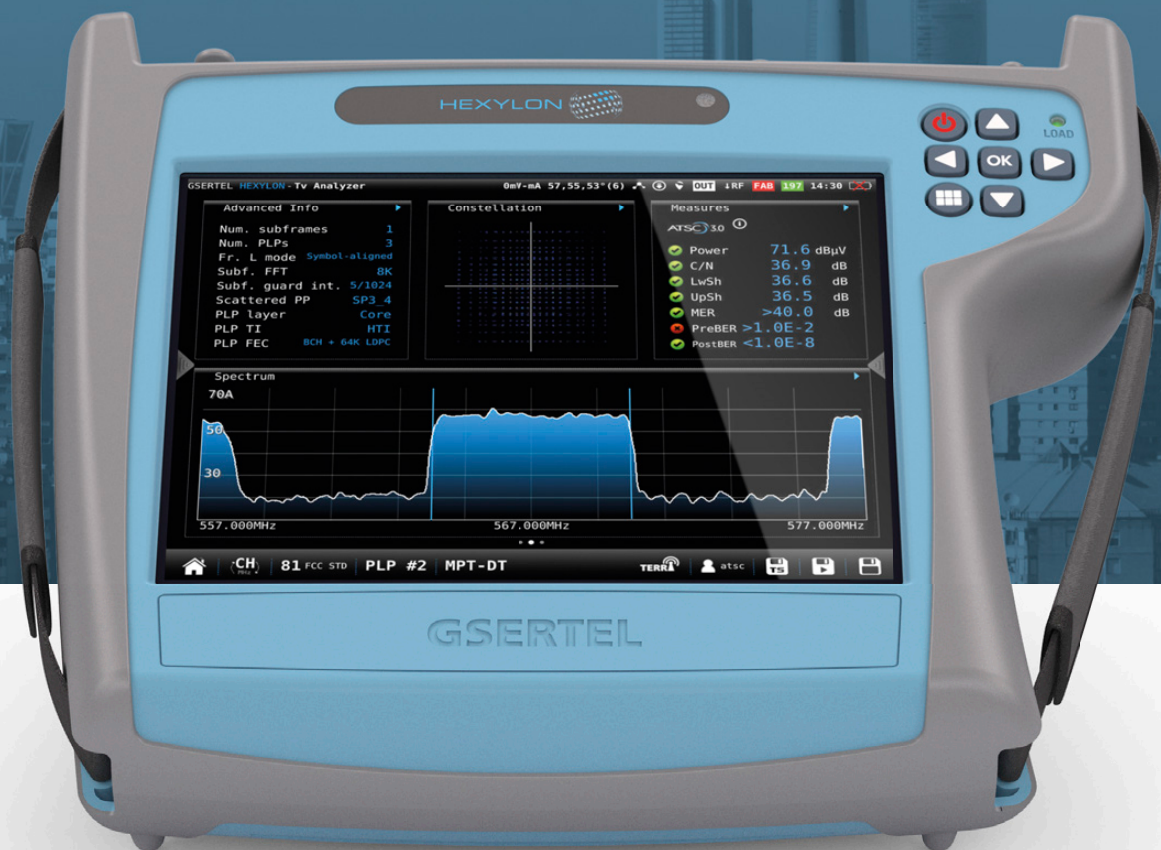


HEXYLON



Aimed to the NextGen TV

HEXYLON is a high performance **Multistandard TV and Radio Analyser** intended for the professional user with **advanced features, high measurement accuracy and the most intuitive user interface in the market**



GSERTEL



One device, full functionality

► All the Standards

ATSC 3.0	ATSC 1.0	QAM	DVB-S/S2/S2X
ANALOG TV	FM	DAB/DAB+	TSoIP
			HEVC



► All the Interfaces

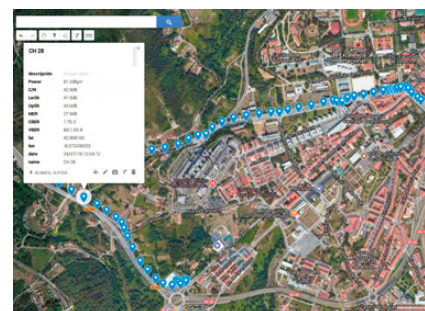
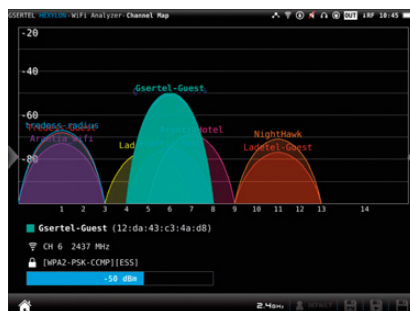
RF	ASI	HDMI	GPS
USB	Wi-Fi	FO	IP

Wi-Fi

Full connectivity and deep Wi-Fi analysis.

GPS

Detailed map and coverage analysis.



Always ON

► Field Exchangeable Spare Battery

Extend your measuring time to the whole day with a field exchangeable spare battery

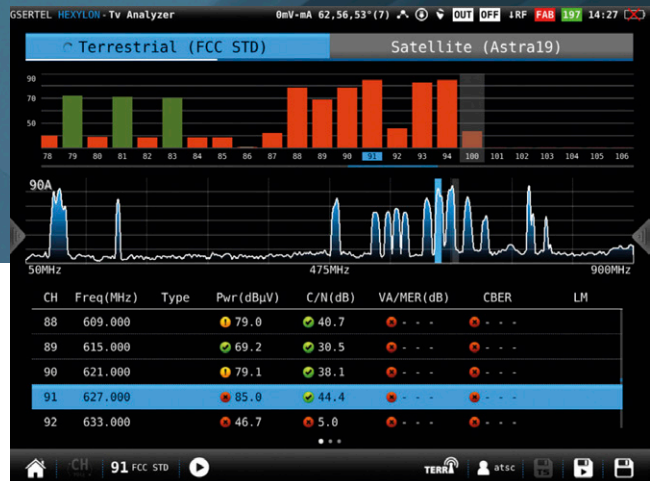
Recharge your battery while using the HEXYLON: batteries can be charged apart from the meter and continue working





