



50 YEARS IN TECHNOLOGY INNOVATION

# SIMULTANEOUS MONITORING OF 24 SATELLITE TRANSPONDERS GEO-MEO-LEO, UP & DOWN LINK, FULLY INTEGRATED IN ONE UNIT

with Built-in: 8 way Switch, 8 Spectrum Analyzers, 2 Quality Analyzers & WEB Server

**SAT  
CARRIER  
MONITOR**



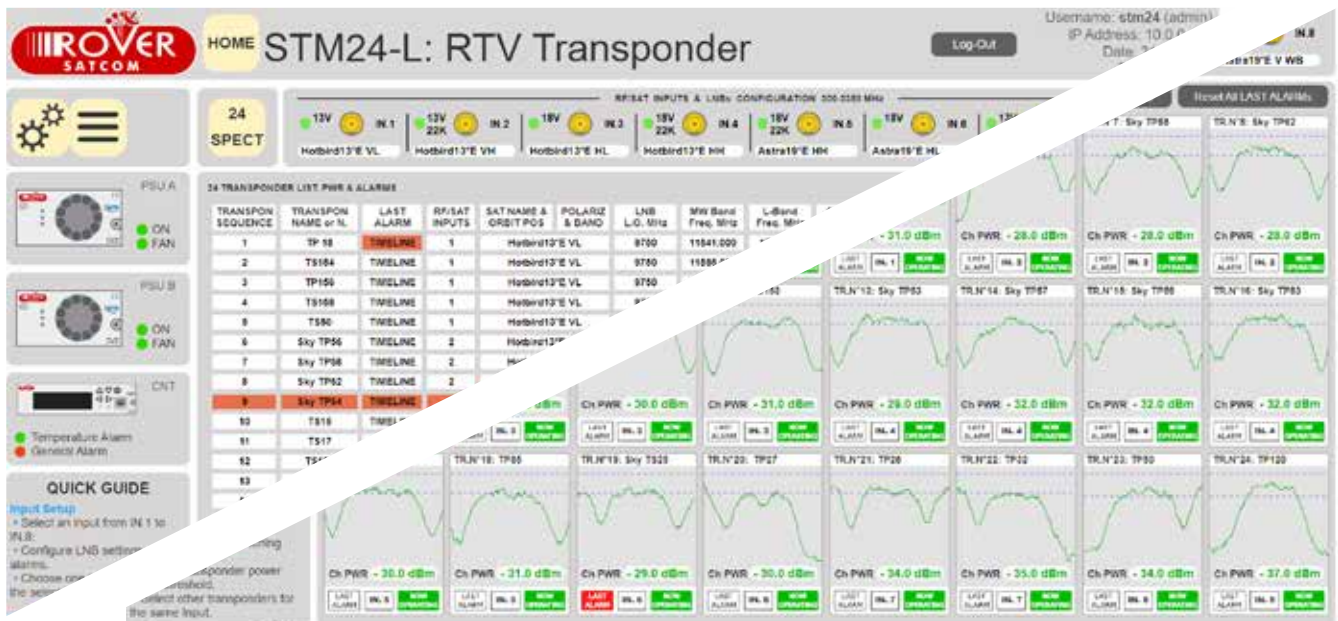
**Satellite  
Transponder  
Monitoring  
System  
24 Transp.  
L Band**

**mod. STM 24-L**

**On Site  
Free Testing  
Available**



- The best Price/Space/Speed Performance available
- No others external HW or SW Required
- 24/7 Fully Remote Operation/Configuration
- Identify problems before your customers do
- Alert NOCs/operator/engineer via Trap or Mail
- Observe historical or current live events
- Year/Month/Day/Hour, Time Line & D.Logger
- World Wide reachable via SNMP & WEB
- Ideal for small & large Operators & Teleports
- 5 Y warranty, Reliable Support & Training



**INNOVATIVE  
PERFORMANCE**

for: SYSTEM INTEGRATOR,  
TELEPORT BROADCASTER,  
CABLE NETWORK, GOVERNMENT  
& MILITARY COMMUNICATIONS



1972 > 2022 >>

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## WHAT ARE THE "STM24" TARGETS?

