2 BROADCAST NETWORKS**

APPLICATIONS

- R&D Streams Analysis and Generation
- DVB-T2 gateway output validation
- Installation & Maintenance Test Tool
- Portable Demonstration Setup

CHARACTERISTICS

1x ASI input and 1x ASI output
IP source analysis (from PC)
T2-MI analysis: L1 pre & post signaling, T2 frame statistics, BB frame header, ISSY field, T2 timestamp
PIDs and PSI/SI parsing, PCR graphs
ETSI TR 101 290 validation (Priority 1, 2, 3)
Audio/Video player (H.264/MPEG-4 AVC, MPEG-1/2, AAC, MP3...)
MPEG-2 TS record and playback
MPEG-2 TS over IP forward (PC's Ethernet interface selection)
Compatible MS Windows XP/Vista/7/8

BENEFITS

- 3-in-1 product: Baseband Analyzer + Recorder + Player
- **Compact** (115 x 62 x 27 mm, **140 g**) and USB self-powered device
- Parse all **T2 parameters (L1 signaling, BB frame, ISSY field, T2 frame)**
- PLP filter and MPEG-2 TS extraction by PLP
- Single & Multi PLP
- Analyze and validate DVB T2-MI and MPEG-2 TS Layer in real-time
- A must-have Lab tool



Device configuration



Monitoring view

TECHNICAL CHARACTERISTICS

DVB-ASI

Connector In	1x BNC female - 75 Ω
Connector Out	1x BNC female - 75 Ω
Max bitrate	140 Mbps

USB Data connector	1x USB2 B-Type
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Power supply	USB self-powered
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Environment

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

Dimensions	115 x 62 x 27 mm / 4.5 x 2.4 x 1 in
Weight	140 g

BASEBAND TRANSPORT MONITORING

T2-MI/ MPEG-2 TS features analyzed in real-time from either source:

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

Or analyzed off-line from source:

- TS file

ETSI TR 101 290

- Priorities 1, 2 and 3

T2-MI

- Single & Multi-PLP (PLP user selection)
- T2 L1 pre/post signaling: frame, cells, OFDM symbols, # FEC, interleaving, TI block size
- PLP allocation: BB frame padding, TS padding, TS overflow
- BB frame, ISSY field, T2 timestamp, PLP extraction

Service information

- PSI/SI table display for DVB services
- PSIP table display for ATSC services
- PID Summary

Bitrate monitoring

- Overall, by Service (Program), by PID

PCR

- PCR Accuracy graphs

SERVICES PROCESSING

- MPEG-4/AVC, MPEG-1/2 services decoding (unencrypted programs): video stream display
- Recording of the entire multiplex (T2-MI / MPTS / SPTS) into a TS file
- Real-time forward of the entire multiplex to ASI or IP (unicast or multicast) over UDP streaming

STREAM PLAYING

- Offline TS file stream analysis
- Loop/segment play modes
- Stream playlist handling
- Bitrate auto detection with PCRs
- Null Packet Removal

ORDERING CODE

DiviDual T2MI T2-MI Analyzer, Recorder, Player
Shipped bundled with DiviSuite software for MS Windows XP/Vista/7/8