Where content becomes the interface

Scan View



- ▶ ALL THE CHANNELS IN THE BAND AT A GLANCE

- ▶ ULTRA-FAST SCAN OF THE ENTIRE BAND

- ▶ AUTOMATIC PRESENT CHANNELS IDENTIFICATION AND MEASUREMENTS

- ▶ COLOR BAR GRAPH REPRESENTATION OF THE CHANNELS ACCORDING TO THE QUALITY LIMIT SET BY THE USER

- ▶ FULL SIGNAL SPECTRUM

- ▶ LIST OF ALL CHANNELS WITH THE RELATED MEASUREMENTS AND CHECKMARKS

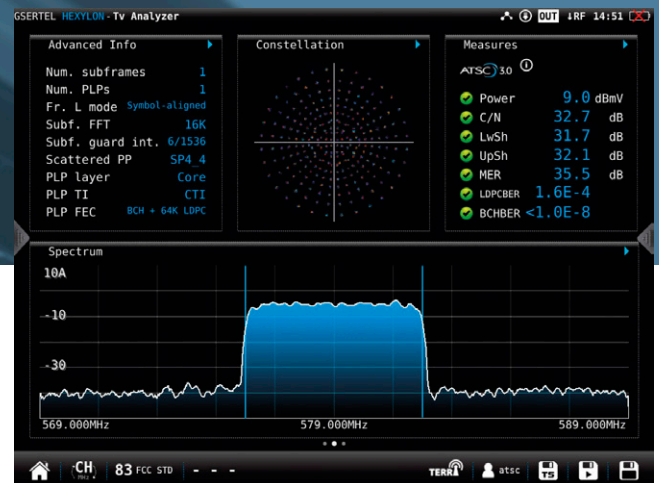
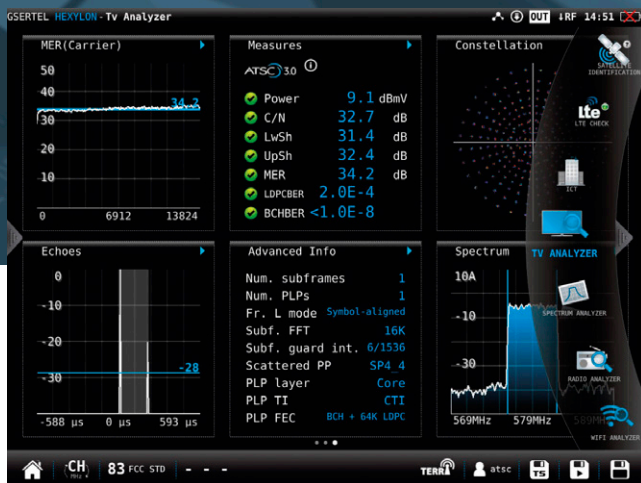
- ▶ LEARNING PLAN FUNCTIONALITY

Due to the revolutionary interface and the advanced functionalities, the **measurement and diagnose times are greatly reduced.**

HEXYLON establishes a **new concept of usability in measurement instrumentation**, where the content becomes the interface, and everything flows intuitively through naturalness in the gestural commands.

With a **real multitouch navigation on high resolution 8" screen**, elements react to user actions the way he expects, offering greater usability. Measurement tools have never been used in such a simple way.

User Defined Widgets

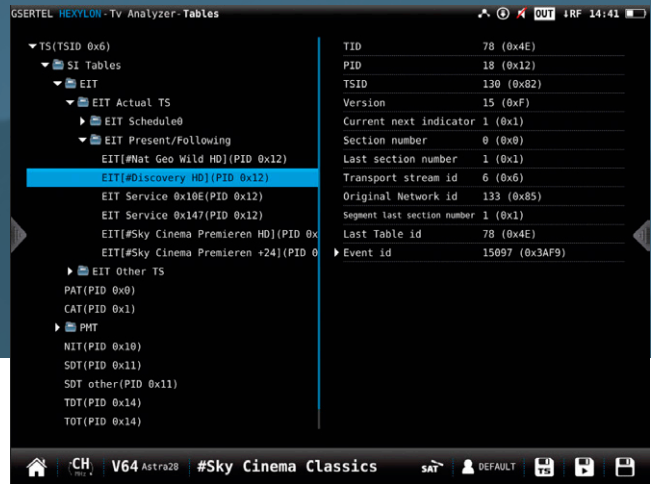
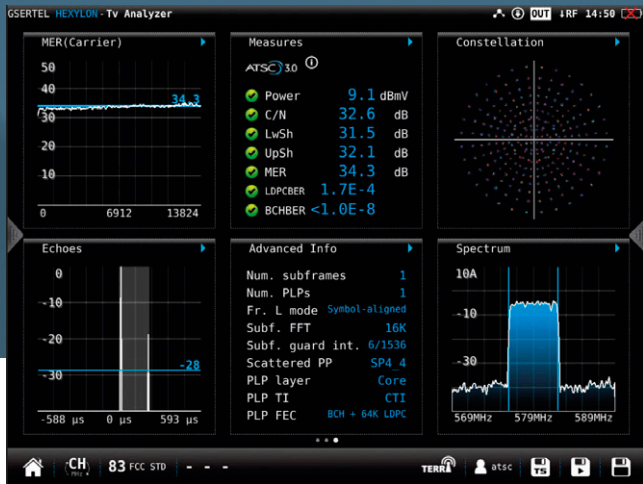


