

PRELIMINARY

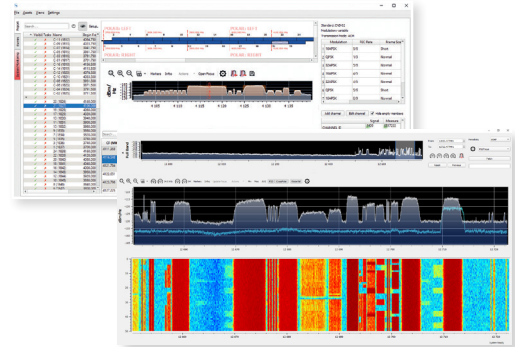
DATA SYSTEMS



TRACK MONITOR ANALYZE GEOLOC

LYNKS MONITOR

Carrier Event Awareness
Swift Coordination
of Processing



COMMUNICATION & SITUATIONAL AWARENESS

The Safran Data Systems LYNKS product series is a scalable solution for **analyzing satellite traffic in a cooperative or non-cooperative environment** (detection, characterization, geolocation) and **tracking satellite orbits** with the Safran Data Systems WeTrack™ service.

The LYNKS MONITOR is a fully automated spectrum monitoring solution for satellite awareness and recording of satellite communication events including communications in a non-cooperative environment. The LYNKS MONITOR can get the full characteristics of the carriers in blind mode and monitor them over a defined period.



Spectrum situational Awareness



Monitoring Satellite Communications



Automatic recording for carrier Analysis and Geolocation

MONITORING OF CARRIERS

Different modes:

- Learning: Populate the database from scratch
- Focus: Constant monitoring of any custom part of the spectrum or carrier(s)
- Background: Scheduled monitoring of satellites, transponders and carriers.

ACTION ON DEFINED TRIGGER DETECTION

Recording
Analysis
Geolocation

POWERFUL FRONT-END

- Two L-band inputs
- Up to 220 MHz BW per input
- Up to 48 simultaneous acquisitions

FAST DETECTION AND ALARM

- Defined signal parameters changes
- Interference occurrence (even spurious)
- Specific signals
- Alteration of the carriers characteristics

ENHANCED FEATURES (OPTION)

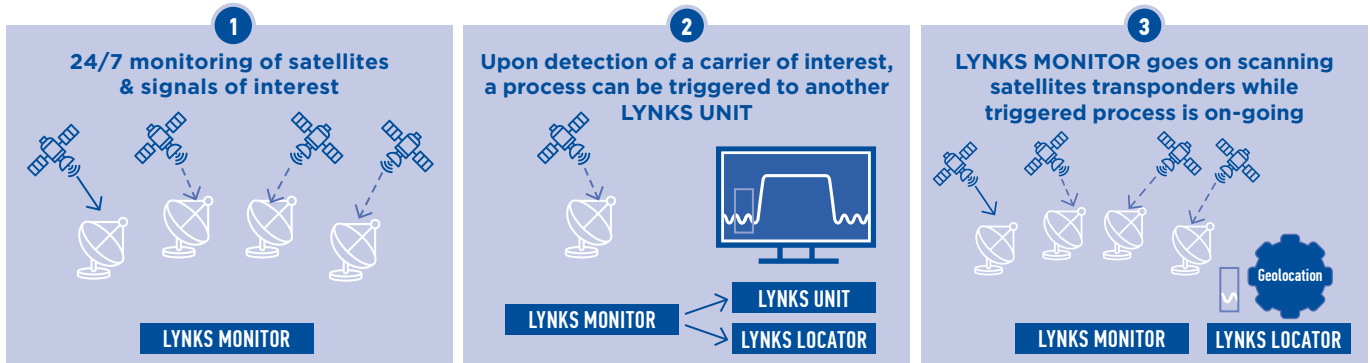
Advanced analysis
TDMA classifier
Carrier ID demodulation

CUSTOMIZATION

Custom tailored interface

LYNKS MONITOR

PRELIMINARY



TECHNICAL SPECIFICATIONS

General characteristics

Inputs	2 inputs
Input bandwidth	950 – 2150 MHz
3dB bandwidth	220 MHz
Nominal input power	-40 up to 0 dBm
(max: +13 dBm) in 1.2 GHz of bandwidth	
Input impedance	50 Ω
Noise Factor	16 dB typical
Internal 10 MHz reference, frequency stability	< ± 3.10 ⁻⁸ /y.
Phase noise with internal reference:	
@1KHz	< -85 dBc/Hz
@1MHz	< -115 dBc/Hz
External 10 MHz reference: level 0 dBm ± 3 dB, phase noise:	
@1KHz, minimum	-85 dBc/Hz
@1MHz, minimum	-115 dBc/Hz
Time synchronization external 1PPS: LVTTTL (compatible TTL)	
Frequency	Range 950 to 2150 MHz (resolution 1Hz)
for the center frequency.	
Processing	Acquisition, analysis, monitoring, recording
Interfaces	Ethernet 1 Gbps (RJ45) & 10 Gbps (SFP+)
Output	XML RPC API

Environmental and physical conditions

Temperature	Operating: +10°C – +30°C
	Storage: -20°C - +70°C
Supply	100-240 VAC – 50-60 Hz
Consumption	< 1,000 Watts
Dimension	2U - 19" rack mountable unit
	483 mm x 87 mm x 716 mm (L x W x D)
Weight	25 Kg
CE compliant	Yes

MONITORING

Monitoring features

Spectrum Analysis	Spectrum Display, Waterfall, Cross Polarization Display, Carrier Detection
Carrier Analysis	Blind carrier RF and Digital Parameters analysis: Modulation, FEC, Standards
Monitoring	Interferer and jammer detection, events and alarms
Carrier History	Historical Measurement, historical events stored in database
Recording	Signal Record
Automatic processing	Blind Satellites and transponder learning Automatic Monitoring Tasks
Matrix	Automatic management of L-band switching matrix

Monitoring performances

BW	Instantaneous: 220 MHz
	Full Band: 1200 MHz
Modulations	xPSK, X-QAM, X-APSK, +30 constellations (option)
FEC (option)	Inner code: TPC, LDPC, TCC, TCM, Convolutional (option), Outer code: RS, BCH
Standards	DVB-S/S2/S2-X, IESS, Comtech...
Carrier Analysis Duration	typ 0.2 sec / carrier
Interfaces	Remote GUI
	API

Find out how our solutions will transform your operations.

Contact our sales teams to uncover the amazing features of the Lynks product series...

GLOBAL SALES

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