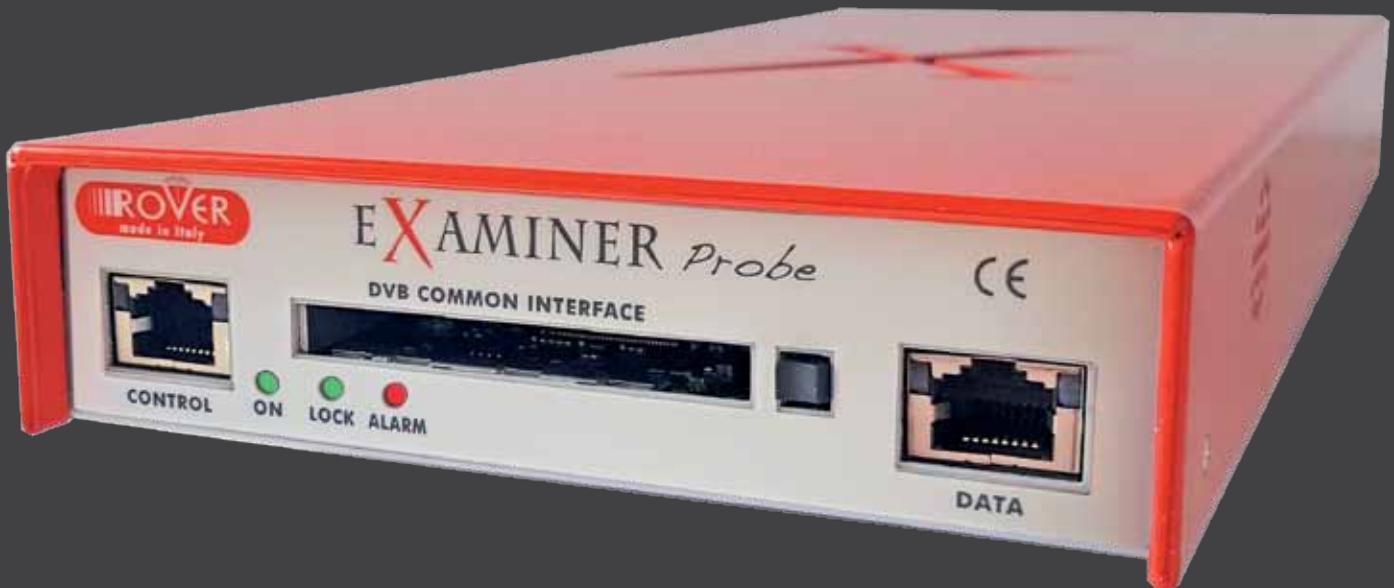


EXAMINER

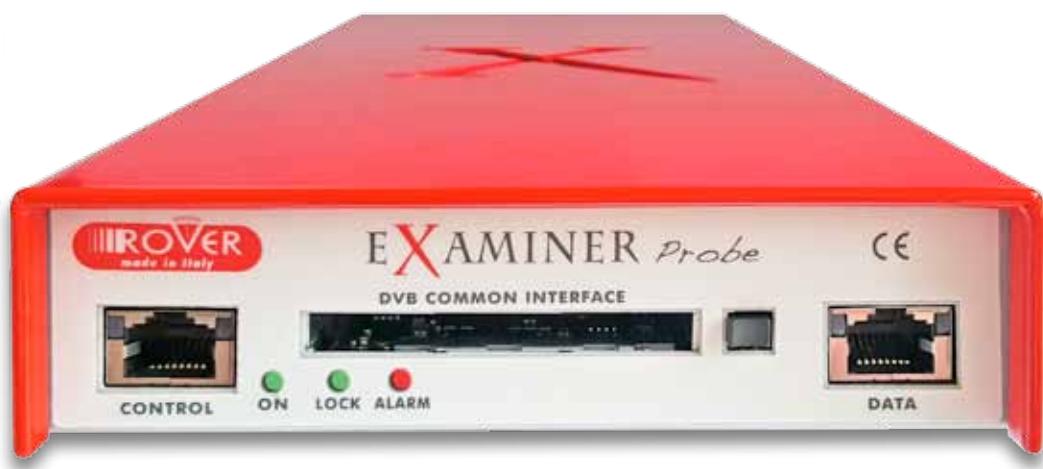
Probe



Professional Radio TV, SAT & CATV Probe
with IP Encap/Decap, ASI output,
T.S. Analysis, HDSD SDI Output,
Remote control with NMS & SNMP.