- ▶ UP TO SIX USER-SELECTED SIMULTANEOUS WIDGETS IN ONE SCREEN
- ▶ ALL THE INFORMATION RELATED TO THE TUNED CHANNEL WITH A SIMPLE LOOK
- ▶ REVOLUTIONARY USER EXPERIENCE
- ▶ DOUBLE-TAP ON THE WIDGET IN ORDER TO GET THE FULL SCREEN VIEW
- ▶ NO COMPLEX MENUS
- ▶ ALL FUNCTIONS AVAILABLE ON THE SAME WHEEL MENU

- ▶ MULTIPLE DESKTOP WITH SIMULTANEOUS WORK ENVIRONMENT
- ▶ CUSTOMIZATION: DEFINE YOUR OWN DESKTOP EASILY BY TAPPING ON THE TOP BAR OF THE SCREEN
- ▶ 20MHZ ULTRA-FAST SPECTRUM ANALYSER (50MHZ FOR SATELLITE BAND)



TV Analyser

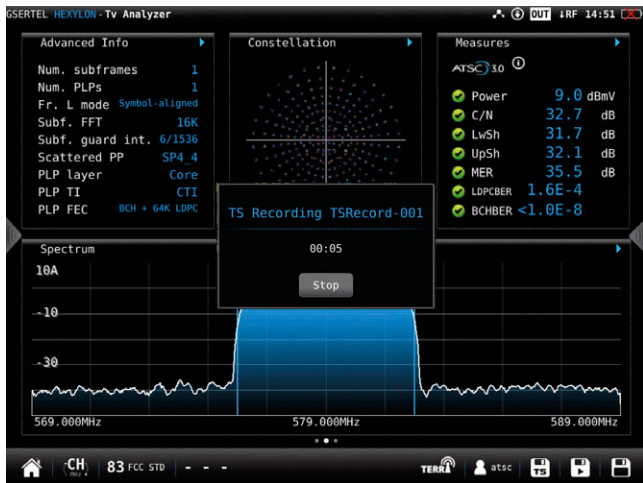


▶ NextGen TV ready

The new HEXYLON is the ideal device to test and maintain the new ATSC 3.0 facilities.

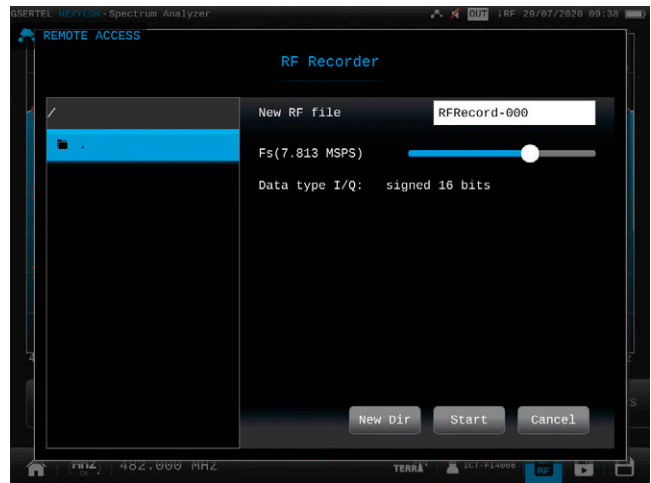
▶ TS Analysis

Treeview of PSI/SI tables with content decoding.



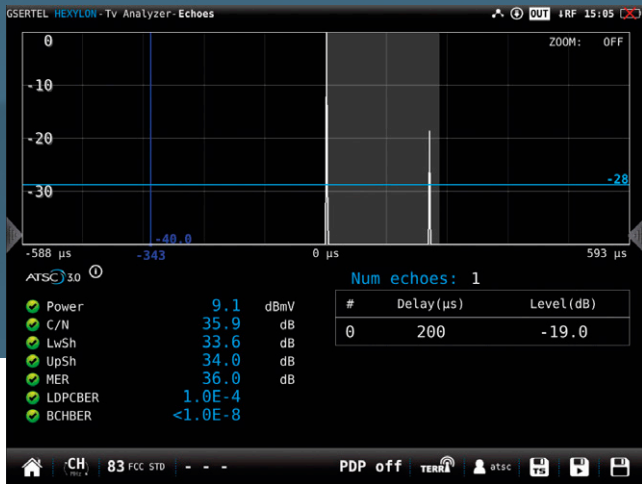
▶ TS Recording

Allows to save and playback a sample of a TS (SPTS or MPTS) or T2-MI signal in the onboard **64Gb** storage.



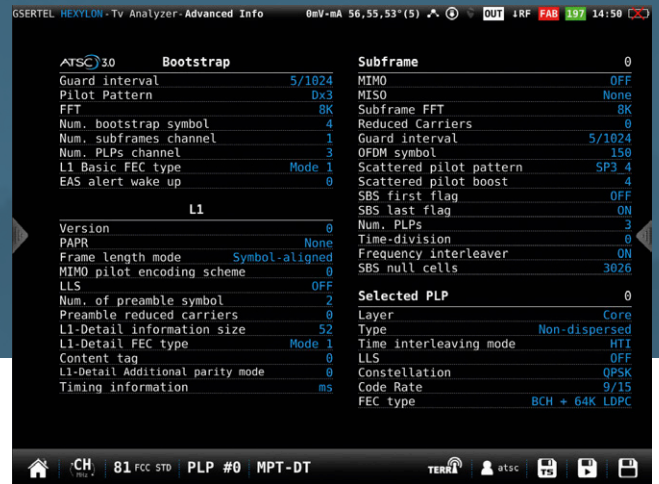
▶ RF Recording

Catch any RF signal up to 25MHz bandwidth and save it for further analysis.



