# DIVI**CATCH**

## DIVI**CATCH RF-C**™

DVB**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.

H.264 MPEG-4 AVC   H.265 HEVC

DIVICATCH

↘ **TO TEST APPLICATIONS**

↘ **TO VALIDATE BOTH RF & BASEBAND**

↘ **TO ACHIEVE COST-EFFICIENCY ON BROADCAST NETWORKS**

## 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 |

## 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…)

**TESTSYSTEMS** by ENENSYS

# DIVICATCH RF-C™

**DVBC**



## 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

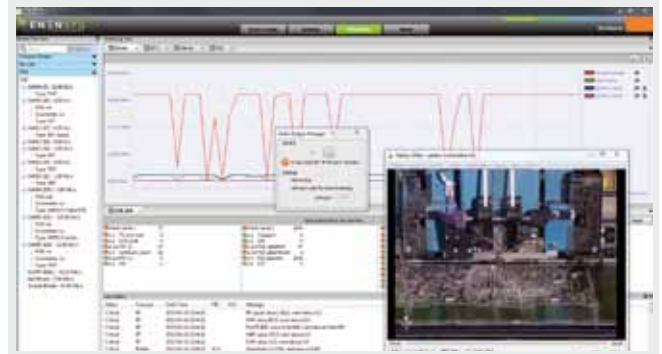**Power supply**    USB self-powered

**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<br>Shipped bundled with DiviSuite<br>software for MS Windows XP/Vista/7/8 |
|---|---|
| **Plugins**   **RF Scope** | RF Analysis |
| **TS Analyzer** | MPEG-2 TS Analysis |
| **T2MI Analyzer** | T2-MI Analysis |

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**TESTSYSTEMS** *by* ENENSYS

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