# VISIONETICS

## INTERNATIONAL

**Au service de votre Numérique**

**Catalog 2026**

**Analyzers**

# Table of Contents

# HEXYLON - One device, a multitude of functionalities
## Multistandard TV and radio analyzer

Hexylon is a high-performance multistandard TV and radio analyzer designed for professional users, offering advanced features, high measurement accuracy, and the most intuitive user interface on the market.

With Hexylon, network operators, broadcasters, and broadcast technicians have a tool to measure, analyze, and diagnose radio and television signals in any scenario, no matter how complex. All of this is achieved in the most automated and intuitive way available on the market.

Its ultra-fast spectrum analyzer, with high resolution and proprietary features such as the new PDP v2 (Path Delay Profile) for echo analysis, makes it possible to visualize any important aspect of the signal that might otherwise remain hidden. With new concepts such as "one-click scalability" (the ability to incorporate new features via the Internet) and "always-on battery" (a battery that is replaceable and can be recharged separately), Hexylon ensures that your investment is protected.

Hexylon integrates a remote user repository in the cloud where you can obtain free updates, measurement downloads, new channel plans, and more, allowing operators to manage their entire fleet of equipment and installers at no additional cost.

## Key Features

All standards :
- Analog
- DVB-T, DVB-T2 v1.3.1, DVB-T2 Lite, DVB-T2-MI (Gateway to Modulator)
- DVB-H
- ISDB-T/Tb, DVB-S, DVB-S2, DVB-S2 Multistream, DSS
- DVB-C, QAM Annex A, B, C
- ATSC 3.0*
- ATSC 1.0*
- DVB-C, DVB-H, Analog (PAL, NTSC, SECAM)
- FM, DAB, DAB+

All interfaces :
- RF
- ASI
- HDMI
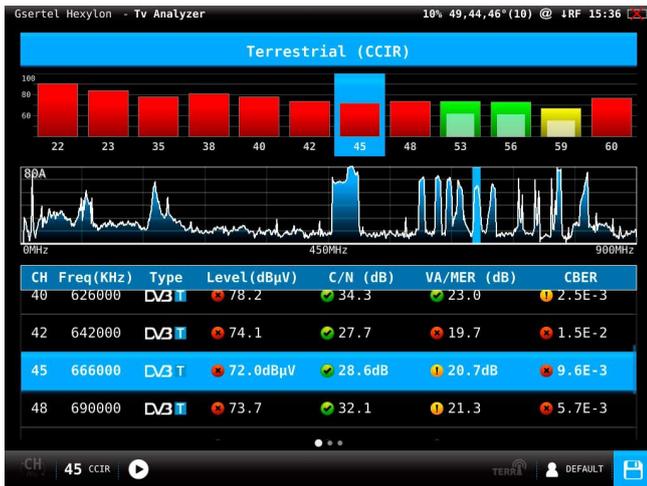- GPS
- USB
- WIFI
- FO
- IP

* ATSC option REF: 901622.

5

Functions :

- Operation via the 8-inch touchscreen or keypad
- Fast field-replaceable battery with integrated charger
- Advanced echo analysis (pre- and post-echoes), including echoes outside the guard interval
- Powerful digital spectrum analyzer (sweep time under 10 ms), frequency range 5 MHz–3.3 GHz
- Graphical constellation display
- Error packet time analysis
- Decoding and playback of ATSC 3.0 services (ROUTE, MMTP) *ATSC option REF: 901622
- Decoding and playback of MPEG-2 / MPEG-4 Full HD 1080p / HEVC 4K video
- MPEG-2 / MPEG-4 Full HD 1080p / HEVC display
- User profile customization
- Automatic channel scanning
- Storage and processing of all measurement data (measurements, spectrum, constellation, echoes, video)
- Configurable resolution bandwidth filters from 300 Hz to 6.4 MHz
- Configurable video filters from 100 Hz to 1 MHz
- Automatic satellite identification
- dCSS, SCR, DiSEqC 1.1 support
- GPS for tracking and automatic storage of measurements
- LTE interference detection and simulation
- Large internal memory for user data recording
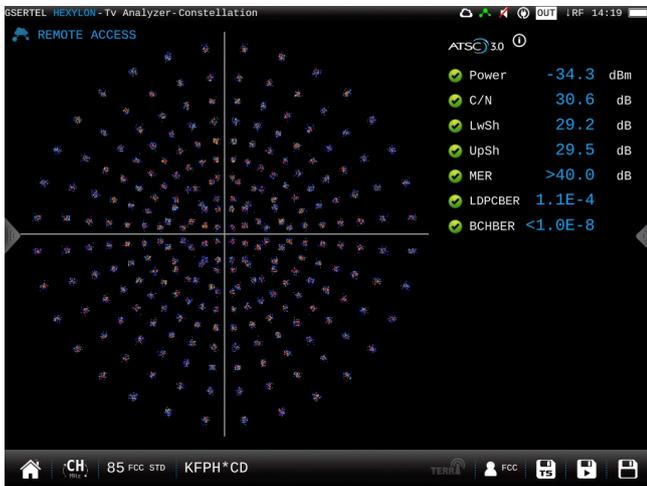- Ethernet, Wi-Fi, third-party equipment, and user cloud connectivity.