- To Monitor 24 Satellite Transponders on high competitive level, in terms of Price/Speed & Performance
- Reduction of the required Space to 1U Rack
- To be worldwide, reachable using only a WEB browser

## WHAT ARE THE NEW "STM24" PERFORMANCE?

- All HW & SW fully integrated in one unit
- Can Simultaneously Measure & Display the Signals condition of 24 Satellite Transponders and related Alarms Status
- Can Simultaneously Display 24 Satellite Transponders Spectrum Mosaic, the related channel PWR, the user defined Alarms Limit Mask and Alarms Trending
- Easy to find/read stored events, thanks to quick Year/Month/Day/Hour Time Line Search, plus separate full Data Logger, with current and Historical events
- Full System Management to identify problems (before your customer) and Immediately Alert Controller/Engineers via Traps, Mail, Synoptic and acoustic alarms

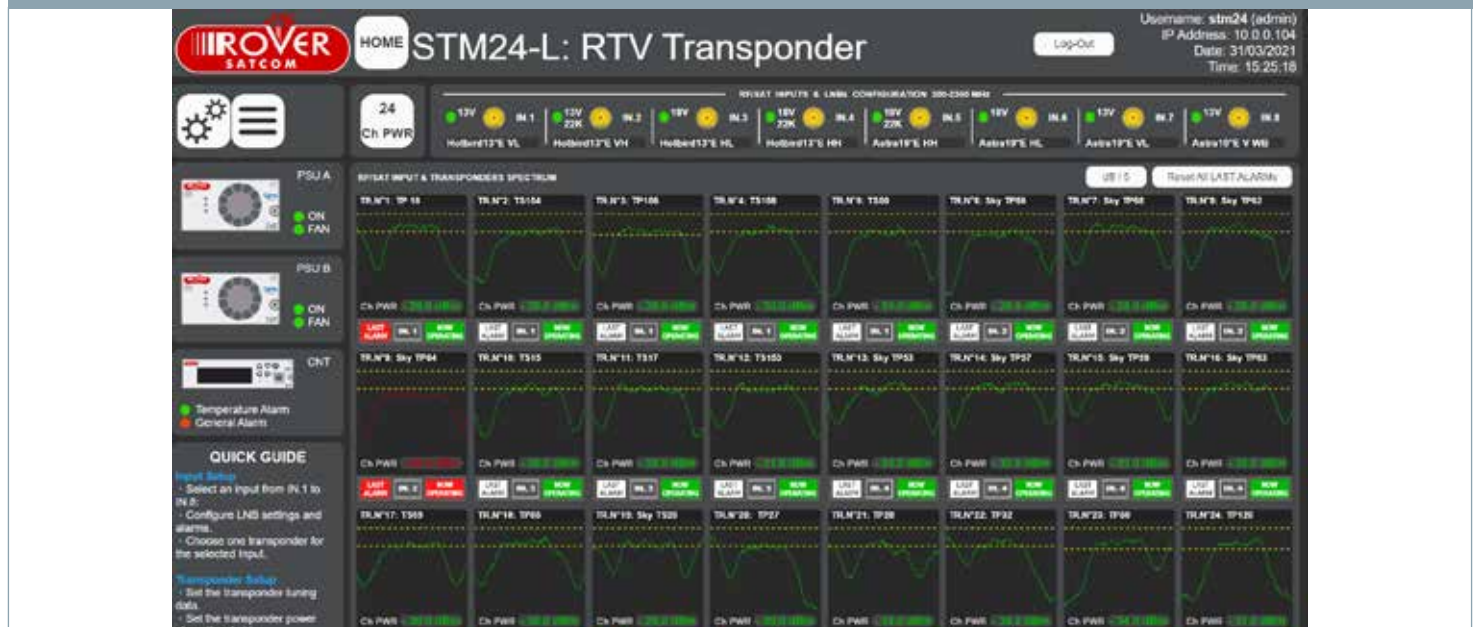
## WHAT THE "STM24" CAN INTEGRATE?