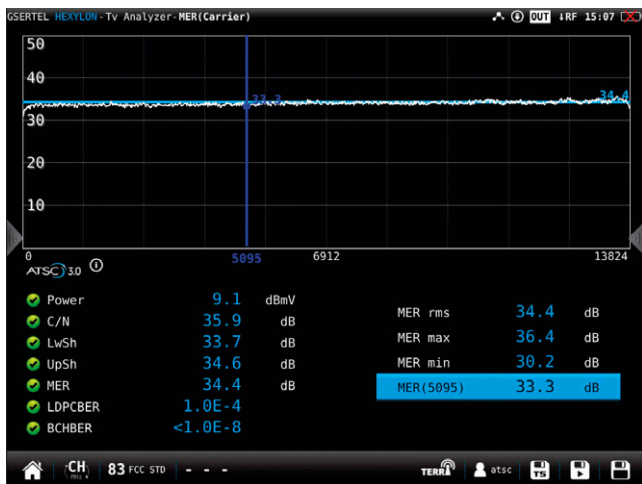
▶ ATSC 3.0 Echoes

Viewing the echoes graph helps the installer to minimize them as much as possible for optimal signal reception.



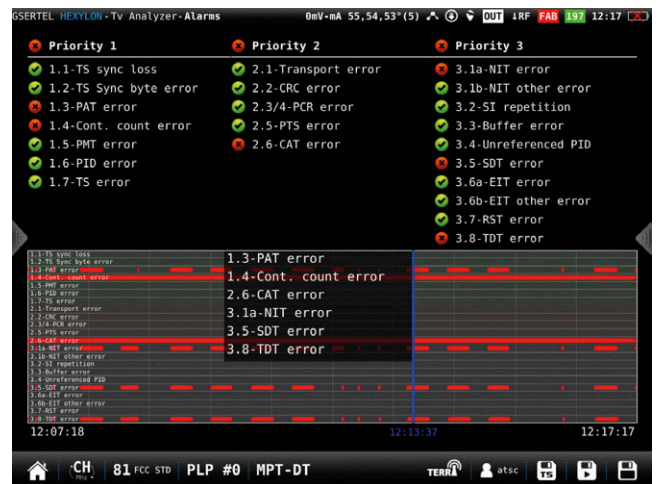
▶ Advanced Info

Exhaustive information about the modulation parameters.



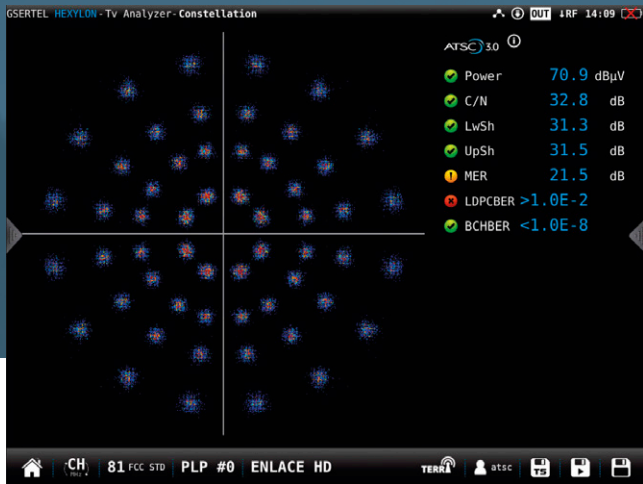
▶ MER/Carrier

Find any interference in your channel that is invisible for a traditional spectral analysis and make decrease the quality of your signal.



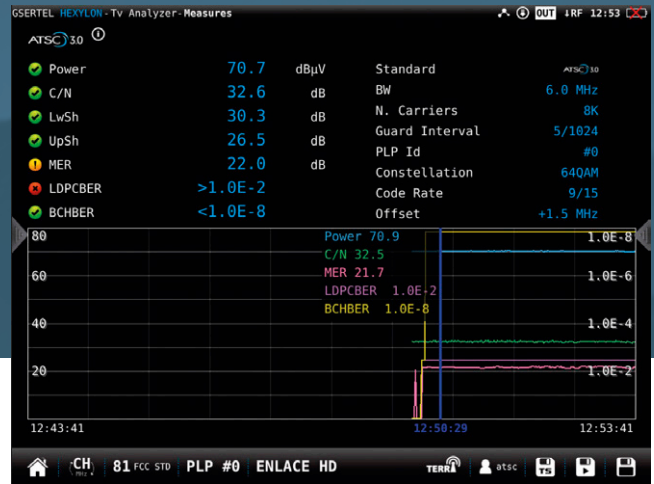
▶ Alarms

Thanks to this feature that shows all the priority 1, 2, and 3 TS alarms generated by the Hexylon in a period of time selected by the user, you can detect any failure in the TS layer.



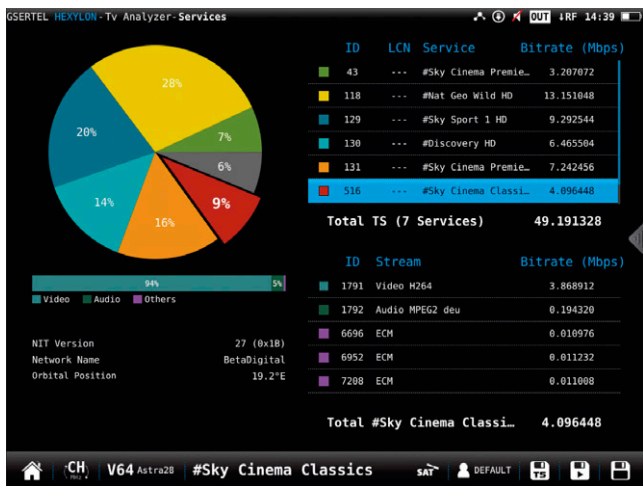
► Constellation

Constellation diagrams are an indispensable tool to help detect the presence of noise, phase jitter, interferences, and gain compression, all of which impact on the signal quality and thus reduce the Modulation Error Ratio (MER).