...Made to Measure...

- Extremely cost effective monitoring
- SAT reception 950 - 2.250 MHz
- TV & CATV reception 48 - 870 MHz
- FM & Analog TV Monitoring
- Descrambler & Mpeg integrated
- World wide TV standards
- Avionic Aluminium body
- Smartphone & Tablet Responsive
- T. S. Analyzer
- Spectrum
- Monitoring with alarms
- Alarms logger
- T. S. over IP in & out
- Video over IP
- Compact & portable
- Wi-Fi option
- SNMP & remote control web browser



The new **EXAMINER** is the most compact & complete analyzer for all the RF signals including: TV, SAT, CATV, RADIO FM or DAB+.

Thanks to the integrated MPEG & Descrambler technology is possible to decode all the digital signals. It implements several input & output: ASI, SDI, HDMI, TS over IP, RF, CVBS.

It can be easily controlled with your PC, Smartphone or Tablet using the frontal LAN port or the optional internet wi-fi Board.



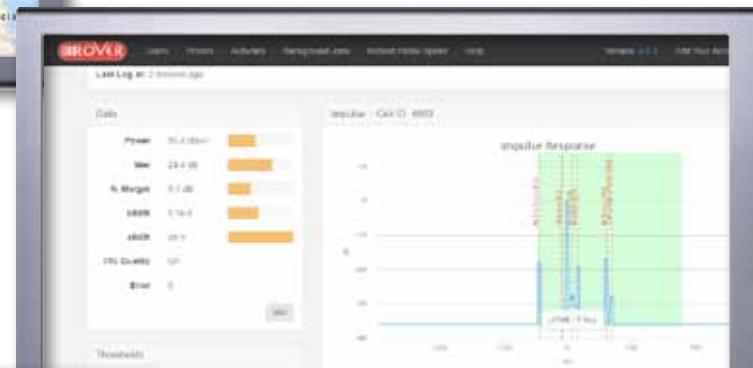


The new **EXAMINER** is studied to be easily integrated in your existing rack-mount equipment.

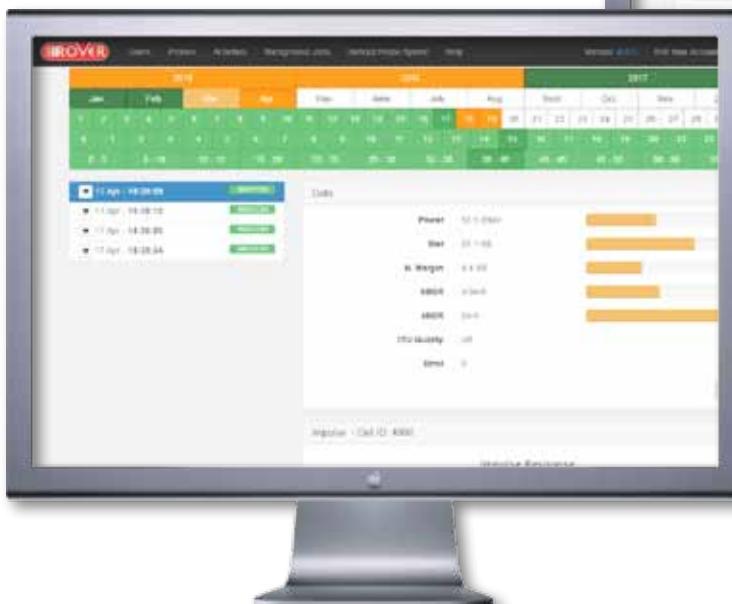
Used with the ROVER NMS is the perfect solution to monitoring the network of all the countries checking the quality of service directly on the field.



Quick monitoring of all Probes
in your country.



Live Monitoring of
Channel Parameters
TV/CATV & SAT.



Two years calendar event storage.



General status with the main alarms in one screen.



Parameters and measures.



Spectrum analysis with selectable SPAN.



T.S. Analyzer ETR 101-290.



