HEXYLON

Aimed to the Network Operator

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**

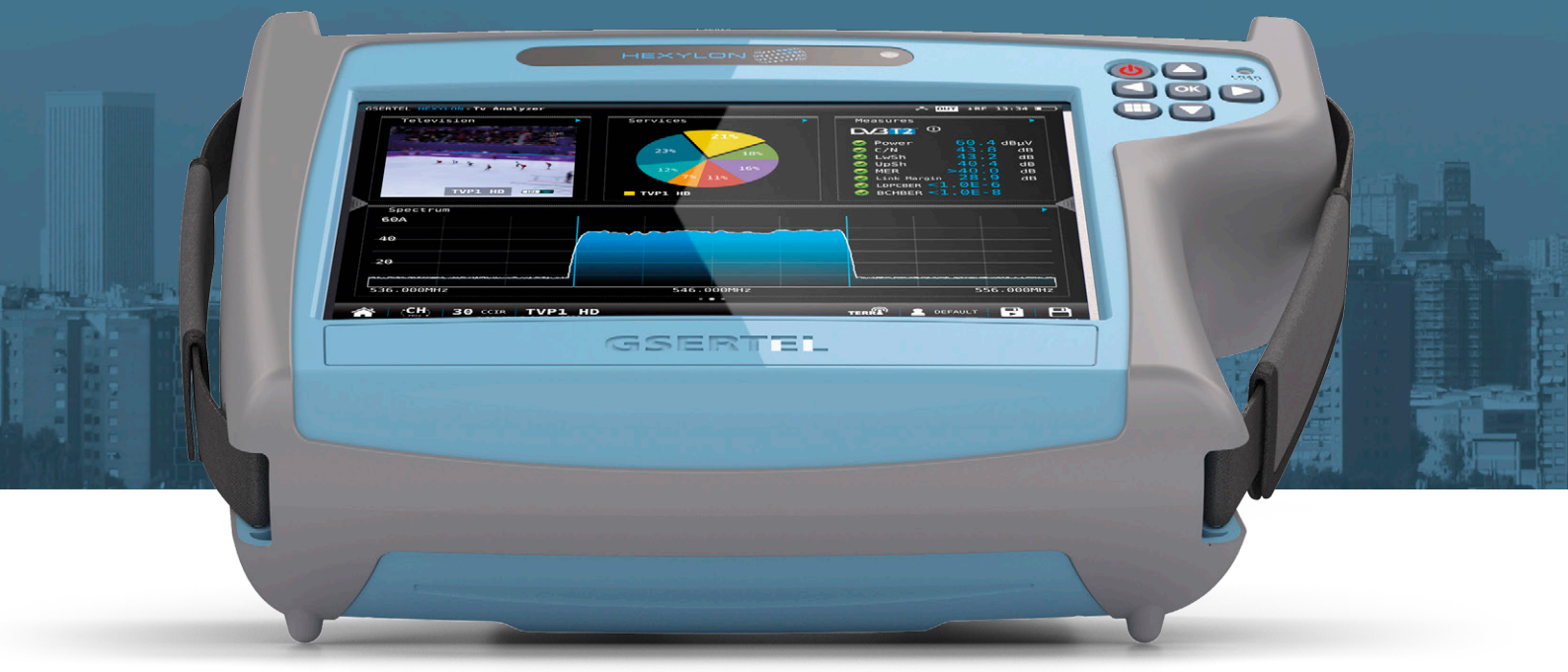
GSERTEL

One device, full functionality

All the Standards

DVB-T/T2 | ISDB-T/Tb | DVB-S/S2X | DVB-C

ATSC 1.0/3.0 | ANALOG TV | FM | DAB/DAB+ | TSoIP | HEVC



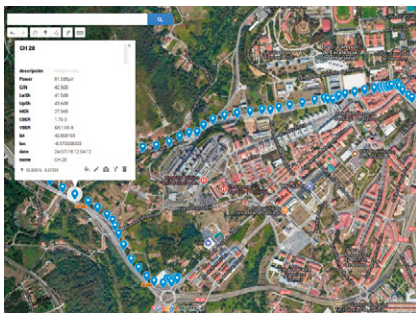
All the Interfaces

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

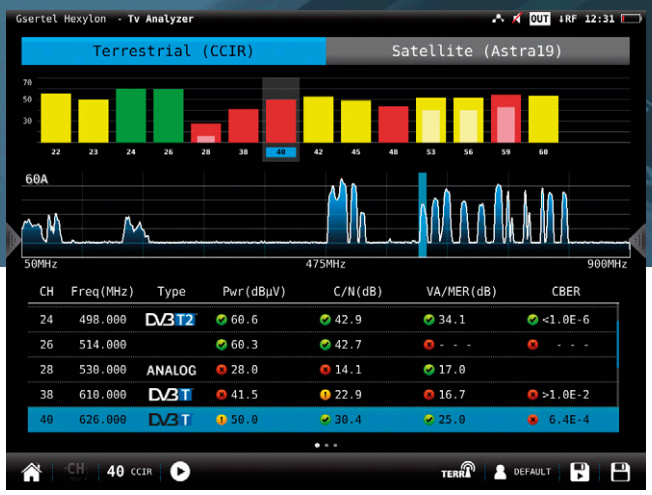
▸ Field Exchangeable Spare Battery

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



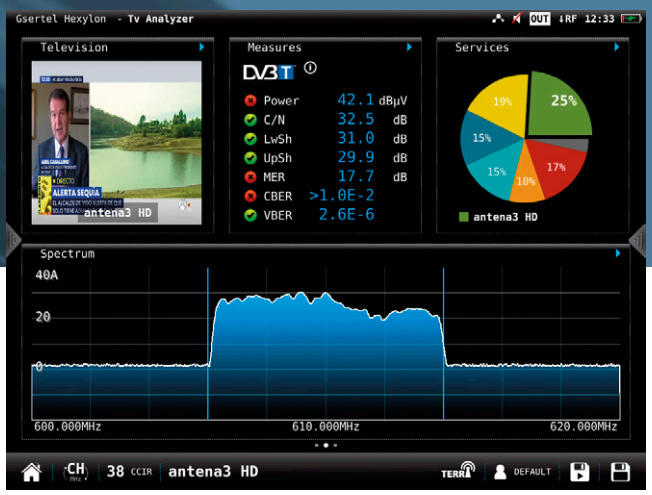
- ALL THE CHANNELS IN THE BAND AT A GLANCE
- ULTRA-FAST SCAN OF THE ENTIRE BAND
- AUTOMATIC PRESENT CHANNELS IDENTIFICATION AND MEASUREMENTS
- COLOR BAR GRAPH REPRESENTATION OF THE CHANNELS ACCORDING TO THE QUALITY LIMIT SET BY THE USER
- FULL SIGNAL SPECTRUM
