



DIVIDUAL ASI







THE **DIVIDUAL ASI** IS A POCKET ANALYZER PROVIDING TRANSPORT STREAM (MPEG-2 TS, T2-MI, BTS) REAL-TIME ANALYSIS, RECORDING AND STREAM PLAYING.

The DiviDual ASI provides real-time analysis at different levels:

- **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.
- **T2-MI**: complete multi-PLP analysis: T2 L1 pre/post signaling, PLP allocation, T2 timestamp, BB frame, ISSY field, PLP extraction.

Baseband streams can be captured using the **ASI input** or the PC's **IP input**. File-based **offline analysis** is also available.

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 DiviDual ASI 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 DiviDual ASI, 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.



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

CHARACTERISTICS

 $1x\ DVB\text{-}ASI$ input and $1x\ DVB\text{-}ASI$ output

IP source analysis (from PC)

PIDs and PSI/SI parsing, PCR graphs

ETSI TR 101 290 validation (Priority 1, 2, 3)

T2-MI analysis: L1 pre & post signaling, T2 frame statistics, BB frame header, ISSY field, T2 timestamp

BTS analysis: IIP Packet parsing, TMCC alarms

PSIP table display for ATSC 1.0

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, 140 g

APPLICATIONS

- R&D Streams Analysis and Generation
- Installation & Maintenance Test Tool
- Portable Demonstration Setup

KEY BENEFITS

- 3-in-1 product: Baseband Analyzer + Recorder + Player
- Compact (pocket size, 140 g) and USB self-powered
- Analyze/Validate T2-MI, BTS and MPEG-2 TS Layer in real-time
- Add your own table and specifications Analysis (PSI/SI, PSIP...)
- A must-have Lab Tool

TECHNICAL CHARACTERISTICS

DVB-ASI

Connector In $1 \times BNC$ female - 75 Ω Connector Out $1 \times BNC$ female - 75 Ω

Max bitrate 140 Mbps

USB Data connector 1 x USB2 B-Type

Power supply USB self-powered

Environment

Operating temperature $-20 \text{ to } 55 \,^{\circ}\text{C}$ / $-4 \text{ to } 131 \,^{\circ}\text{F}$

Physical

Dimensions 115 x 62 x 27 mm / 4.5 x 2.4 x 1 in

Weight 140 g



TS features analyzed in real-time from either source:

- DVB-ASI through USB from the DiviDual
- 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
- PSIP table display for ATSC 1.0 services
- Service components type and structure
- PID summary

T2-MI

- 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
- Single & Multi-PLP, PLP extraction

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, extracted PLP) 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

DiviDual ASI

TS Analyzer, Recorder, Player
Shipped bundled with DiviSuite software for MS Windows XP/Vista/7/8/1

Software options TS Analyzer TS Analysis T2-MI Analyzer T2-MI Analyzer



All Options Bundle (TS + T2-MI)



