

ANALYZE RF & BASEBAND

From RF to video, your digital TV « swiss knives »

	STANDARDS	CHARACTERISTICS							SOFTWARE OPTIONS					
		RF Input 	ASI Input/Output 	IP Input/Output 	SPI Input/Output 	1 PPS & 10 MHz Input 	GNSS Input 	A/V Output 	Recorder 	Player 	RF Scope 	T5 Analyzer 	T2-MI Analyzer 	Test Coverage
Measurement Receivers														
REFEREE II	DVB-T, DVB-T2 Lite, DVB-C, DVB-C2, ISDB-T/Tb*	•	•	•		•	•	•	•	•	•	•	•	•
Professional Receivers														
DIVICATCH RF-S/S2	DVB-S, DVB-S2	•	•	• ⁽¹⁾				•	•	•	•	•	•	•
DIVICATCH RF ISDB-T/TB	ISDB-T/Tb	•	•	• ⁽¹⁾				•	•	•	•	•	•	•
DIVICATCH RF-T/C T2/C2	DVB-T, DVB-T2 Lite, DVB-C, DVB-C2, ITU-J83 Annexes A, C	•	•	• ⁽¹⁾				•	•	•	•	•	•	•
DIVICATCH RF-C	DVB-C, ITU-J83 Annexes A, B, C	•	•	• ⁽¹⁾				•	•	•	•	•	•	•
Baseband Adapters														
DIVIDUAL ASI	Baseband DVB-T, DVB-T2 Lite, DVB-C, DVB-C2, DVB-S, DVB-S2		•	• ⁽¹⁾				•	•	•	•	•	•	•
DIVIDUAL ASI+SPI LVDS OR TTL	ISDB-T/Tb, ATSC, DTMB		•	• ⁽¹⁾	•			•	•	•	•	•	•	•
DIVIDUAL ETI	Baseband DAB, DAB+, T-DMB		•							•	•			



In their «all options» package, our test devices can be shipped in max 48h



DIVISUITE IP

Pure Software Application (Fixed PC license, Floating server license)



⁽¹⁾ IP through the PC's Ethernet interface
A/V Output : H.265/HEVC, H.264/MPEG-4 AVC, MPEG-1/2, AAC, MP3...

*Contact us for availability



DIVISUITE BASE



TS Recorder
■ Bitrate, Log Files

TS Player over ASI

TS IP Forward over IP

A/V Output

■ H.265/HEVC, H.264/MPEG-4 AVC, MPEG-1/2, AAC, MP3...

COMMON FEATURES COMING AS A DEFAULT PACKAGE

Stream Overview

Bitrate graphs
Drag & Drop PID

Bitrate Alarms

Offline Analysis

Audio/Videodecoding
H.265/HEVC, H.264/MPEG-4 AVC, MPEG-1/2, AAC, MP3...

Record the analyzed TS to file format

Forward the analyzed TS to the PC's IP interface

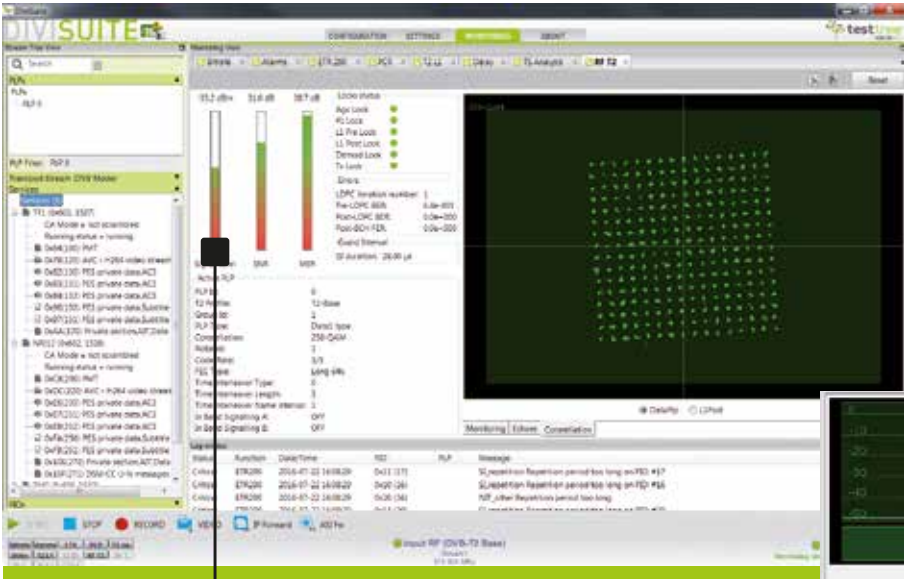
Play the analyzed TS over the ASI output