- LIST OF ALL CHANNELS WITH THE RELATED MEASUREMENTS 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 SIMULATENOUS 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

▸ PDP2

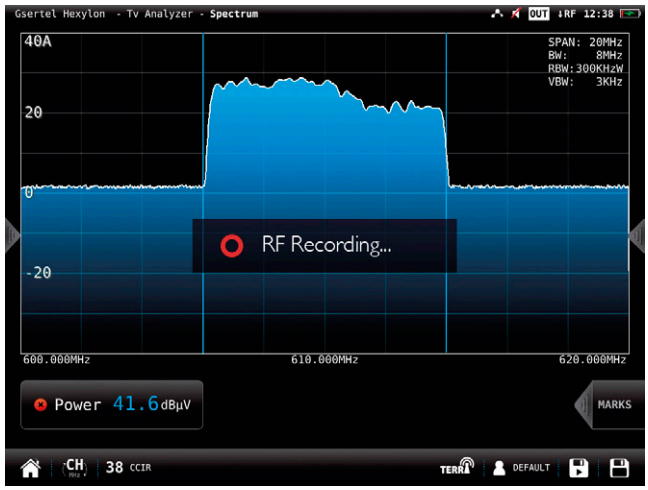
Where others are blind, HEXYLON keeps seeing. The exclusive Path Delay Profile patent feature allows to measure echoes without demodulating the signal up to 1.148µs.

▸ TS Analysis

Treeview of PSI/SI tables with content decoding.

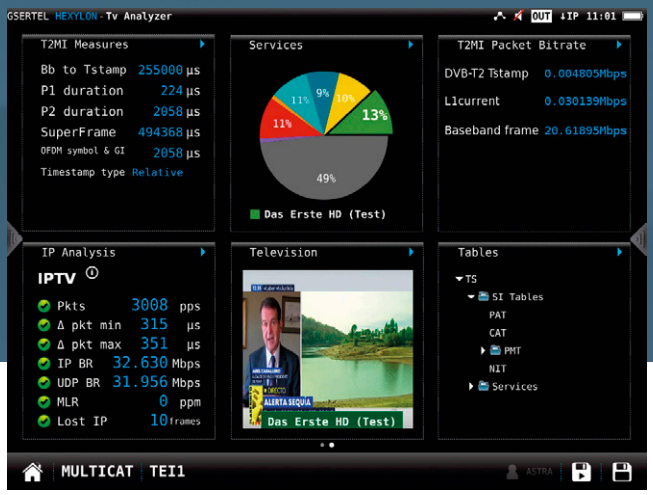
▸ TS Recording

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



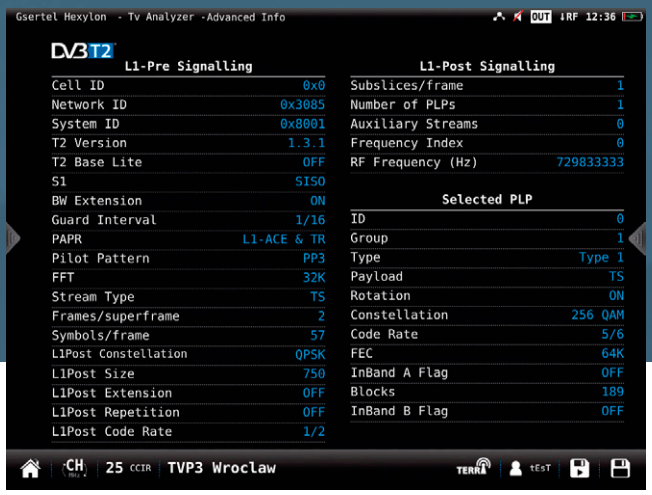
▸ RF Recording

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



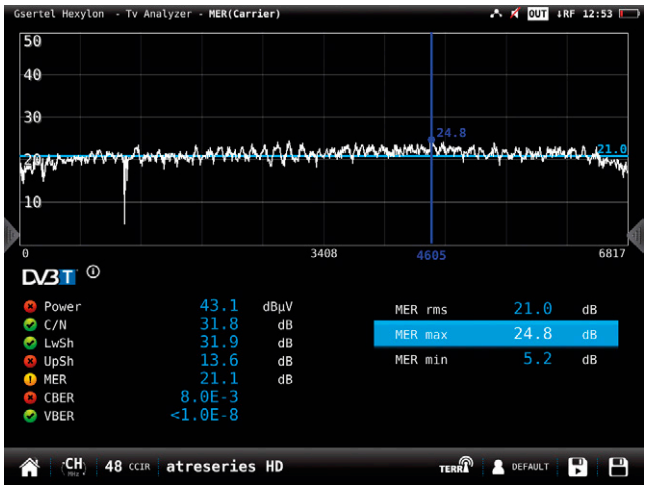
T2-MI Analysis

Provides the reception of a T2-MI signal and its analysis: L1 signaling, L1 post-signaling, DVB-T2 timestamp, PLP, BB.



