EXAMINER

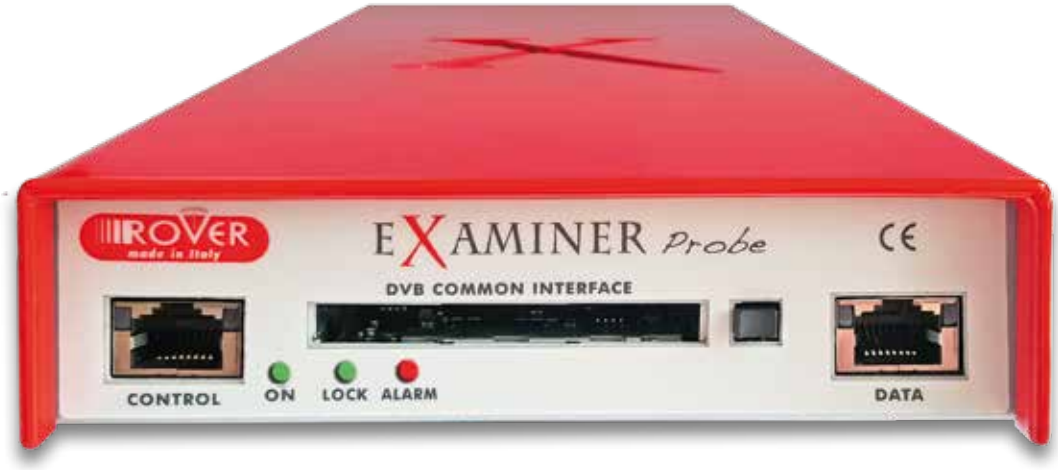
Probe

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

...Made to Measure...

PROFESSIONAL SAT - TV - CATV PROBE

- Extremely cost effective monitoring
- SAT reception 950 - 2.250 MHz
- TV & CATV reception 48 - 870 MHz
- FM & Analog TV Monitoring
- DAB/DAB+ Analysis
- 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



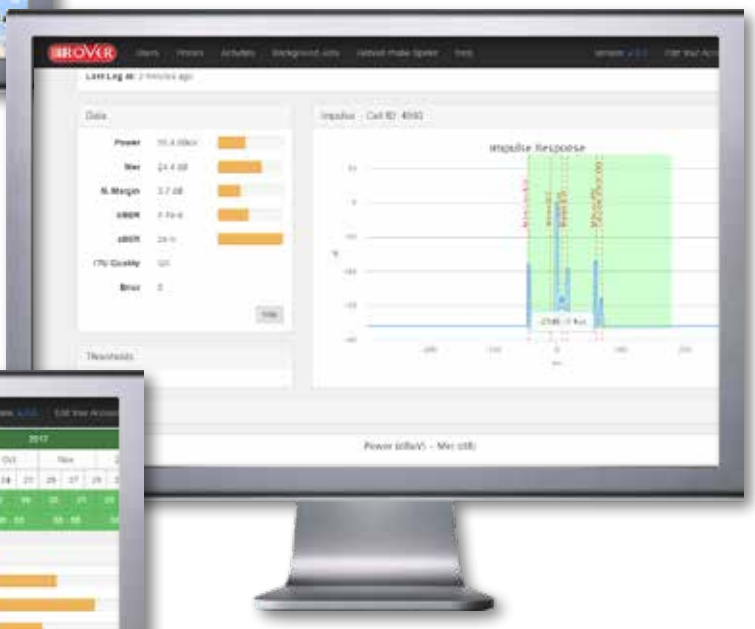
The new EXAMINER is the most compact & complete analyzer for all the RF signals including: TV, SAT, CATV, RADIO FM or DAB+.

Thanks to the integrated MPEG & Descrambler tecnology 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 Monotoring of Channel Parameters TV/CATV & SAT.

Two years calendar event storage.

WEB INTERFACE EXAMPLES

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

TECHNICAL SPECIFICATIONS

UNIT SPECIFICATIONS

PARAMETERS	SPECIFICATIONS
Power Supply	12 VDC
Operating Temp	0 - 45º 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)
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, FEC mode, FEC frame, Pilot, ISSY	
Alarms	
Input signal Unlock, LNB, BER, Level, SNR	

TERRESTRIAL & RADIO SPECIFICATIONS

PARAMETER	SPECIFICATIONS
CAPABILITIES	DVB T-T2 - ISDBT - ATSC - DTMB - GB20600, DAB+, FM Radio
Standards	ESTI EN 300744 (DVB-T, DVB-H), ETSI EN 302755 (DVB-T2), EN 50083-9 (DVB-C)
DVB 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 dBuV 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 dBµV (±2 dB - 0.05dB/°C)
Frequency offset	1-500 KHz (option >= 100Hz)
SNR / MER	8-38 dB (±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	1-100 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	256 QAM (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

PARAMETER	SPECIFICATIONS
FM	
Key features	Signal lock, Level, SAP/Subcarrier presence, Vision frequency Spectrum, TII informations
Input	Compatible band FM
Output	Local analog stereo audio output
RDS	Program service, Program type, Radio text, Prog. Identification (PS/PTY/RT/PI)
DAB/DAB+	
Key features	RF Measures, Mode I, II support, Automatic detection, sub-channel structure, vision frequency Spectrum, TII informations
Measures	Signal lock, Level, MER, SNR, FIC BER, MSC BER (add numerical FIC/MSC counter)
Parameters	Frequency offset 20-200 KHz, Precision SNR/MER 3-20 dB (± 1 dB)
Input	Compatible band III VHF (168 to 240 MHz)
Output	Local analog stereo audio output, ASI, IP
ETI	Service Information (SI), ensamble service Plan, service list

ROVER BROADCAST

ORDERING CODE

UNIT	
0EXAMINER 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	
0EXA-WIFI	Internal board for wi-fi connection with Smartphone or Tablet
0MRX-BISS	Option for: BISS descrambling SW
0EXA-BAG	Bag for EXAMINER
0EXA-GREY	Extra cover in Grey color
0MRX-CONST	Option for: Constellation, Reflectometer, Mer VS carrier (only for DVBT/T2)
0MRX-ANALOG-TV/FM	Option for: Analog front-end for TV and FM Radio
0HD_DAB+	Option for: DAB + demodulation
STANDARDS (ONE STANDARD PER BOARD ONLY)	
0HD_ATSC	Option for: ATSC demodulation
0HD_DTMB (GB20600)	Option for: DTMB demodulation
0HD_ISDBT	Option for: ISDBT demodulation

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

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