H.264 MPEG-4 AVC **H.265 HEVC**

DIVISUITE SOFTWARE OPTION



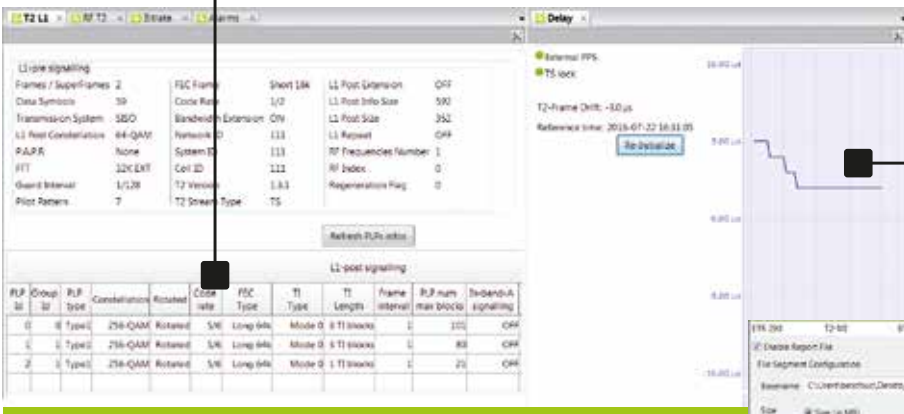
- Signal Quality: level, SNR, MER, BER
- Graphs, Report Files
- Modulation Parameters
- Constellation
- Channel Impulse Response
- SFN Synchronisation



Test the field RF Quality TX Echoes diagram

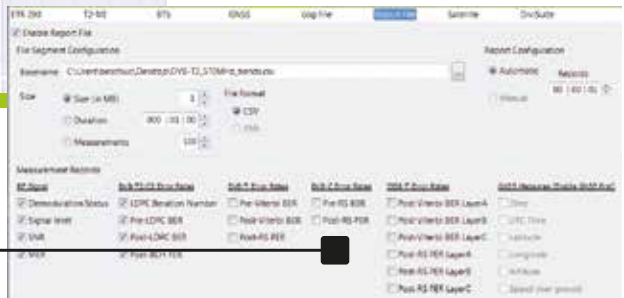


Validate the Modulator/TX RF Quality
Signal Quality measurement: level, SNR, MER, BER
Modulation parameters
Constellation
DVB-T2 L1 signaling



Validate SFN synchronization
SFN Drift
1 PPS & 10 MHz inputs

Modulator/TX endurance tests
Log & Report files
Save events and trend measurements

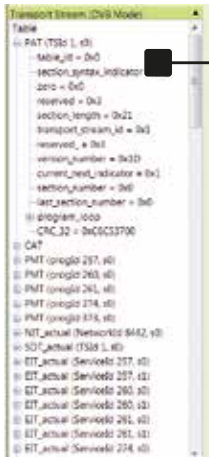


DIVISUITE SOFTWARE OPTION



- TS Standard: MPEG, DVB, ATSC 1.0, ISDB-T/Tb (BTS)
- PSI/SI Tables Decoding
- ETSI TR 101 290
- PCR Graphs
- ASI Network Delay

Transport Stream complete Analysis!



Validate PSI/SI Tables
Supported TS: MPEG, DVB, ATSC 1.0, ISDB-T/Tb
Add your own table analysis specification

Name	On	Off	Min (ms)	Max (ms)	Normal
1.1 TS_sync_loss	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
1.2 Smt_sync_error	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
1.3.a PAT_err_2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	300	50	3000
1.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
1.5.a PMT_err_2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	500	40	25000
1.6 PID_err_1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1000	1000	25000

Validate ETSI TR 101 290 measurements
ETSI TR 101 290 Priority 1,2,3
Customized alarm thresholds
Log files

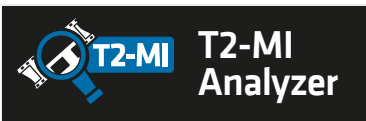
The main interface displays a 'Stream View' on the left with a tree of services and PIDs. The center features a 'Global Stream' section with a 'PCR' graph showing PCR accuracy over time. On the right, there is a 'Services analysis' table and a 'Services bitrate' pie chart. A log window at the bottom shows critical messages related to ETSI TR 101 290 violations.

