

DIVICATCH



DIVICATCH RF-C™



Your own world's finest Analyzer

THE **DIVICATCH RF-C** IS A **POCKET ANALYZER** CUMULATING DIGITAL CABLE RF LIVE RECEPTION WITH MPEG-2 TS REAL-TIME ANALYSIS AND RECORDING.

The DiviCatch RF-C provides **real-time analysis** at different levels:

- **RF**: measures key RF signal parameters (Level, MER, SNR, BER) and indicates the modulation parameters and constellation as well as the Channel Impulse Response.
 - **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 events and trends analyzed over time can be stored into **report files**.

In addition, the DiviCatch RF-C can be used as a **gateway** which retransmits the RF signal **over RF output loop** and the baseband stream **over IP**.

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 DiviCatch RF-C, a 2-in-1 product featuring both **RF + baseband analysis**, and **recording** capabilities, offers a cost-effective test solution for field, lab or head-end applications.

CHARACTERISTICS

1x RF input and 1x RF output loop for Digital Cable
ITU-J83 Annexes A, B, C supported
1x DVB-ASI input
IP source analysis (from PC)
RF key measurements: signal level, SNR, MER, BER, EVM
Graphical constellation, Channel Impulse Response display
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 recording
MPEG-2 TS over IP forward (PC's Ethernet interface selection)
Compatible MS Windows XP/Vista/7/8



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

APPLICATIONS

- R&D Streams or Signal Analysis
- Digital Cable Troubleshoot
- Installation & Maintenance Test Tool
- RF Reception Quality
- Portable Demonstration Setup

BENEFITS

- 2-in-1 product: RF/Baseband Analyzer + Recorder
- Compact (135 x 62 x 27 mm, **160 g**) and USB self-powered device
- Receive live Digital Cable signals (ITU-J83 modes)
- All modulation schemes supported (from QPSK to 256QAM)
- Analyze/Validate MPEG-2 TS Layer in real-time
- Add your own table and specifications Analysis (PSI/SI, PSIP...)



TECHNICAL CHARACTERISTICS

RF

Standards	ITU-J83 Annexes A, B, C
Connector In	1x F-type female - 75 Ω
Connector Out (loopback)	1x F-type female - 75 Ω
Sensitivity	-80 to 5 dBm / 28 to 114 dBμV
Frequency range	50 to 900 MHz (125 kHz resolution)
Channel bandwidth	6 & 8 MHz
Modulation	16QAM, 64QAM, 128QAM, 256QAM
Symbol rate	0.87 to 7 Msymbols/s

DVB-ASI

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

USB Data connector 1x USB2 B-Type

Power supply USB self-powered

Environment

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

Physical

Dimensions 135 x 62 x 27 mm / 5.3 x 2.5 x 1.1 in
Weight 160 g

BASEBAND TRANSPORT MONITORING

MPEG-2 TS streams analyzed in real-time from either source:

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

Or analyzed offline from source:

- TS file

ETSI TR 101 290

- Priorities 1, 2 and 3

Service information

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

Bitrate monitoring

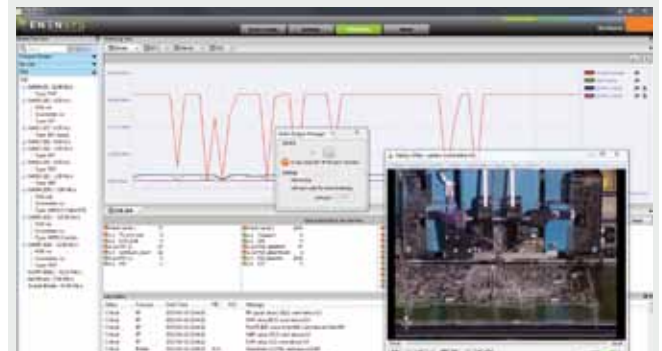
- Overall, by Service (Program), by PID

PCR

- PCR Accuracy graphs



Monitoring view : RF, ETR, Logs



Monitoring view: Video Output

RF MEASUREMENTS

All measurements are made in real-time

Graphical display	Constellation, Channel Impulse Response
Signal level	-75 to -10 dBm / 33 to 99 dBμV
SNR	17 to 41 dB
MER	15 to 33 dB
EVM	0 to 100 %
BER	Pre-RS

SERVICES PROCESSING

MPEG-4/AVC, MPEG-1/2 services decoding (unencrypted programs):
video stream display

Recording of the entire multiplex (MPTS/SPTS) into a TS file

Real-time forward of the entire multiplex to IP (unicast or multicast)
over UDP streaming

ORDERING CODES

DiviCatch RF-C

DVB-C Analyzer
Shipped bundled with DiviSuite
software for MS Windows XP/Vista/7/8

Plugins	RF Scope	RF Analysis
	TS Analyzer	MPEG-2 TS Analysis
	T2MI Analyzer	T2-MI Analysis