DIVIDUAL ASI

Baseband TS Analyzer

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

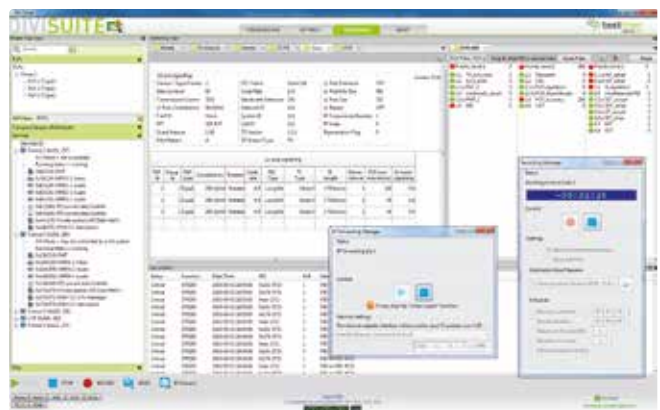| |
|---|
| 1x DVB-ASI input and 1x DVB-ASI output |
| IP source analysis (from PC) |
| PIDs and PSI/SI parsing, PCR graphs |
| ETSI TR 101 290 validation (Priority 1, 2, 3) |
| T2-MI analysis: L1 pre & post signaling, T2 frame statistics, BB frame header, ISSY field, T2 timestamp |
| BTS analysis: IIP 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 x BNC female - 75 Ω
Connector Out	1 x 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 to 55 °C / -4 to 131 °F

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

BASEBAND TRANSPORT MONITORING

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/7/8/10 |
|---|---|
| *Software options* | **TS Analyzer** TS Analysis
T2-MI Analyzer T2-MI Analysis |

48HMAX **SHIPMENT** | All Options Bundle (TS + T2-MI)

RoHS