# Example displays



**Automatic scan**

Automatic scanning, identification, and measurement of all channels in the band



**Channel analysis**

Video, transport stream analysis, measurements, and real-time spectral representation of the channel on a single screen.
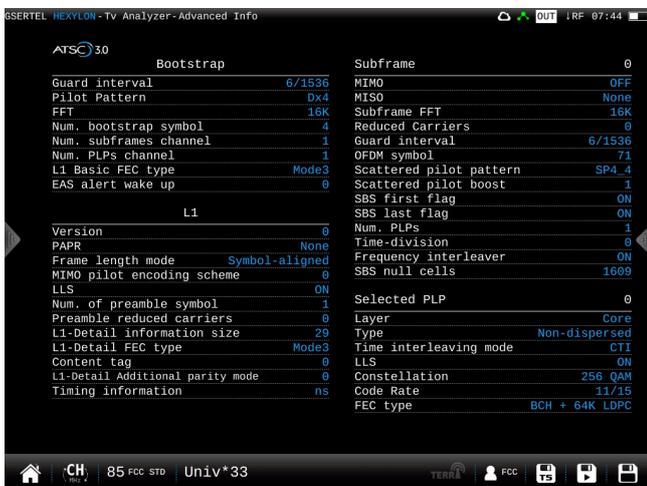


**Constellation**

Using the constellation diagram, you can detect the presence of noise, phase jitter, interference, and gain compression, all of which impact overall signal quality and thus reduce the modulation error ratio (MER).
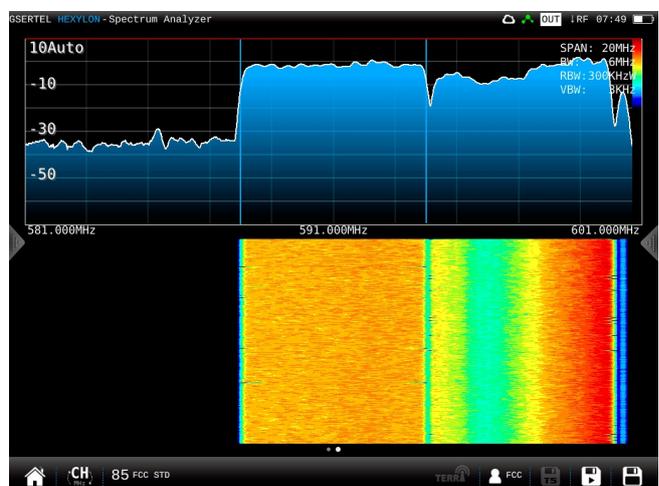


**Spectrum analyzer**

Fast, accurate, and intuitive spectrum analyzer with multiple measurement and capture setups.



**Advanced information**

Displays comprehensive details on modulation parameters.



**Waterfall**

Time- and frequency-based representation of the signal.

# DVB-T/T2 Network Monitoring Platform

RCS 100 : 1 RF input, 1 ASI input, and 1 ASI output
RCS 400 : 4 RF inputs, 4 ASI inputs, and 2 ASI outputs

The Gsertel DVB-T/T2 RCS is a professional network monitoring platform that enables remote, proactive, simultaneous, and real-time control of a DVB-T/T2 digital TV multiplex at both the RF and transport stream levels.

With a compact 1U format, all necessary processing and analysis for monitoring results are performed on the device itself, requiring no additional equipment other than a standard web browser to view the information.

The RCS's intuitive web interface provides easy and quick access to all functions, combined with unique features such as powerful spectral analysis and the ability to record signals in streaming or ETI (Ensemble Transport Interface) format, making the RCS an ideal solution for viewer monitoring, transmission sites, or field locations.