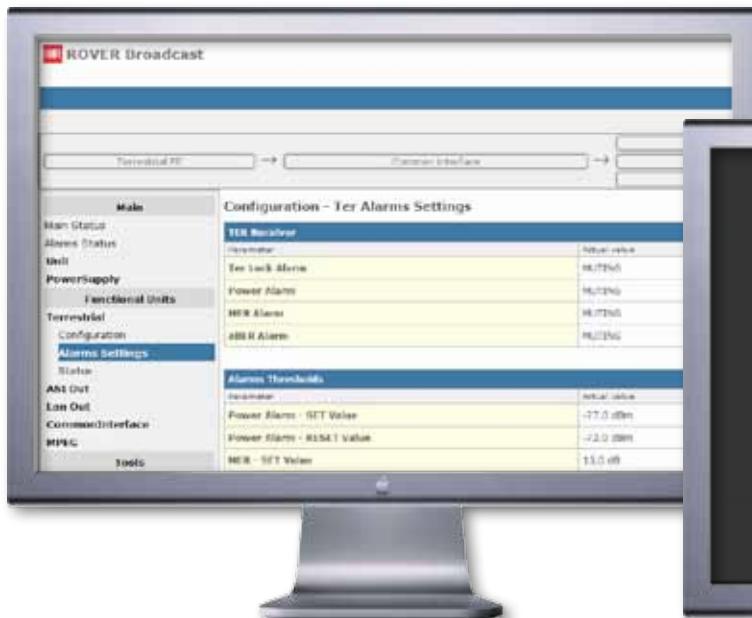
The Mosaic allow to analyze up to 6 measures screens on the same display.



It scans the network at the selected frequencies in any modulation in round-robin.



DOUBLE USER INTERFACE



Professional Set-up and Logger.



Browsing Status.



PC, TABLET & SMARTPHONE WEB RESPONSIVE



Desktop Interface



Tablet
Responsive



Smartphone
Responsive

UNIT SPECIFICATIONS

| PARAMETERS | | SPECIFICATIONS |
|--------------------|---|----------------|
| Power Supply | 12 VDC | |
| Operating Temp | 0 - 45° C | |
| Humidity | Up to 95 % - Non condensing | |
| Size | 139 x 345 x 37 mm | |
| Weight | 0,7 Kg | |
| Control | | |
| Front Panel | TS over IP and ETHERNET connections | |
| Control Ports | RJ45 10/100 Base-T | |
| Control Protocols | SNMP, HTTP (web interface), FTP, Telnet over Ethernet port | |
| WI-FI | Optional WI-FI internal router for Smartphone/Tablet management | |
| Connections | | |
| Input | RF TV or SAT, TS over IP, ASI | |
| Output | TS over IP, ASI, HD/SD SDI, HDMI, CVBS, Analog audio stereo | |

SATELLITE SPECIFICATIONS

| PARAMETERS | | SPECIFICATIONS |
|--|--|----------------|
| Standards | | |
| DVB-S/S2 ETS300421 (QPSK), EN302307 (QPSK, 8PSK, 16APSK), EN50083-9 | | |
| Demodulation (QPSK, 8PSK, 16APSK) | | |
| Constellation | QPSK, 8PSK, 16APSK | |
| DVBS2 Mode | VCM, CCM, Multi and single TS, Normal & Short FEC frames | |
| Symbol Rate | 1- 45 Msymb/s (DVB-S), 2- 45 Msymb/s (DVB-S2) | |
| FEC | Auto, all ratios compliant with standards | |
| FEC Block | Short and Normal | |
| Roll-Off | 0.2, 0.25, 0.35 | |
| DVB-S Block linear code (outer code) | R/S 204, 188 | |
| DVB-S2 Block linear code (outer code) | BCH, LDPC | |
| Spectrum | Auto | |
| RF Input | | |
| Input connector | F –Type (75 Ω) | |
| Frequency | L-band 930–2250 MHz | |
| LNB control voltage | Off, +13/18 VDC, 22 KHz, 0.25 A (overload protection) | |
| RF Input Level | 40 - 100 dBuV (with attenuator) | |
| ASI Output | | |
| Standard | ASI-C MPEG-2 ISO/IEC 13818-1 | |
| Output mode | 188 bytes packet | |
| Output connector | 2 x BNC (75 Ω) - IN/OUT | |
| Measures | | |
| RF power level (dBuV, dBm), SNR, aBER&bBER(DVB-S) ,MPEG PER & PER (DVBS2), TS bitrate, TS Analyzer ETR 101-209, Stuffing rate, FECmode, FEC frame, Pilot, ISSY | | |
| Alarms | | |
| Input signal Unlock, LNB, BER, Level, SNR | | |