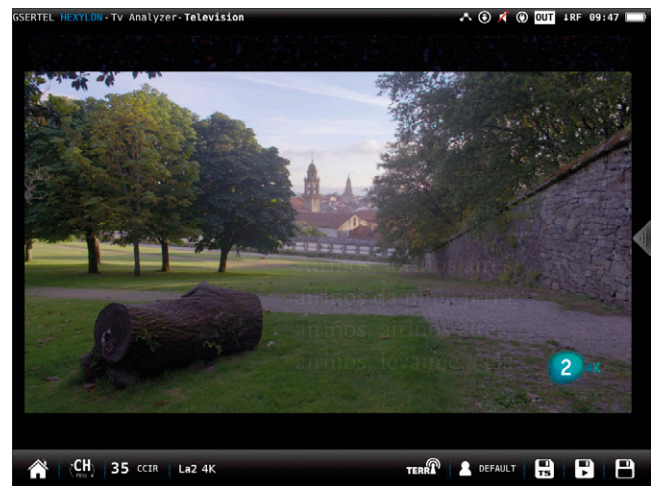
► Measurements

Access to all the measurements of the channel at any instant included in a range of time selected by the user.



► Services

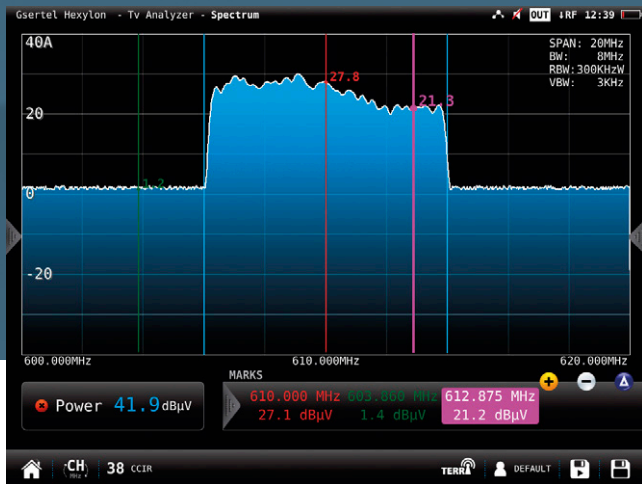
This feature shows a bitrate distribution graph of the channel services, as well as all the information relative to them.



► Real Live 4K Video

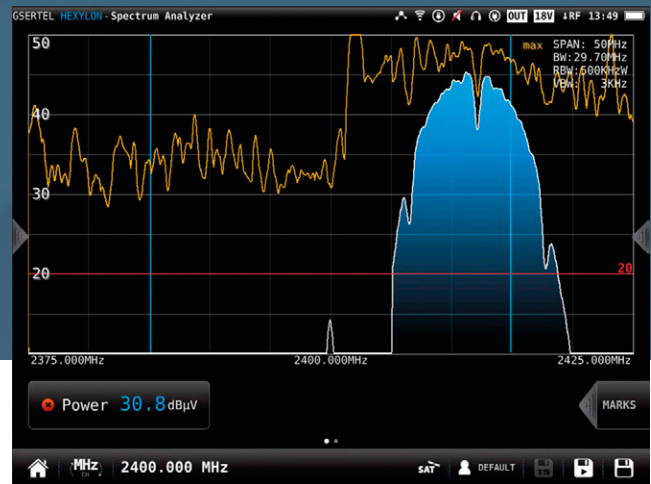
Ultra HD signals real-time display.

Spectrum Analyser



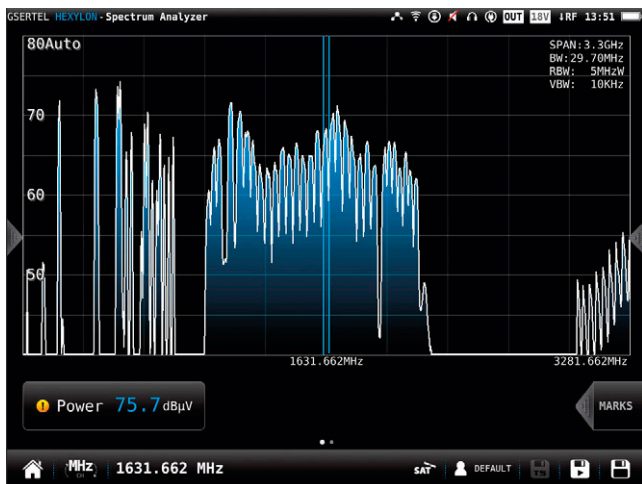
► Fast and Accurate

With a sweeping time <10ms, and multiple RBW and VBW filters, the HEXYLON spectrum analyser allows a deep analysis of any signal between 5MHz and 3.3GHz.



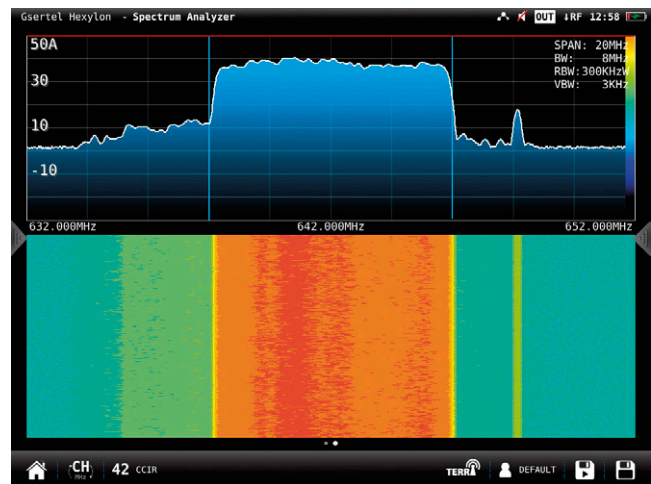
► Trigger by Level

Catch any pulsed signal in your network using this feature, with trigger level defined by the user.



► Continuous Band

The entire band at a glance with the HEXYLON's continuous band spectrum. From 5MHz to 3.3GHz.



► Waterfall

The waterfall diagram is a three-dimensional representation of the signal spectrum, in frequency and time. Signal levels are converted to colors and displayed along a time axis, enabling the detection of the spurious interferences.