Check regionalization Service Plan

Check PCR
Drag & Drop PID containing PCR
PCR accuracy graphs

Advanced Service Analysis
Component type & structure
Component bitrates

DIVISUITE SOFTWARE OPTION



- T2 L1 pre/post signaling, PLP allocation (BB frame, TS, padding/overflow)
- **NEW** T2 timestamp, BB frame, ISSY field
- Single & Multi-PLP, PLP extraction

Validate your DVB-T2 Gateway!

PLP extraction/filter

The screenshot shows the DiviSuite software interface. On the left, there's a 'Stream Tree View' showing a tree structure of PLPs and transport streams. The main area displays 'Monitoring View' with several tables and a log window. A 'T2-MI' window is open, showing 'T2 frames statistics' and 'PLP Allocation' charts. A 'T2-MI' window is also open showing a pie chart and a bar chart.

ASI IP

The screenshot shows the DiviSuite software interface. On the left, there's a 'Stream Tree View' showing a tree structure of PLPs and transport streams. The main area displays 'Monitoring View' with several tables and a log window. A 'T2-MI' window is open, showing 'T2 frames statistics' and 'PLP Allocation' charts. A 'T2-MI' window is also open showing a pie chart and a bar chart.

Check T2-MI streams
T2 L1 pre/post signaling
ETSI TR 101 290 T2-MI alarms

Check T2 Frames
BB frame header
ISSY field
T2 timestamp

DIVISUITE SOFTWARE OPTION



- GNSS Receiver (GPS/GLONASS)
- Test Reports (Google Earth compliant)

Test the field coverage!

**GNSS receiver enabled
Real-time measurement**

The screenshot shows the DiviSuite software interface. On the left, there's a 'Monitoring View' with signal level graphs for -13.0 dBm, 31.0 dB, and 36.0 dB. The 'GNSS' tab is active, showing 'GNSS Status' as 'LOCKED' with 18 satellites in view and 8 satellites in use. A 'Log window' is open, displaying a table of log entries:

Status	Function	Date/Time	PID	PLP	Message
Critical	ETR290	2016-07-22 17:16:19	0x23c (372)		PID on PID #172
Critical	ETR290	2016-07-22 17:16:19	0x174 (372)		PID on PID #372
Critical	Bitrate	2016-07-22 17:16:19	N/A		Overall bitrate (24.8822) went below
Critical	Bitrate	2016-07-22 17:16:19	N/A		Net bitrate (21.2075) went below 2-
Critical	ETR290	2016-07-22 17:16:18	0x23c (372)		PID on PID #172
Critical	ETR290	2016-07-22 17:16:18	0x174 (372)		PID on PID #372
Critical	Bitrate	2016-07-22 17:16:18	N/A		Overall bitrate (24.8822) went below
Critical	Bitrate	2016-07-22 17:16:18	N/A		Net bitrate (21.2071) went below 2-
Critical	ETR290	2016-07-22 17:16:17	0x23c (372)		PID on PID #172
Critical	ETR290	2016-07-22 17:16:17	0x174 (372)		PID on PID #372
Critical	Bitrate	2016-07-22 17:16:17	N/A		Overall bitrate (24.8822) went below
Critical	Bitrate	2016-07-22 17:16:17	N/A		Net bitrate (21.2145) went below 2-

Display results in Google Earth or Google Fusion Tables applications



The screenshot shows the 'Report Configuration' window in DiviSuite. It includes sections for 'File Segment Configuration', 'Report Configuration', and 'Measurement Results'. The 'Measurement Results' section has several checkboxes for parameters to include in the report:

- RF Signal
- Demodulation Status
- Signalling
- DNR
- MER
- DVB-T2 (CI) Error Rate
- LDPC Iteration Number
- Pre-LDPC BER
- Post-LDPC BER
- Post-BCH FER
- DVB-T Error Rate
- Pre-Video BER
- Post-Video BER
- Pre-PS-PSR LayerA
- Post-PS-PSR LayerB
- Pre-PS-PSR LayerC
- Post-PS-PSR LayerC
- GNSS Measures
- Date
- UTC Time
- Latitude
- Longitude
- Altitude
- Speed over ground

**Generate Google Earth compliant files (KML)
Customize measured parameters**