

## THE PROFESSIONAL & ACCURATE TOUCH SCREEN ANALYZER

**DVB-T2/C2/S2**  
**H265 - HEVC**

**AUTOMATIC, FAST & EASY-TO-USE**

**9" HIGH BRIGHTNESS 16:9 DISPLAY**

**FULL TOUCH Excludable**

**EXCLUSIVE DUAL COMMANDS**

**MECHANICAL Keys & Encoder**

50Ω "N" Connector

RF IN

75Ω "F" Connector

ASI T.S.

HEVC

- H265
- HIGH EFFICIENCY VIDEO CODING

IP TV

- IP to ASI DENCAP.
- ASI to IP ENCAP.
- IPTV ANALYZER

LAN

- T.S. LIVE STREAMING
- T.S. RECORDING
- REMOTE CONTROL
- SNMP & HTTP

OPTIC

FC-ST-SC INTERCHANGEABLE CONNECTOR

- POWER METER
- POWER LOSS
- POWER GRAPH
- SAT, TV & CATV SPECT & MEAS

GPS

- POSITION LOGGING
- 10 MHz & 1 PPS TIME REFERENCE
- GPS ANTENNA QUALITY TEST

MONITORING

- 7 DAYS CHANNEL MONITORING
- LOGGER WITH GPS
- REMOTE PC/TABLET CONTROL
- USB ON THE GO FOR LONG TERM LOGGING
- PRODRIVE TEST
- QOS 24 H WITH NMS

*OPTIONS: check the Cross reference on page 12.*

## MAIN FUNCTIONS

### SPECIAL FUNCTIONS

- **ETR 101-290 T.S. Analyzer.**
- **Exclusive patented ROVER AUTODISCOVERY system:** auto-matically detects and selects analog and digital COFDM/QAM TV signals in both measurement and spectrum mode.
- **HELP function:** automatically identifies all the signals with digital modulation SAT, TV and CATV.
- **Automatic Assistant:** Signal Quality analysis, Channel Scan memorization.
- **Barscan TV & CATV function from 10 to 100 channels on one screen.**
- **Buzzer & Noise Margin real time graph for digital signals microinterruptions.**
- **Reflectometric measurements APP.**
- **PRODRIVE TEST:** REMOTE MONITORING and LOGGING: TS, measurements, spectrum, thumbnails.
- **Optical Input signals.**
- **SATELITE:** SAT SCR, DiSEqC, SCR & dCSS, Motorized antenna, Dual LNB, SAT FINDER, SAT EXPERT
- **Custom Channel Plans:** 25 (199 ch. per plan), Programmable TV, SAT (or combined TV/SAT) by PC or Local Keyboard.
- **Loggers:** TV, SAT & combined with stop & go function.
- **SAT Memory Plan:** More than 2.000 transponders prememorized for world wide Satellite.
- **Free SMART PC interface program and FW upgrades.**
- **OPTIONS\*:** check the Cross reference on page 12.

### SPECIFICATIONS: MEASUREMENTS & SPECTRUM ANALYSIS

- **Frequency Range:** TV, CATV & Radio: 4-1250 MHz (TAB 9 PLUS); SAT: 950-2450 MHz.
- **Frequency Resolution:** TV & CATV 25 KHz; SAT: 5 or 1 MHz selectable.
- **Power range Meas.:** TV 28 to 130 dB $\mu$ V, SAT 30 to 130 dB $\mu$ V.
- **Digital Meas:** Digital Power, MER (32 to 42 dB depending on modulation), BER, PER, LDPC, BCH, Noise Margin, MER versus CARRIER.
- **Analog Meas & Picture:** Analog level, V/A ratio.
- **Measurement Resolution:** 0.1 dB.
- **Level Measurement Accuracy:** 1 dB typ. (2 dB max.)
- **Resolution Filter Bandwidth:** TV & CATV: 100 KHz @ -3 dB; SAT: 1 MHz or 5 MHz @ -3 dB selectable.
- **Constellation:** for TV/CATV and SAT signals.
- **Spectrum:** Real time, Max Hold and spectrum memorization with real time compare function.
- **Net-id on board:** Net-id, NID, TSID, LCN, SAT Orbit Position.
- **Echoes, Pre-echoes, Micro-echoes:** Representation in real Time.
- **Quality:** Digital Auto quality Test: PASS-MARGINAL-FAIL.
- **TS:** TR 101-290 v1.2.1 ANALYSIS, SI, PMT, bit rate, network delay, MPEG services and tables.
- **IPTV:** measurements and picture decoding.