TERRESTRIAL SPECIFICATIONS

| PARAMETER | SPECIFICATIONS |
|-------------------------------|--|
| CAPABILITIES | DVB T-T2 ISDBT - ATSC - DTMB - GB206000 Terrestrial Demodulator |
| Standards | ESTI EN 300744 (DVB-T, DVB-H), ETSI EN 302755 (DVB-T2), EN 50083-9 (DVB-C) |
| Demodulation | |
| Constellation | QPSK, 16QAM, 64QAM, 256QAM |
| Guard Interval | 1/4, 1/8, 1/16, 1/32, 1/128, 19/256, 19/128 |
| Carrier mode | 1k, 2k, 4k, 8k, 16k, 32k |
| Hp/Lp code rate | 1/2, 2/3, 3/4, 5/6, 7/8 |
| Channel Bandwidth | 5MHz, 6MHz, 7MHz, 8MHz (7 & 8 MHz BW with SAW Tuner) |
| PLP | Single & Multi PLP Selection (DVB T2) |
| RF input | |
| Input connector | N 50 Ohm Return Loss > 14 dB or F 75 Ohm Return Loss > 10 dB specify your choices when ordering |
| Frequency range | 48 – 2.250 MHz |
| Frequency resolution | 10 KHz |
| RF input level range | 40 to 120 dB μ V with attenuator |
| ASI Output | |
| Standard | ASI-C MPEG-2 ISO/IEC 13818-1 |
| Output connectors | 2 x BNC on 75 ohm ASI-C |
| Output mode | DVB-ASI 188 byte packets |
| Available measurements | |
| RF input level | 40-120 dB μ V (\pm 1dB - 0.05dB/ $^{\circ}$ C) |
| Frequency offset | 1-500 KHz (option \geq 100Hz) |
| SNR / MER | 8-40 dB (\pm 1dB) |
| bBER | 1x10-2 to 1x10-5 (DVB T) |
| aBER | 1x10-2 to <10-8 (DVB T) |
| TS Analyzer | ETR 101-290 |
| TS Bitrate/Stuffing | 1-40 Mb/s |
| TPS information | FEC/Guard Interval/Hierarchy/Cell. Id./Time Slicing /MPE FEC |
| Other available measurements | LDPC interactions, Pre-BCH BER, Pre-LDPC BER, PLP ID error |
| Frequency offset | 10 to 500 KHz . OPTION >100 Hz |
| RF Spectrum OPTION | RF Spectrum with SPAN 10 MHz |
| Carrier Mode T/T2 | 2K, 8K |
| Carrier Mode T2 | 1K, 4K, 16K, 32K |
| Modulation T-T2 | QPSK, 16QAM, 64QAM |
| Modulation T2 | 256QAM (T2) |
| Guard interval T/T2 | 1/4, 1/8, 1/16, 1/32, 1/2, 2/3, 3/4, 5/6, 7/8 |
| Guard interval T2 | 1/128, 19/256, 19/128, 3/5, 5/5 |
| Alarms | |
| Board self-test | Good / Fail |
| Signal lock | Lock / Unlock |
| Power Level | Alarm on threshold |
| MER | Alarm on threshold |
| BER | Alarm on threshold |



ORDERING CODE

| UNIT | |
|---|---|
| OEXAMINER PROBE | Professional probe TV, SAT and CATV for RF and IP analysis, TS analyzer (ETR 101 290), Common Interface or BISS descrambling integrated, Alarms and Logger, Remote control via HTTP and SNMP. |
| OPTIONS | |
| OEXA-WIFI | Internal board for wi-fi connection with Smartphone or Tablet |
| OMRX-BISS | Option for: BISS descrambling SW |
| OEXA-BAG | Bag for EXAMINER |
| OEXA-GREY | Extra cover in Grey color |
| | |
| | |
| | |
| STANDARDS (ONE STANDARD PER BOARD ONLY) | |
| OMRX-CONST | Option for: Constellation, Reflectometer, Mer VS carrier (only for DVBT/T2) |
| OMRX-ANALOG-TV/FM | Option for: Analog front-end for TV and FM Radio |
| OHD_DAB+ | Option for: DAB + demodulation |
| OHD_ATSC | Option for: ATSC demodulation |
| OHD_DTMB (GB20600) | Option for: DTMB demodulation |

PRELIMINARY: SPECIFICATIONS & PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

WWW.ROVERINSTRUMENTS.COM

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