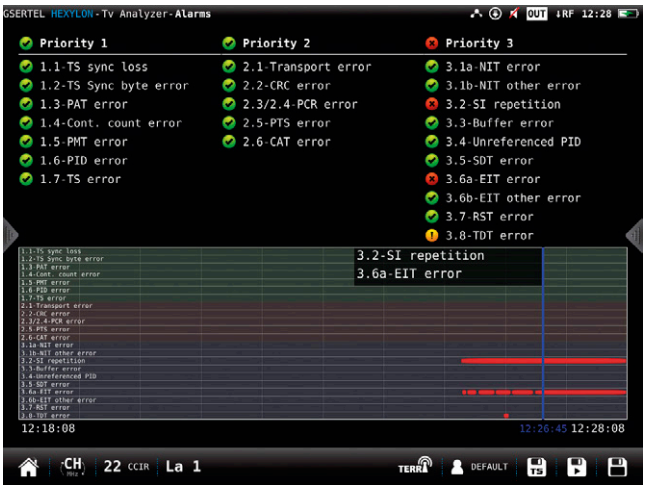
Advanced Info

Exhaustive information about the modulation parameters.



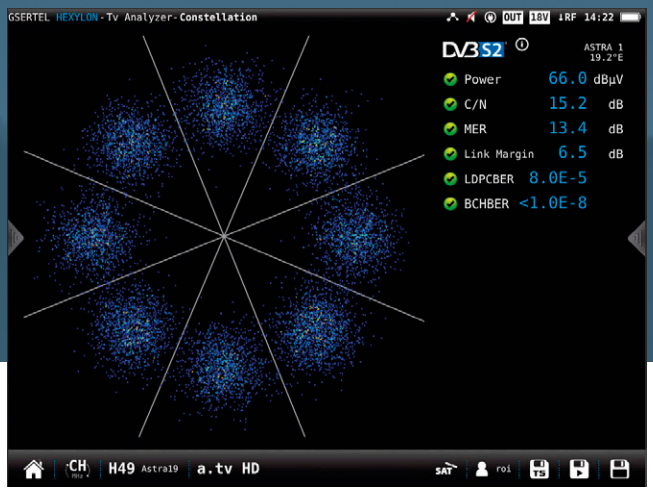
MER/Carrier

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



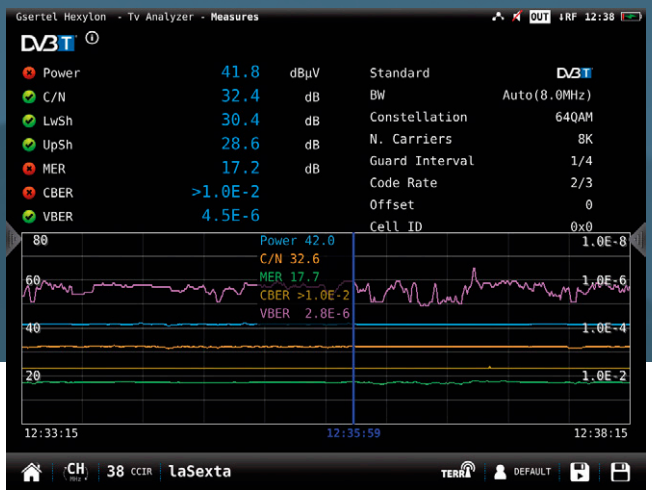
Alarms

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.



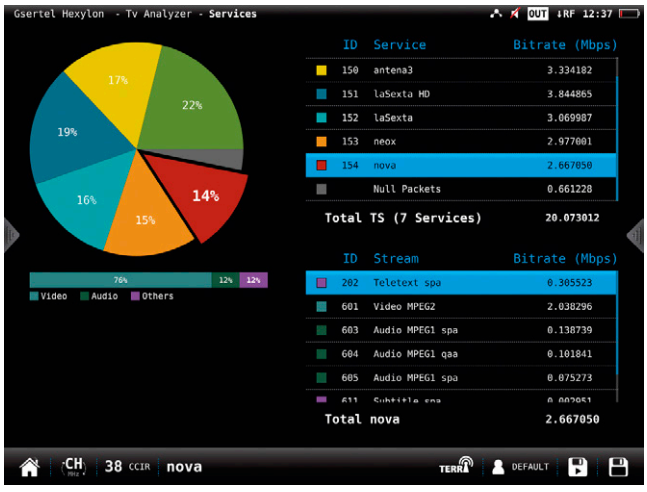
Constellation

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).