## Key Features

Connectivity :
- Inputs:
  - 1 x RF (RCS100), 4 x RF (RCS400)
  - TS: 1 x ASI (RCS100), 4 x ASI (RCS400)
  - IP: 2 x GE RF RJ45 (TSoIP) optional (RCS100 & RCS400)
- Synchronization: 1 PPS, BNC 50Ω
- Ethernet RJ45 port for management
- HDMI output
- USB portB

Optional :
- IP input (TSoIP) with VLAN and IGMP support
- Redundant IP input
- Advanced measurements (full spectrum, constellations, SFN DVB-T/T2 drift, frequency offset)
- Extended TS analysis (priority level 3 errors, PCR)
- T2-MI analysis
- TS recording (manual trigger and alarm)
- Live streaming
- PID monitoring
- Bitrate monitoring
- Loudness measurement (according to EBU Tech Doc 3341)
- Black and freeze detection
- Audio silence detection
- QoS measurements and alarmse

Professional Monitoring:

■ RF Analysis
      * Real-time spectrum
      * Two operating modes: single-channel analysis or multi-channel scanning
      * Signal quality measurements: Power, C/N, BER, MER, DVB-T echoes
      * DVB-T2 models
      * ETR 290 BBFER DVB-T2
      * DVB-T2 LDPC iterations
      * TPS (Transmission Parameter Signaling)
      * Alarm log (real-time) with temporal evolution display

■ TS Analysis
      * Bitrate
      * Priority level 1 and 2 error analysis according to TR 101 290 recommendations
      * Table repetition and quality analysis
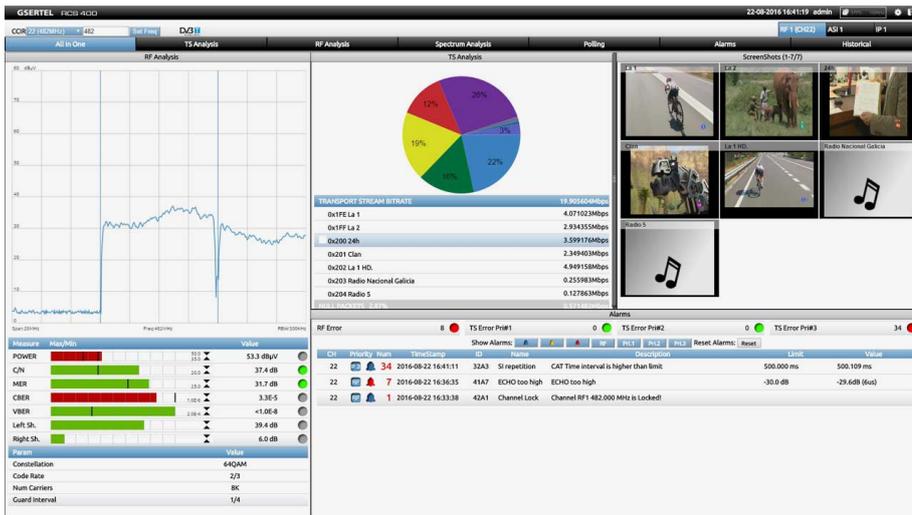      * Service tree
      * RDS analysis
      * EPG

