

DiviCatch™ RF-T/H

DVB-T & DVB-H Live RF Analyzer



Create your own world finest Analyzer

The DiviCatch RF-T/H is a Pocket Analyzer cumulating DVB-T & DVB-H RF live reception with MPEG2 TS real-time analysis and recording.

The product combines 3 levels of real-time analysis:

RF measurements: Key RF parameters (MER, SNR, etc.) are shown in real-time.

MPEG2-TS monitoring: The 3 priority levels of ETR290 are implemented, bitrate can be monitored globally and for each service, and customizable alarms are available.

DVB-H analysis: Table parsing includes DVB-H specific INT, bursts (train mode, filter by service), delta-t information can be monitored in real-time and DVB's preferred ratios for Quality of Restitution (MFER & FER) are indicated for each PID or each service. Including a DVB-IPDC or OMA Bcast ESG client, its application validates proper reception and shows ESG rendering.

In addition, DiviCatch RF-T/H features live stream capture capabilities. The application also integrates a video decoder enabling real-time decoding of all unencrypted services.

Eventually, the GPS option turns the DiviCatch RF-T/H into the must-have companion for coverage and drive tests.

ENENSYS has implemented a new software : DiviSeries All in One Software. It allows to check any Divis applications on a new and very intuitive GUI. Divicatch monitoring screens can be totally customized and loaded. User can also save file analysis (offline analysis available)

For DTTV and Mobile TV deployments, DiviCatch RF-T/H, a 2-in-1 product featuring both RF and DVB-ASI inputs, 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 network

Applications

- Broadcast Test & Measurement
- RF Reception Quality Measurement
- Installation & Maintenance
- Head-End Monitoring
- Coverage & Drive Tests

Benefits

- 2-in-1 product: RF + Baseband
- One application for all DiviSeries products
- Compact and USB-self-powered device
- Receive live DVB-T & DVB-H signals
- Validate the quality of reception & transmission
- Add your own tables and your specifications Analysis (PSI/SI,PSIP,..)
- Evaluate the Quality of Restitution (MFER & FER ratios)
- Analyse DVB-H layer in real-time
- Output coverage maps with GPS capability (opt.)

Characteristics

- 1 RF input for DVB-T & DVB-H
- Full DVB-H (4K FFT mode & 5MHz)
- 1 ASI input
- RF key measurements
- TR 101 290 validation (aka ETR290)
- PIDs, PSI/SI parsing
- Advanced MPEG2-TS recording
- MPEG2-TS over IP forward
- IP source analysis
- IP Output (Ethernet interfaces selection)
- Global summary

Options

- GPS receiver for synchronizing RF measurements with geographical coordinates

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Input Interfaces

RF input	
Standards	DVB-T & DVB-H
Connector	1x F-type (female) - 75 Ω
Frequency range	UHF and VHF (45 - 864 MHz)
Sensitivity	-80 to -8 dBm
Channel bandwidth	5, 6, 7 & 8 MHz
FFT Mode	2k, 4k, 8k
Modulation	QPSK, 16QAM, 64QAM + hierarchical
RF loopthrough	
Connector	1x F-type (female) - 75 Ω
DVB-ASI	
Connector	1x BNC (female) - 75 Ω

RF Measurements

All measurements are made in **real-time**

Constellation	Diagram display
Signal level	56 to 100, expressed in dBμV
SNR	0 to 24, expressed in dB
Bit Error Rate	Pre-Viterbi, Post-Viterbi, Post-RS
Modulation Error Rate	0 to 38, Typical 34, expressed in dB
Error Vector Magnitude	Expressed in %

Baseband Transport Monitoring

MPEG2-TS features monitored in **real-time** from either source:

- ASI or RF through USB from the DiviCatch
- IP stream through Ethernet from the PC

TR 101 290

- Priorities 1, 2 and 3 implemented
- MIP Validation

Service information

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

Bitrate monitoring

- Overall, by program or PID by PID

PCR Jitter

PCR Jitter Accuracy graphs (real-time, history and density)

Services Processing

- MPEG2/MPEG4 services decoding (unencrypted programs)
- Recording of the entire multiplex to a TS file
- Real-time forward of the entire multiplex to an IP address

DVB-H Layer Analysis and Processing

- Real-time burst view and burst structure information
- Delta-t and jitter information
- MFER and FER
- De-encapsulation from DVB-H (with PID filtering capability)
- ESG decoding (SDP automatic extraction, Bootstrap status, etc.)
- IPDC & OMA Bcast** supported

GPS feature (optional)

- External GPS receiver (USB self-powered)
- Export of log files and coordinates to CSV format
- Customizable logging information

Environment

Operating temperature	0 to 55°C / 0 to 122 °F
Storage temperature	-20°C to 70°C / -4°F to 158°F
Humidity	0 to 95%, non condensing

Physical and Power

Length	134.7 mm / 5.3 in.
Height	61.45 mm / 2.42 in.
Width	27 mm / 1.06 in.
Weight	156g
Power supply	USB2.0 self-powered

Ordering codes

DVB-T + DVB-H RF Analyzer	DiviCatch RF-T/H
Shipped with software (Windows 2000/XP)	
GPS feature	NN6-GPS



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