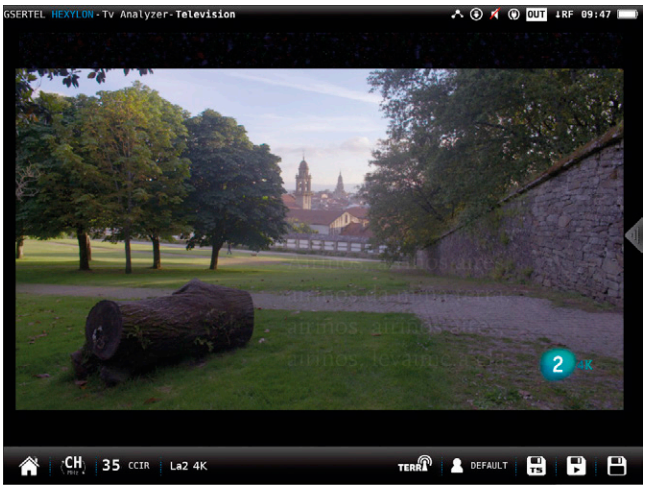
Measurements

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



Services

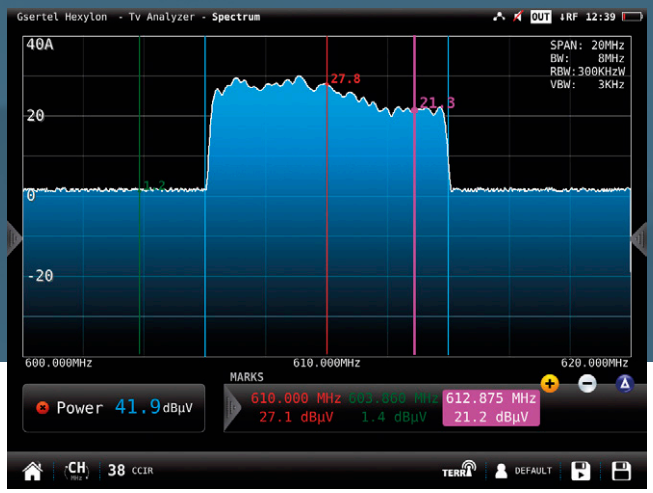
This feature shows a bitrate distribution graph of the channel services, as well as all the information relative to them.



Real Live 4K Video

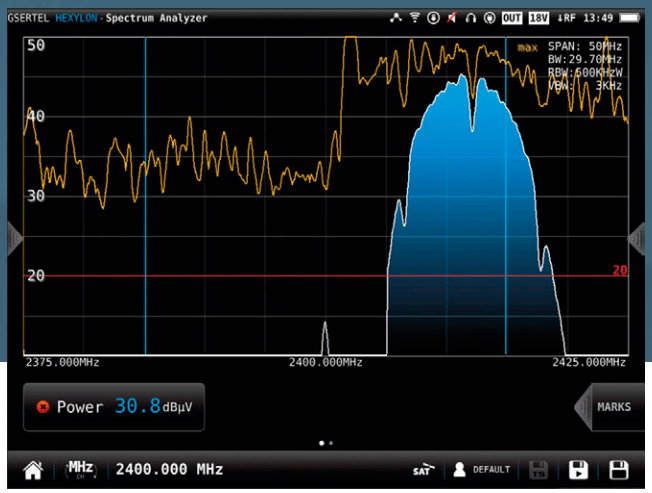
Ultra HD signals real-time display.

Spectrum Analyser



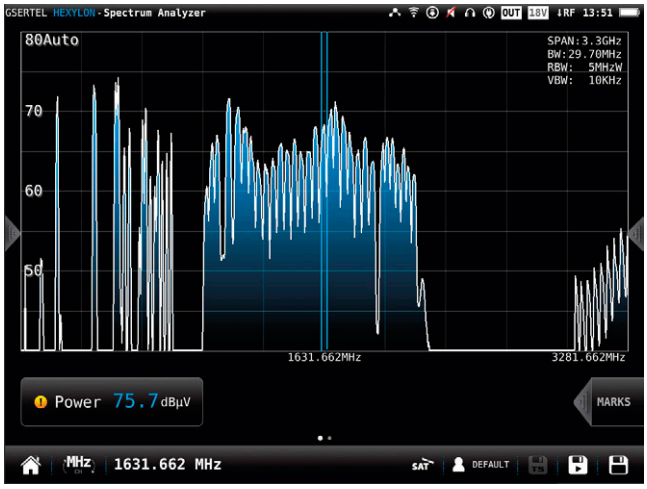
Fast and Accurate

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.