- N. 1 RF/SAT 8 way Input Switch
- N. 8 Extended L-Band Spectrum Analyzer
- N. 24 Carriers processors (one each Transponder)
- N. 2 (opt.) Satellite & TV Demod. for Quality Measurements
- N. 2 HOT-SWAP Redundant Power Supply Unit
- N. 2 (opt.) RF/SAT Outputs, Port (24 Selected Transponders)
- N. 8 (opt.) RF/SAT Monitor Ports (one each input)
- N. 8 (opt.) Separated & Controlled LNB Powering
- N. 1 HOT-SWAP Local Controller with Display
- N. 2 Ethernet Ports, front & rear
- N. 1 Optical Ethernet ports, via SFP Module
- N. 1 WEB SERVER & SNMP MIB

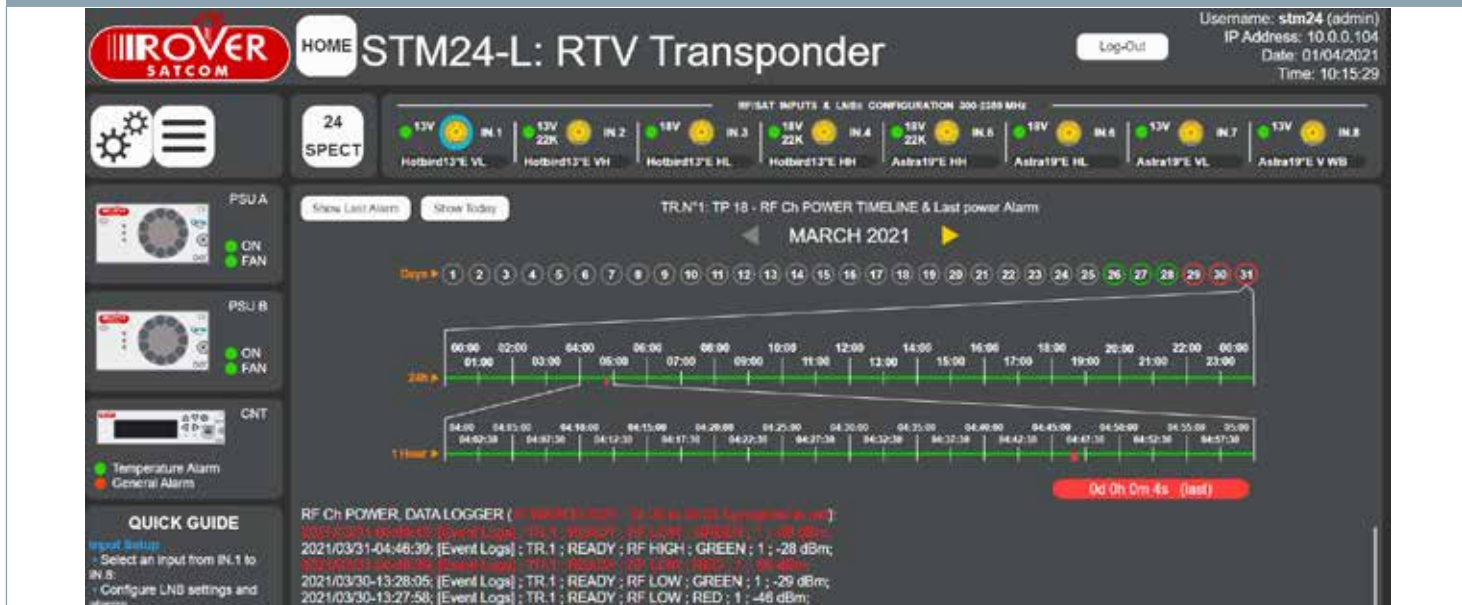
## HOME PAGE: 8 RF/SAT INPUTS, 24 TRANSPONDERS MEASURE/MONITORING & ALARMS



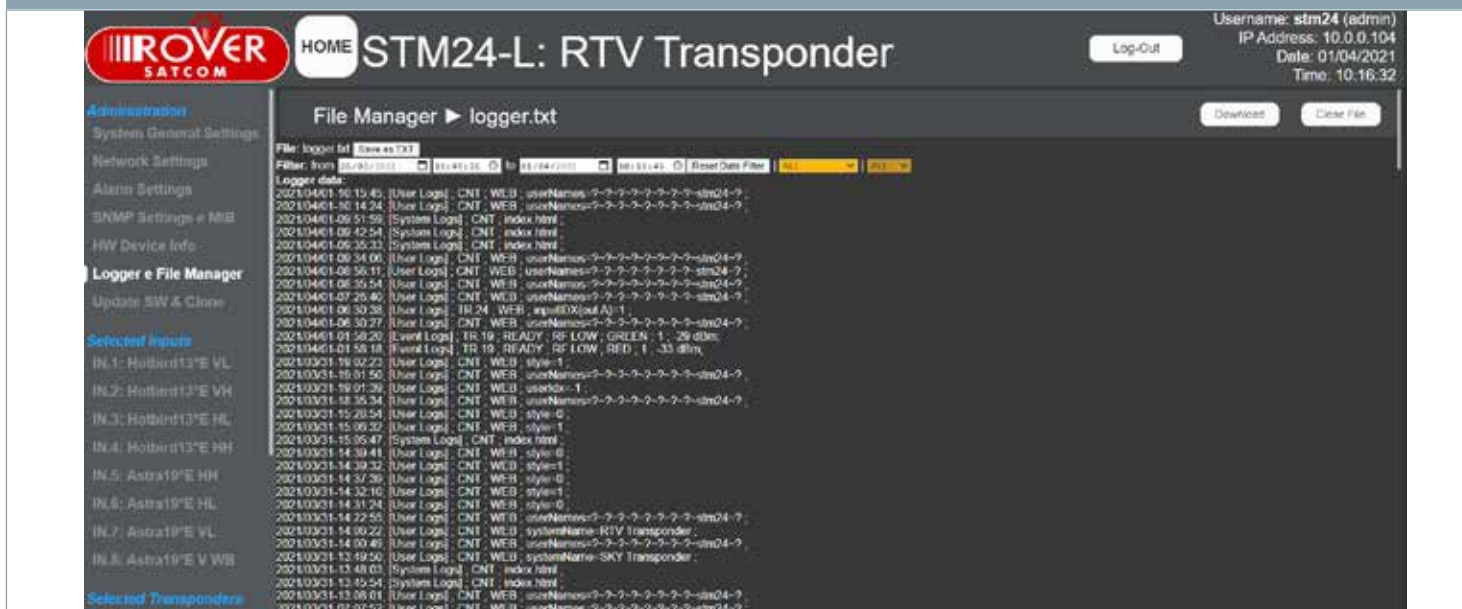
## MOSAIC OF 24 TRANSPONDERS SPECTRUM with ch PWR & ALARM LIMITS THRESHOLDS