■ Additional Features
      * Video thumbnails
      * Ethernet connectivity
      * Complete measurement history with alarm analysis
      * Synchronization inputs: 1 PPS and 10 MHz
      * HTML5 control application
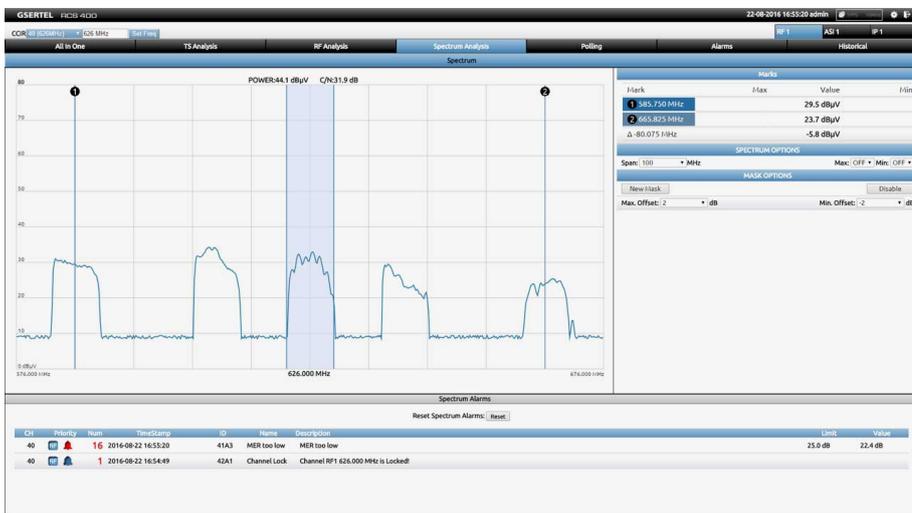      * T2-MI PLP extraction
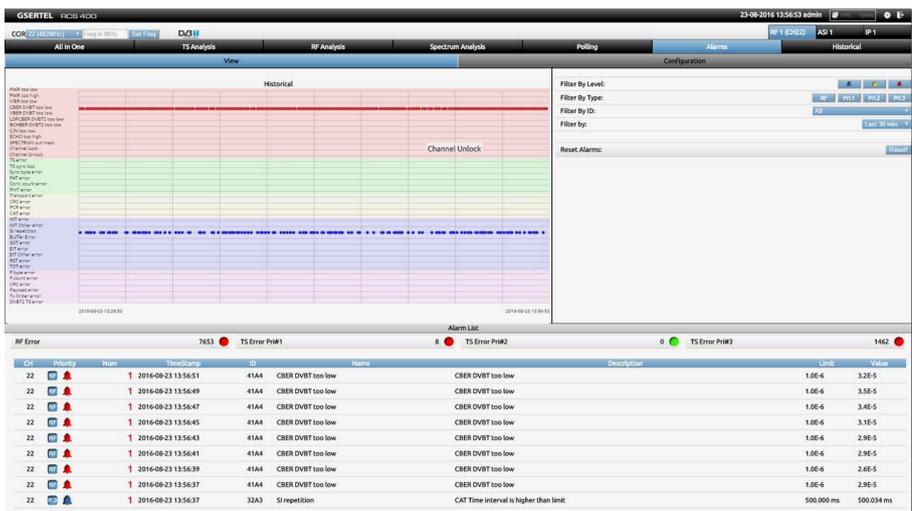      * SNMP v2.0 alarms

# Example displays



**All-in-One**
All channel analysis and measurement information summarized at a glance.



**Full Spectrum**
Spectrum analyzer from 5 Hz to 1 GHz with mask function and automatic alarm.



**Alarms**
Time-based display, filtering, and visualization of alarm functions (grouped by type).
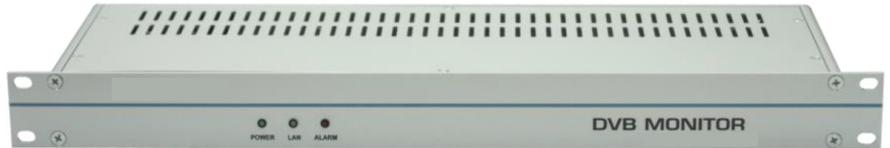
# SM300/QM300/IPM300
## Modulation Quality Guard
## For DVB-S/S2/T/T2/C, PAL, SECAM, and IPTV

This range of analyzers is dedicated to real-time monitoring of CATV, IPTV, and DVB-S2/T/C broadcast networks. Installed at the headend, the analyzer ensures optimal service quality for subscribers by quickly detecting broadcast issues. Through the RF tuner or GbE port, it analyzes TS streams and up to 240 services to ensure compliance with regulatory requirements and operator quality standards. With its IP management port, it can be configured and controlled remotely via the web interface or SNMP. For every incident or alarm, the network operations center (NOC) can be notified via SNMP traps and email.

## Key Features

☑ 1U rack-mountable equipment with single power supply
☑ RF monitoring: Signal level, MER, BER, C/N, SNR (SM300/QM300 models)
☑ IPTV monitoring: Multicast/unicast TS streams over RTP/UDP (IPM300 model)
☑ PSI/SI and ETR290 table monitoring
☑ Scrambling-related alarms: ECM interval and parity, EMM bitrate
☑ PID audio and video bitrate monitoring
☑ Built-in web interface
☑ HTTP streaming for IPTV service viewing on a client workstation (IPM300 model)
☑ Supports ITU J-83 Annex A and C in DVB-C (QM300 model)
☑ Daily log file creation in case of incidents
☑ Alarm reporting via SNMP traps and email notifications
I

## Model Types

| Modèle | | SM300 | QM300 | IPM300 |
|---|---|---|---|---|
| Entrée RF | DVB-S2 | ● | | |
| | DVB-T/C | | ● | |
| Entrée IPTV | | | | ● |
| Management | | ● | ● | ● |
| SD card | | ● | ● | ● |

## Rear Panel (QM300/SM300)

## Rear Panel (IPM300)