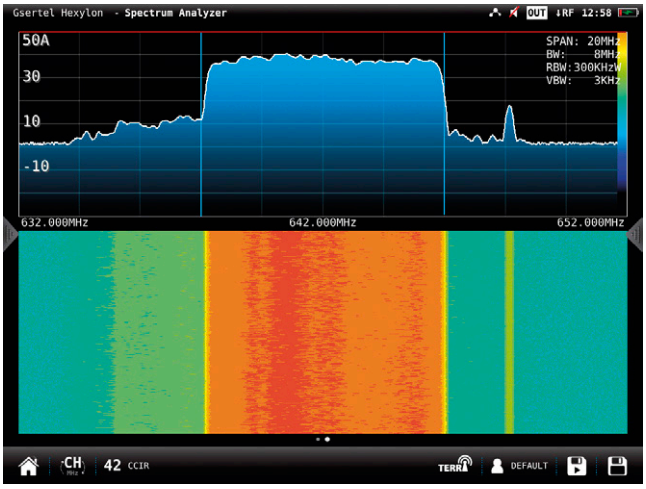
Trigger by Level

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



Continuous Band

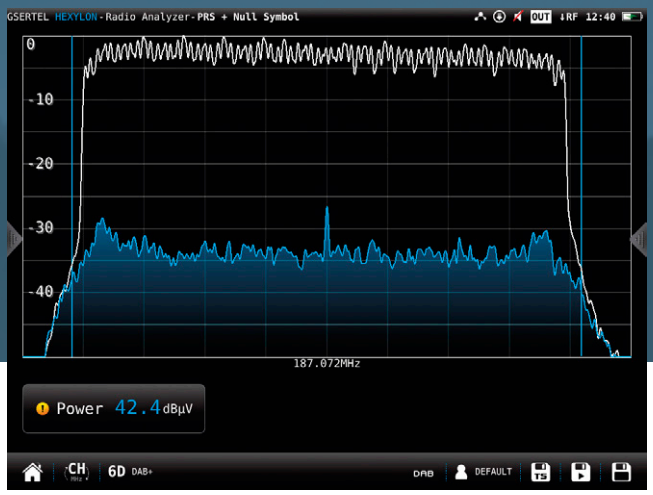
The entire band at a glance with the HEXYLON's continuous band spectrum. From 5MHz to 3.3GHz.



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



PRS+Null Symbol

This feature shows two spectrum overlapped charts: one is the representation of the phase reference symbol (PRS), and the other one is the representation of the null symbol.

DAB+ Parameters including TII

It shows exhaustive information about the modulation parameters, including the Transmitter Identification Information (TII).

Radio Info

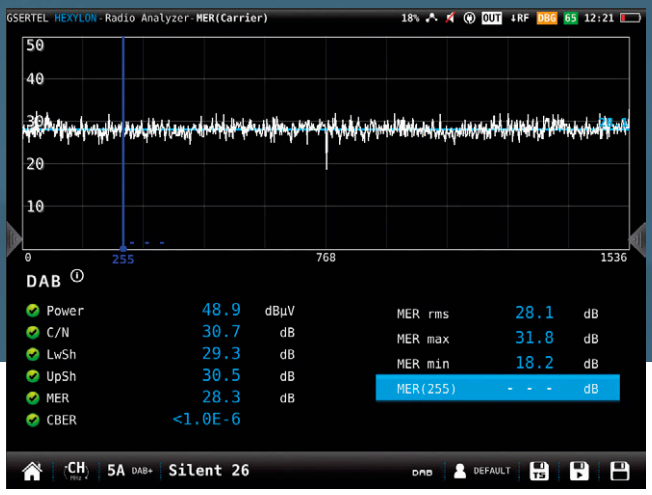
It shows all the information about the tuned channel. For FM channels it is shown the RDS information, and for DAB channels it is shown the Ensemble, the Service, and the Radiotext information.

Echoes

This feature displays the echoes of the received. Level and distance information related to the main beam are shown.

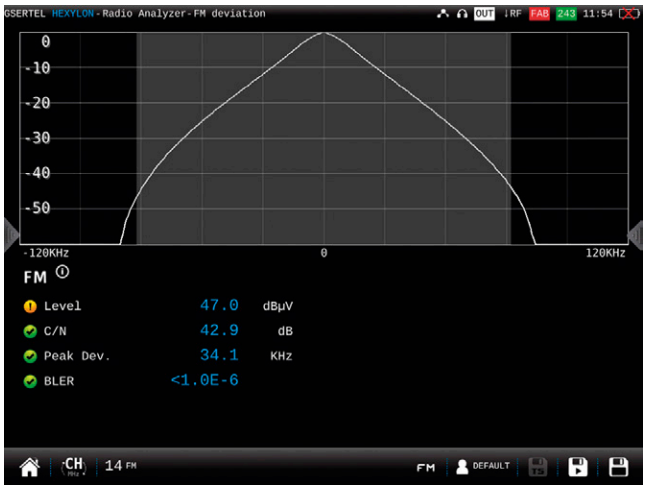
Errored FIB

This feature makes an errored fast info blocks (FIB) analysis of the fast info channel (FIC) during a time interval selected by the user.



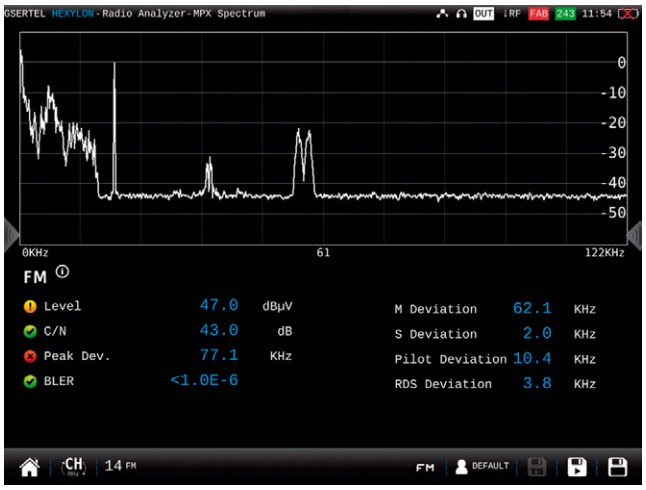
MER/Carrier

This feature represents MER value per each carrier of the DAB signal.



FM Deviation

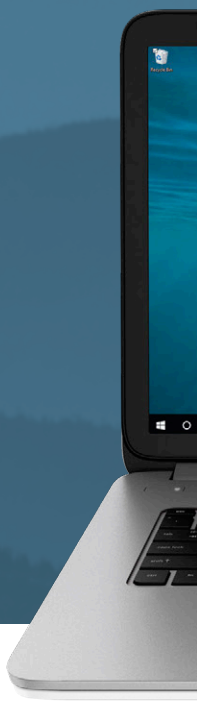
It shows the difference between an FM modulated frequency and the nominal carrier frequency.