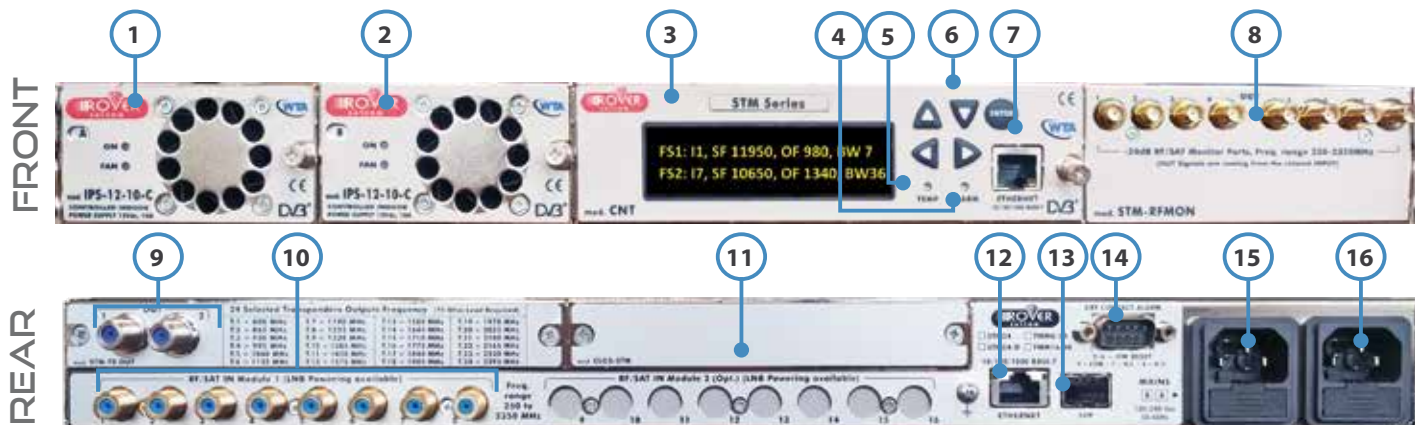
## TRANSPONDER SIGNAL EVENTS TIME LINE



## FULL EVENTS DATA LOGGER



## mod. STM24-L FRONT and REAR PANELS DESCRIPTION



- |                                 |   |  |
|---------------------------------|---|--|
| 1. Hot Swap A Power Supply Unit | 7. Front Ethernet LAN Port                      | 12. Rear Ethernet LAN Port             |
| 2. Hot Swap B Power Supply Unit | 8. (opt.) RF/SAT Monitor Ports                  | 13. (opt.) SFP, Fiber or Copper Module |
| 3. Hot Swap Control Unit        | 9. (opt.) RF/SAT Out Ports (24 Select. Transp.) | 14. Dry Contact Alarm & HW Reset       |
| 4. General Alarm LED            | 10. N. 1 to 8 RF/SAT Inputs (supplied)          | 15. B-PSU Mains Receptacle & Fuse      |
| 5. Temperature Alarm LED        | 11. (opt.) N. 1 future expansions               | 16. A-PSU Mains Receptacle & Fuse      |
| 6. Keyboard push button         |   |  |

# "STM24-L" TECHNICAL SPECIFICATIONS

## RF & PORTS:

- **Frequency Range:** Extended L-Band 250-2350 MHz
- **Frequency Resolution:** 1 KHz
- **Frequency Accuracy:** 5 KHz (worst case)
- **Input Ports Capacity:** N. 8 RF/SAT
- **RF/SAT Monitor Ports:** (opt.) N. 8 at -20 dB ± 3 (each input)
- **RF/SAT Output Ports:** (opt.) N. 2 with 24 Selected Transp.
- **RF Connectors:** 75 ohm F(f) or 50 ohm SMA (f) (opt.)
- **Port to Port Isolation:** typ. 60 dB, min 50 dB (worst case)
- **Input Return Loss:** typ. 16 dB at 75 ohm, 18 dB at 50 ohm
- **LNB powering:** N. 8 separated PSU, 500 mA each

## CHANNEL POWER MEASUREMENTS: (Already related to the Transponder BW)

- **Power Range:** -60 to -10 dBm
- **Max safe input:** +10 dBm
- **Amplitude accuracy:** 1 dB typ.
- **Measurements unit:** dBm or dBµV or dBm
- **Transponder Preselection BW:** adj. from 5 to 65 MHz
- **Measur. Speed:** 5 mS per Transponder