### OPTICAL MEASUREMENTS

- **FC-ST-SC interchangeable input connectors.**
- **Automatic loss calculation.**
- **Wavelengths (nm):** 1310, 1490, 1550.
- **Range:** -25 to 10 dBm.
- **Resolution:** 0.1 dB.
- **Accuracy:** +/- 0.5 dB.
- **Optical to RF conversion.**

## COMM. PORTS AND OUTPUTS

- **RF Input** : 75 ohm (interchangeable "F").
- **LAN**: RJ45 10/100 base Ethernet.
- **USB 2.0**: Type B (PC Interface).
- **USB 2.0**: Type A (USB drive).
- **Digital Pictures**: MPEG2-4 SD & HD pictures with Program List, Audio Video PIDs, LCN, Video bit Rate all on one screen.
- **Audio**: AAC supplied, DOLBY (opt.).
- **Asynchronous Serial Interface (ASI)**: ASI input on 75Ω BNC connector, ASI output on 75Ω BNC connector.
- **Audio / Video**: Composite A/V input, HDMI output.
- **Common Interface**: PCMCIA slot for single/multi-service CAM modules.

## GENERAL SPECIFICATIONS

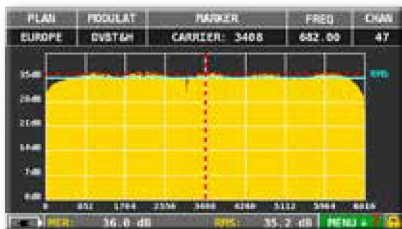
- **9" TFT TOUCH display**: 16:9 high resolution and high brightness.
- **Power Supply**: Built in LiPo battery with up to 6 hours duration & Battery Test function.
- **DC voltage at RF input**: 5 - 12 - 18 - 24 V, DiSEqC, SCR, dCSS.
- **PC Interface**: USB.
- **Front-Panel**: Alpha numeric keypad.
- **Power Save**: TFT backlight timer, brightness adj.
- **PC Management**: SMART software.
- **Weight**: only 2,6 Kg with batteries.
- **Size**: H 29,0 x W 17,0 x D 5,5 cm.
- **Housing**: Aluminium and Steel and padded bag.

Visit [WWW.ROVERSHOP.IT](http://WWW.ROVERSHOP.IT) to check the available accessories.

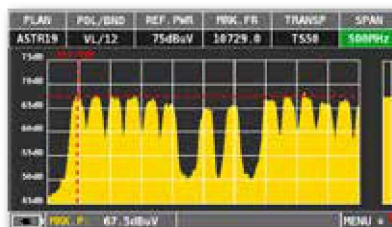
\* Some options must be requested when ordering the instrument.

Features and functions may change without notice.

## MEASUREMENT EXAMPLES



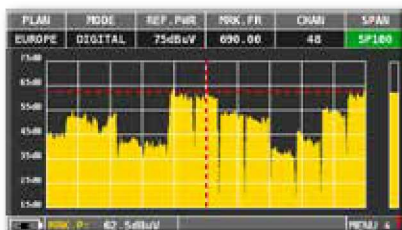
MER vs CARRIER: normal visualization



Spectrum SAT 500 MHz span



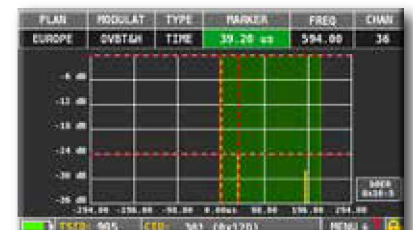
Single channel monitoring: 30 minutes



Spectrum TV 100 MHz span



DVB-T2 (opt.) rotated Constellation 256 QAM mod., on the right relative modulation parameters & M-PLP



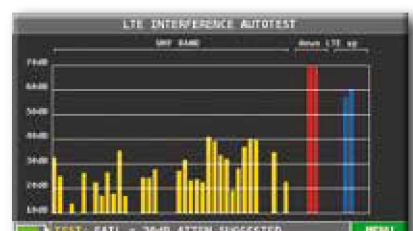
ECHO MEASUREMENT in SFN networks, with impulse response in real time, green area shows the guard interval



ETR 101290 Transport Stream Analyzer



GPS antenna Quality, constellation & Position.



LTE Interference Autotest