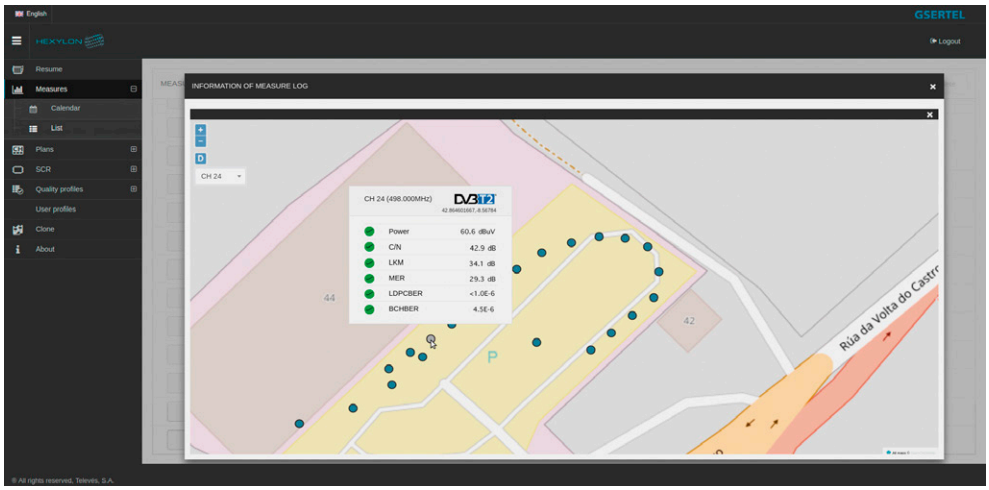
MPX Spectrum

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

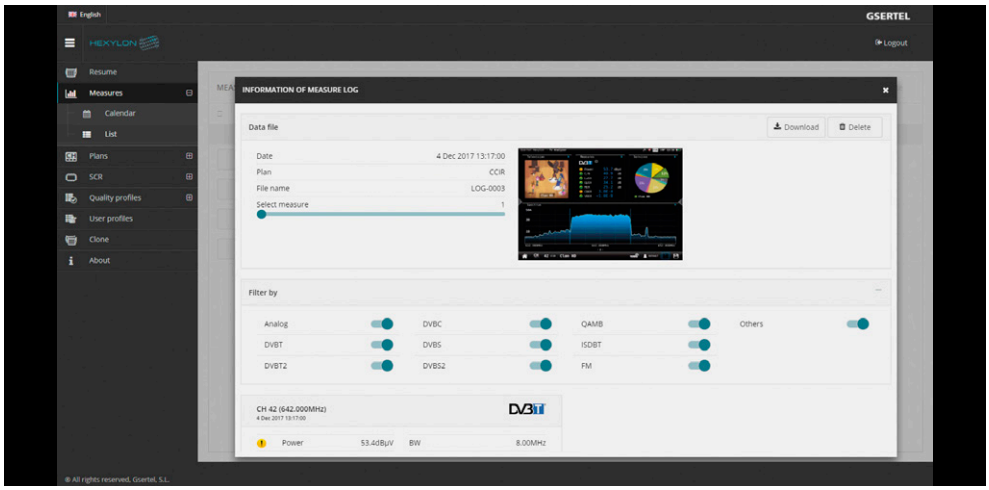
The simplest way to get the highest benefit of your HEXYLON



Web Application & Personal Cloud

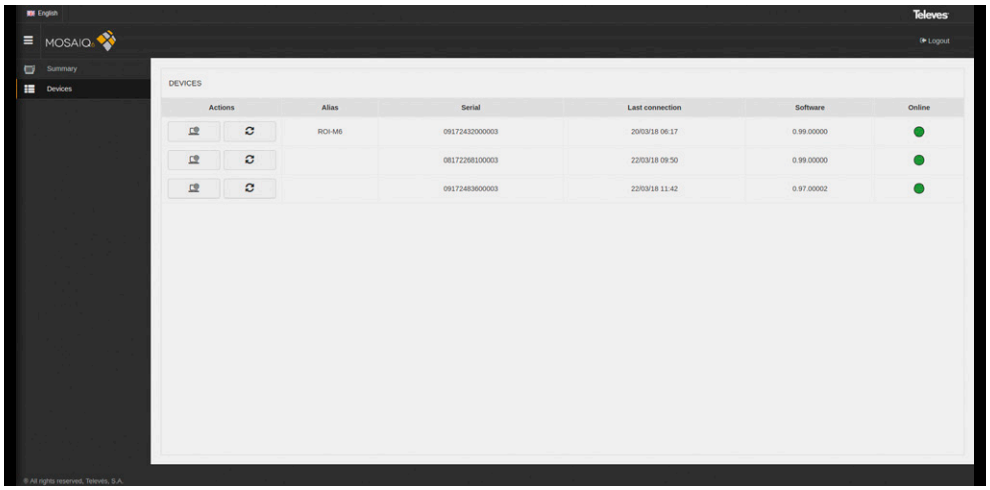


Present a Google Map trace view with GPS measurements.