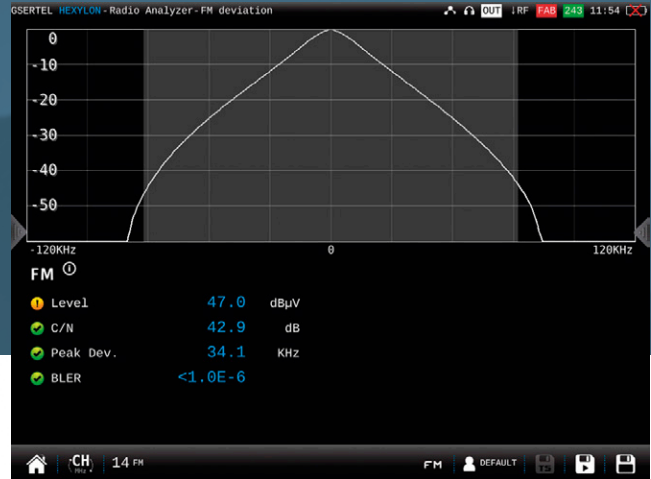


Radio Analyser



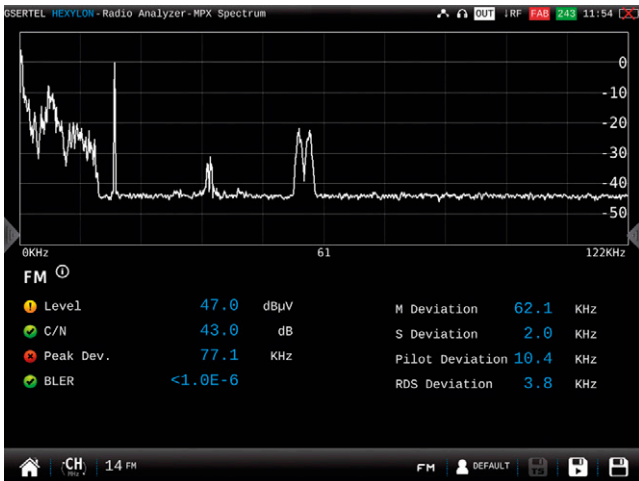
▶ Radio Info

It shows all the information about the tuned channel. For FM channels it is shown the RDS information, and for DAB channels it is shown the Ensemble, the Service, and the Radiotext information.



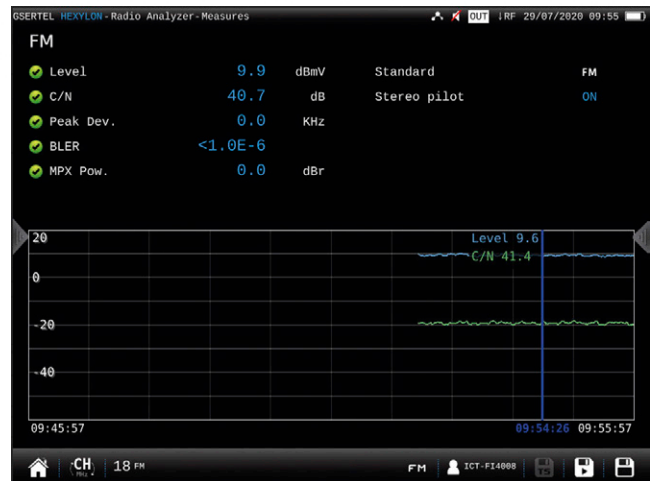
▶ FM Deviation

It shows the difference between an FM modulated frequency and the nominal carrier frequency.



▶ MPX Spectrum

This feature shows the spectrum of the demodulated FM signal, the FM channel measurements, and several deviation measurements: mono, stereo, pilot and RDS deviations.

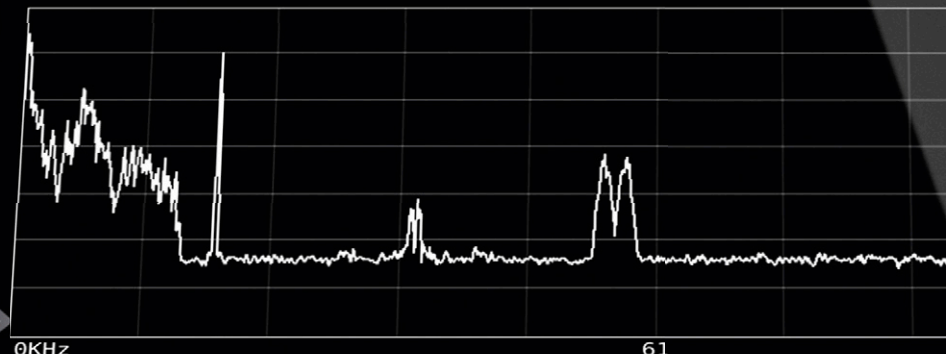


▶ Radio Measurements

All the measurements of the radio channel at any instant included in a range of time selected by the user.

HEXYLON 

GSERTEL HEXYLON - Radio Analyzer-MPX Spectrum



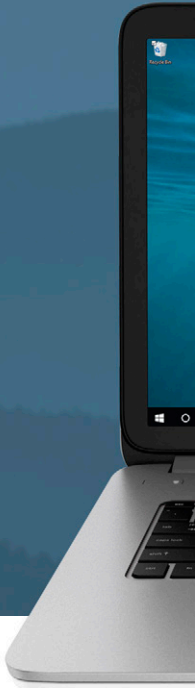
Parameter	Value	Unit	Parameter	Value	Unit
FM			M Deviation		
Level	47.0	dBμV	S Deviation		
C/N	43.0	dB	Pilot Dev.		
Peak Dev.	77.1	KHz	RDS Devia		
BLER	<1.0E-6				