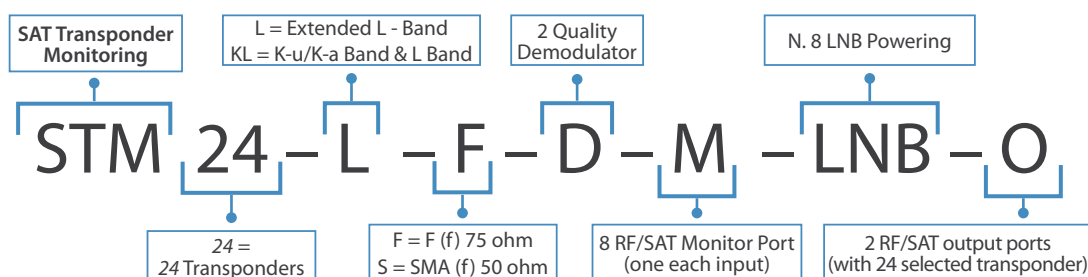
## SPECTRUM MEASUREMENTS:

- **Power Range:** -75 to -10 dBm
- **Max safe Input:** +10 dBm
- **Noise floor:** -85 dBm
- **Power accuracy:** 1 dB typ. (picture refresh 2 dB)
- **Aliasing:** -55 dB
- **Refresh speed:** 1 sec per Transponder
- **Resolution BW:** 5 MHz at 50 MHz SPAN
- **Video BW:** 10 KHz
- **SPAN:** from 50 MHz to 2 GHz
- **dB/Div.:** 5 or 10 dB selectable
- **User defined Alarms limits:** from 1 dB to 30

## GENERAL SPECIFICATIONS:

- **3 Ethernet:** N. 2 Copper & N.1 optical SFP
- **PSU:** N. 2 Redundant
- **PSU Voltage:** 110 to 240 Vac
- **PSU Consumption:** 25 W
- **Slim case:** 1U 19" Rack
- **Net Weight:** 5 to 8 Kg (options depends)
- **Temperature range:** -30 to +55° C
- **Umidity:** 95 %
- **EMC:** EN 50083-2
- **Safety:** EN 50083-1 and EN 60950

## ORDERING CODE DEFINITION



## OPTIONS

ITEM Model	DESCRIPTION	APPLICATION
STM24-LNB-8	(HW) N. 8 LNB Power Supply Inserter, 13-18V-22K-300 mA, fully independent and Short circuit protected, with 8 consumption alarms.	LNB Powering
STM-DEM-2	(HW) Dual DVB-S2-T2-ISDBT Demodulator/Decoder, for MER-BER-PER-Constellation-Network & Programs ID Quality Control, can be connected to any of 24 Selected Transponders.	MER-BER-CONSTEL
STM-MON8	(HW) N. 8 RF-SAT -20 dB Input Monitor Port, SMA Connector on front panel.	IN signals Monitor
STM-OUT-2-24	(HW) N. 2 RF-SAT Outputs, with all 24 selected Transponders, for external ETR101-290 Measurements.	Transp. OUT for measures

## ALTERNATIVE VERSION Ku-Band and L-Band

MODEL/CODE	DESCRIPTION	APPLICATION
STM-24-KL	<p><b>K-u / K-a &amp; L-Band version, see related catalogue:</b>                      Simultaneous Monitoring of 24 Satellite Transponders with built-in Ku-Band BDC, 24 chs. Power &amp; Spectrum, 8 selectable Extended K-u / K-a &amp; L-Band Inputs "F" 75 ohm or "SMA" 50 ohm, Frequency Range 250-2450 MHz, Very Fast Alarm: 24 Transponders in 500 ms, Local display SNMP &amp; WEB Server Control, Y-M-D-H Time Line &amp; Data Logger, 5 years Warranty.</p> 	SAT Monitoring

STM V5,9 28-4-21



Product  
made in Italy by  
Rover Broadcast.com

CERTIFICATES N°  
1263 ISO 9001  
1264 ISO 14001  
1265 ISO 45001



Specifications and features are subject to change without notice.

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