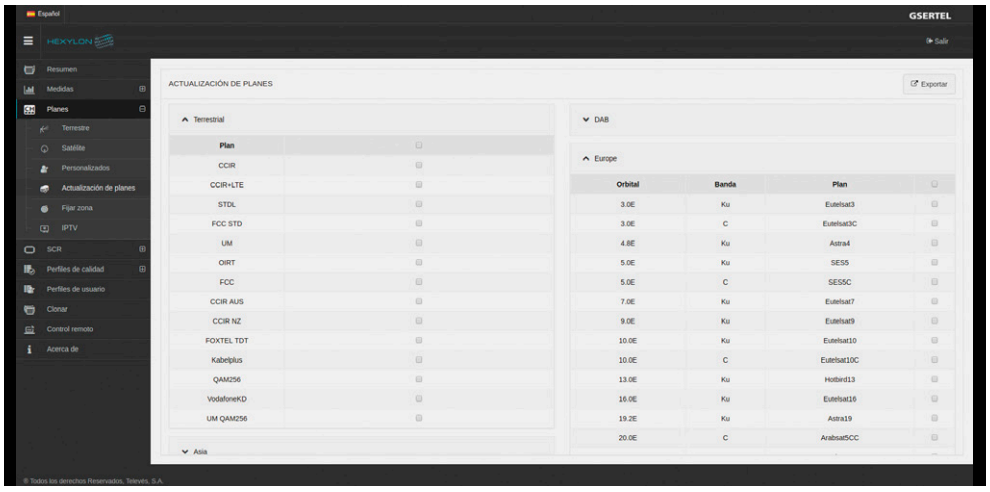


Analyze and download logs, measurements, screenshots, recordings...

Get complete remote control with the embedded VNC application.



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 swapable.

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	50Ω
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 DVB-T	
Extension band	Up to 1500 MHz
Modulations	COFDM (QPSK, 16QAM, 64QAM)
Power	20-130dBµV
CBER	9.9E-2 - 1.0E-6
VBER	1.0E-3 - 1.0E-8
MER	Up to 40dB
C/N	Up to 52dB
Echoes	✓
PDP Echoes	✓
MER by carrier	✓
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Digital measurements DVB-T2	
Extension band	Up to 1500 MHz
Modulations	COFDM (QPSK, 16QAM, 64QAM and 256QAM)
Power	20-130dBµV
LDPCBER	9.9E-2 - 1.0E-6
BCHBER	1.0E-3 - 1.0E-8
Link Margin	Up to 30dB
MER	Up to 40dB
C/N	Up to 52dB
Shoulders	Up to 52 dBµV
Echoes	✓
PDP Echoes	✓
MER by carrier	✓
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Multiple PLP	✓

Digital measurements QAM (Anex A/B/C)	
Modulations	4QAM, 16QAM, 32QAM, 64QAM, 128QAM and 256QAM
Power	20-130dBµV
BER	1.2E-3 - 1.0E-8
MER	Up to 40dB
C/N	Up to 52dB
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Digital measurements ISDBT	
Modulations	DQPSK, QPSK, 16QAM and 64QAM
Power	-90 dBm to 20 dBm
VER	Pre-BER (by layer): 1.0E-2 - 1.0E-6 Post-BER (by layer): 9.9E-2 - 1.0E-8
MER	18 dB to 40 dB
C/N	Up to 52 dB
Echoes	✓
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Digital measurements DVB-S	
Wideband	250 - 2400 MHz (Only compact. HW)
Power	20-130dBµV
CBER	9.9E-2 - 1.0E-6
VBER	1.0E-4 - 1.0E-8
MER	Up to 20dB
C/N	Up to 30dB
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Digital measurements DVB-S2X (option 901626)	
Wideband	250 - 2400 MHz (Only compact. HW)
Modulations	QPSK, 8PSK
Power	20-130dBµV
Link Margin	Up to 10dB
MER	Up to 20dB
C/N	Up to 30dB
LDPCBER	9.9E-2 - 1.0E-6
BCHBER	9.9E-2 - 1.0E-8
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Multi TS	✓
PLS scrambling	✓

Digital measurements DVB-S2	
Wideband	250 - 2400 MHz (Only compact. HW)
Modulations	QPSK, 8PSK, 8APSK, 16 APSK and 32 APSK
Power	20-130dBµV
Link Margin	Up to 10dB
MER	Up to 20dB
C/N	Up to 30dB
LDPCBER	9.9E-2 - 1.0E-6
BCHBER	9.9E-2 - 1.0E-8
Constellation	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Multi TS	✓
Digital measurements ATSC 3.0 (option 901622)	
Freq. Range	42-1800MHz
MPEG image	✓
Modulation	QPSK, 16QAM, 64QAM, 256QAM, 1024QAM and 4096QAM
Power	-90 -20 dBm
MER	Up to 40dB
LDPCBER	1.0E-2 - 1.0E-6
BCHBER	1.0E-2 - 1.0E-8
C/N	Up to 40dB
Constellation	✓
Echoes	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
Digital measurements ATSC 1.0 (option 901622)	
Freq. Range	42-1800MHz
MPEG image	✓
Modulation	8VSB
Power	-90 -20 dBm
MER	Up to 40dB
PreBER	1.0E-2 - 1.0E-8
PostBER	1.0E-2 - 1.0E-9
Constellation	✓
MER by carrier	✓
Uncorrected packets	✓
TILT	✓
Attenuation	✓
DAB/DAB+ Measurements	
Power	20-130dBµV
MER	Up to 20 dB
C/N	Up to 30 dB
Shoulders	Up to 52dBµV
CBER	9.9E-2 – 1.0E-6
MER	Up to 35dBµV
DAB+ Advanced measurements	Option 901629