Home | CH 14 FM

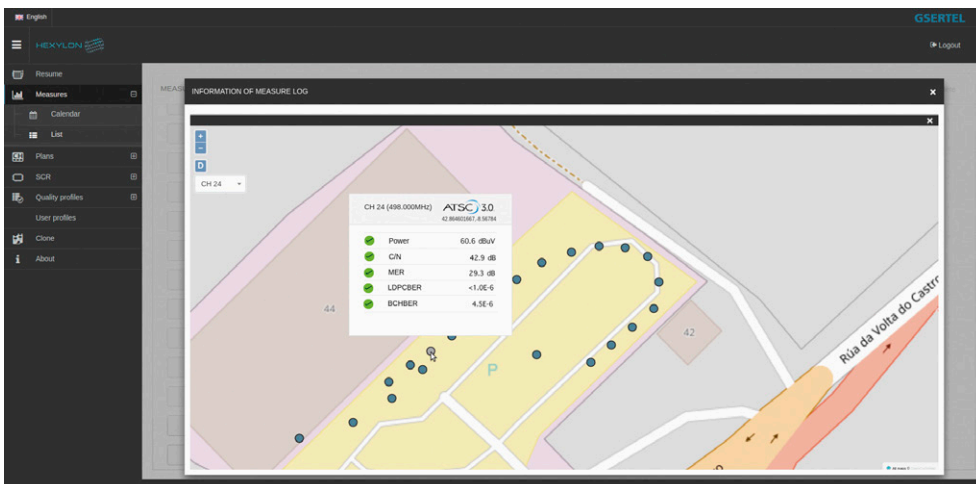
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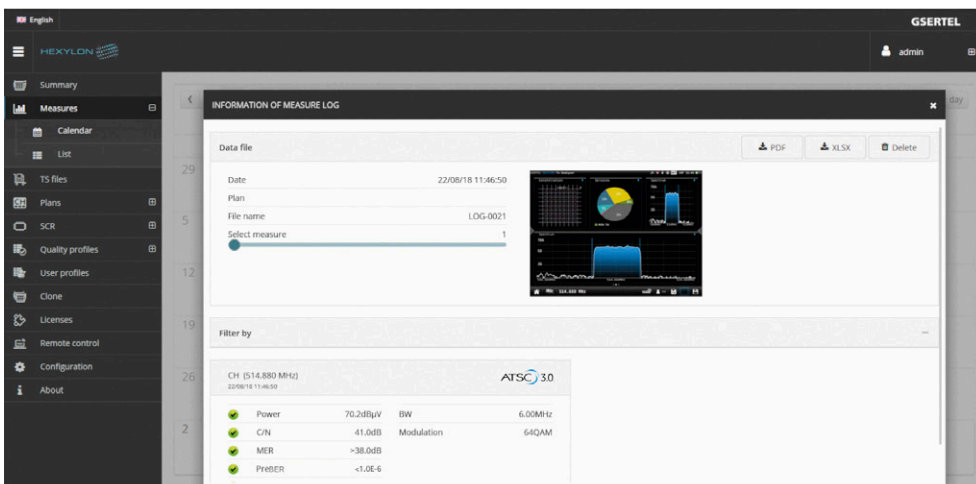
The simplest way to get the highest benefit of your HEXYLON



► Web Application & Personal Cloud



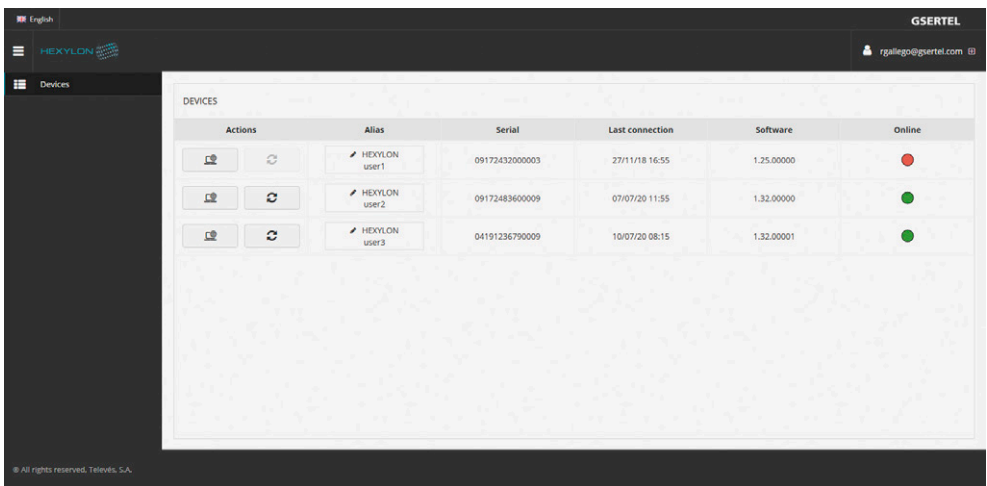
Present a Google Map trace view with GPS measurements.



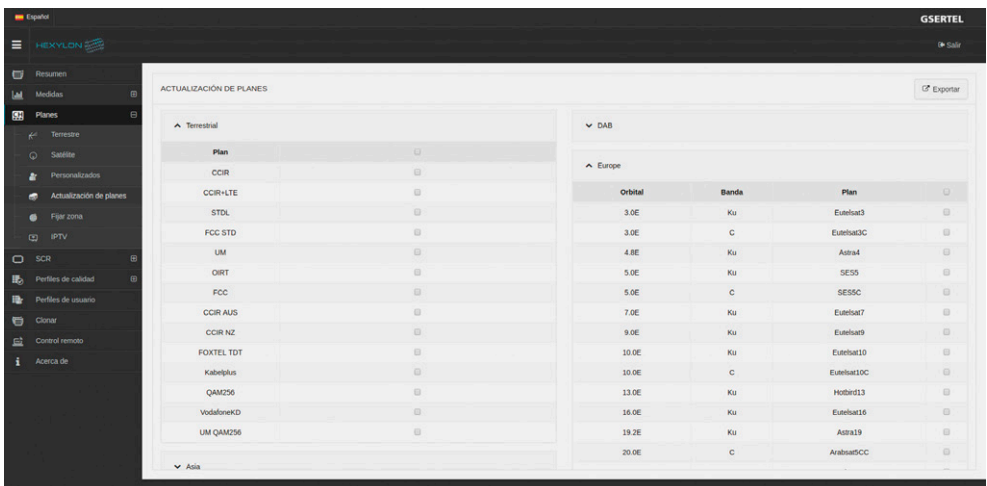
Analyze and download logs, measurements, screenshots, recordings...