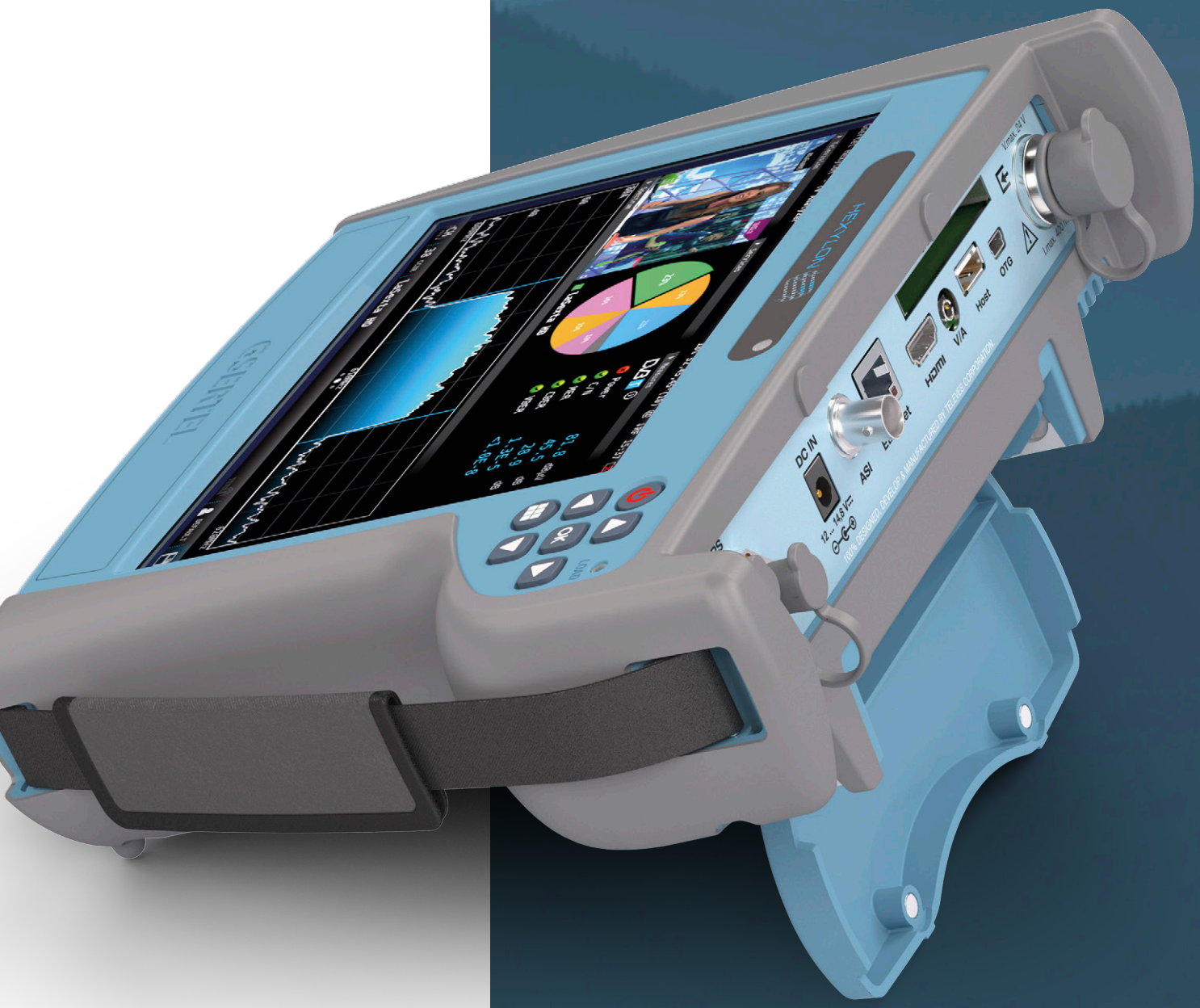
FM Measurements	
Level	✓
C/N	Up to 52dB
RDS	✓
FM Advanced measurements	Option 901633
Analog Measurements	
Level	20-130dBµV
V/A	Up to 52dB
C/N	Up to 30dB
Features	
Up to 6 widgets	✓
User-customizable	✓
System Scan with measurements and learning plan	✓
LTE check	✓
FO (-40, 7dBm)	Reference 901620
FO Selective (-40, 7dBm)	Reference 901621
GPS & Drive Test	Option 901625
MPEG2, MPEG4 Full HD Channels visualization	✓
4K visualization	Option 901630
Info MPEG	SID, VID, AID, Resolution, Profile, Audio Bitrate, Video Bitrate, Resolution info
IPTV Analyser	✓
Wifi Analyser	2,4 GHz and 5 GHz
TS Analysis + TS Recording	Option 901628
RF Recording	Option 901631
T2MI Analysis	Option 901627
Units	dBµV, dBmV, dBm
Network Tools	✓
Preamp powering	
Preamp powering	5,13, 18, 24Vdc and other (any value between 5 and 24V)
Maximum supplied power	12 W
Maximun supplied current	900 mA
LNB Tone	22 Khz
DiSEqC	✓
SCR | dCSS (EN 50494 | EN 50607)	✓

Specifications are subject to change without notice

Options

MODELS	
REFERENCE	**DESCRIPTION**
901620	HEXYLON Multistandard TV and Radio Analyser with FO
901621	HEXYLON Multistandard TV and Radio Analyser with Selective FO

OPTIONAL FEATURES	
REFERENCE	**DESCRIPTION**
901625	GPS Option for HEXYLON
901626	DVB-S2X for HEXYLON
901627	T2MI Analyser for HEXYLON
901628	TS Analysis and TS Recorder for HEXYLON
901629	DAB/DAB+ Extended features for HEXYLON
901630	HEVC 4K for HEXYLON
901631	RF Recoder
901632	BTS Analyser for HEXYLON
901633	FM Advanced Features
901634	SFN Drift
901640	Additional Battery Pack
901641	1 Year Additional Guarantee



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