Get complete remote control with the embedded VNC application.



CLOUD functionality: access to the information of your devices from everywhere.



Configure your standard channel plans according to your working geographical area. Then edit or add new channel plans in a simple way, as well as user profiles and upload all to your HEXYLON.

General Specifications

Display	8" Touch Screen TFT 1024x768 Full Color
Weight	2150g
Dimensions	250x210x60 mm (HxWxD)
Power supply	Input: 100-240V ~ 50-60Hz Output: 12VDC, 4A
Battery	Li-ion (7,2VDC, 9000mAh). Field swappable.

Operating time	> 4 hours
Oper. temperature	-5°C to 45°C (23°F to 104°F)
Storage temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	5% to 95% without condensation
Interfaces	ETH, USB, HDMI, Audio Out (Jack), Optical fiber connector FC/APC, GPS antenna connector
Storage	64 Gb

Technical Specifications

Frequency	
Range	5 - 3300 MHz
Accuracy	1 kHz
Tuning	Frequency or channel
Input	✓
Impedance	50 Ohm
ASI IN/OUT	✓
Spectrum Analyser	
Span	100 KHz, 1, 5, 10, 20, 50, 100, 200, 500 MHz, 1.0, 2.0 and 3.3 GHz. Other (any value between 100 KHz and 3.3 GHz)
RBW	500 Hz, 1, 3, 5, 10, 30, 50, 100, 300, 500 KHz, 1, 3, 5 MHz
Marks	Up to 4, with delta feature
Event trigger	✓
Waterfall	✓
Hold feature	Maximum and minimum
Reference level	Automatic and manual
Digital measurements ATSC 3.0	
Freq. Range	42-1800MHz
MPEG image	✓
Modulation	QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, and 4096QAM
Power	-90 - 20 dBm
MER	Up to 40 dB
PreBER	1.0E-2 - 1.0E-6
PostBER	1.0E-2 - 1.0E-8
C/N	Up to 40 dB
Constellation	✓
Echoes	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Digital measurements ATSC 1.0	
Freq. Range	42-1800 MHz
MPEG image	✓
Modulation	8VSB
Power	-90 - 20 dBm
MER	Up to 40 dB
LDPCBER	1.0E-2 - 1.0E-8
BCHBER	1.0E-2 - 1.0E-9
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Digital measurements QAM (Anex A/B/C)	
Modulations	4QAM, 16QAM, 32QAM, 64QAM and 256QAM
Power	-90 - 20 dBm
BER	1.2E-3 - 1.0E-8
MER	Up to 40dB
PreBER	1.0E-2 - 1.0E-8
PostBER	1.0E-2 - 1.0E-9
C/N	Up to 52 dB
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓

Digital measurements DVB-S	
Wideband (only compatible HW)	230-2400 MHz
Power	-90 - 20 dBm
CBER	1.0E-2 - 1.0E-6
VBER	1.0E-2 - 1.0E-8
MER	Up to 20 dB
C/N	Up to 30 dB
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Digital measurements DVB-S2X (option 901626)	
Wideband (only compatible HW)	230-2400 MHz
Modulations	QPSK, 8PSK
Power	-90 - 20 dBm
Link Margin	Up to 10 dB
MER	Up to 20 dB
C/N	Up to 30 dB
LDPCBER	1.0E-2 - 1.0E-6
BCHBER	1.0E-2 - 1.0E-8
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Multi TS	✓
PLS scrambling	✓
Digital measurements DVB-S2	
Wideband	✓
(Only compatible HW)	230-2400 MHz
Modulations	QPSK, 8PSK, 8APSK, 16 APSK and 32 APSK
Power	-90 - 20 dBm
Link Margin	Up to 10 dB
MER	Up to 20 dB
C/N	Up to 30 dB
LDPCBER	1.0E-2 - 1.0E-6
BCHBER	1.0E-2 - 1.0E-8
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Multi TS	✓
FM Measurements	
Level	✓
C/N	Up to 52 dB
RDS	✓
FM Advanced measurements	Option 901633

DAB/DAB+ Measurements	
(DAB+ advanced measurements option 901629)	✓
Power	-90 - 20 dBm
MER	Up to 20 dB
C/N	Up to 30 dB
CBER	9.9E-2 - 1.0E-6
MER	Up to 35 dB
SFN Drift	✓
Analog Measurements	
Level	-90 - 20 dBm
V/A	Up to 52 dB
C/N	Up to 30 dB
Up to 6 widgets	✓
User-customizable	✓
System Scan with measurements and learning plan	✓
LTE check (4G and 5G)	✓
FO (-40, 7 dBm)	Reference 901622
GPS and Drive Test	Option 901625
MPEG2, MPEG4 Full HD Channels visualization	✓
4K visualization	Option 901630
IPTV Analyser	✓
Wifi Analyser	2,4 GHz and 5 GHz
TS Analysis + TS Recording	Option 901628
RF Recording	Option 901631
Units	dBµV, dBmV, dBm
Network Tools	✓
Preamp powering	5,13, 18, 24Vdc and other (any value between 5 and 24V)
Maximum supplied power	12 W
Maximum supplied current	900 mA
LNB Tone	22 KHz
DiSEqC	✓
SCR dCSS	✓
Cloud	✓

Specifications are subject to change without notice

GSERTEL

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