# All the functions you need
in your hand

Rely on H30FLEX for installation and troubleshooting. Robust, light-weight and extremely easy to use. *Carry out installation, maintenance and troubleshooting tasks on networks with DVB-S/S2, DVB-T/T2 or DVB-C and analogue channels.*

DVBT DVBT2 DVBC DVBS DVBS2

H30FLEX is a light-weight handheld unit, packed with all the required functions to install and maintain television systems, using **DVB-S/S2, DVB-T/T2 or DVB-C** digital modulation as well as analogue signals.

Available for the first time in an affordable package, digital processing brings installers the opportunity to take measurements with a high level of accuracy, essential to the satisfaction of a job well done.

Televes is leading the way with **this reference meter, designed to meet the requirements of TV installers, both satellite and terrestrial.**

FIRST IN THE WORLD WITH
DIGITAL PROCESSING

MPEG

CONSTELLATION DISPLAY

SPECTRUM ANALYZER
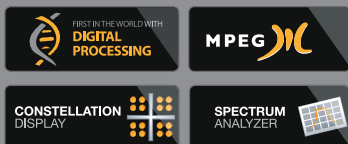
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MULTI STANDARD
Fully configurable equipment to meet your needs

H30FLEX is fully prepared to meet the specific needs of each individual user. It is a multi-standard equipment, ready to take measurements on the DVB-S/S2 satellite band, but also on the DVB-T/T2 and DVB-C terrestrial band channels.

In order to meet the changing needs of individual users, the equipment allows them to **easily add new options, with no need to send the meter back to the factory.**

READY TO CAPTURE
signal from any satellite

H30FLEX allows you to configure the parameters required for the reception of your satellite signal. To do this, H30FLEX allows pre-amplifier powering, **and configuration of both DiSEqC and SCR parameters.**

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INTERACTIVE USER INTERFACE
Optimize the learning curve

Scrolling through the menu is now very easy, thanks to its **single-level structure**, which includes all the functions in a very intuitive way: better utility, higher operation speed, and maximum productivity. No function requires more than three successive button pushes to achieve the desired operation. You will not find any easier-to-use device, **and will be able to surf the different functions with no need for a user manual.**

COMPREHENSIVE FUNCTIONALITY
Pass/Fail indicators

A full range of functionalities such as Single-channel measurements, Constellation diagram, Spectrum analyser, Service identification, Data logs, Channel plan auto-learning, and more.

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ACCURACY AND SPEED
Real-time digital processing

Designed to instantly **obtain all the information about the signal in real time,** it is a true milestone in field work. H30FLEX provides the required accuracy and speed to detect minor transient radiation, or spurious signals that could affect the system during signal reception.

100% AUTOMATIC
Signal detection

Fully automatic, it detects the parameters of different modulations **with no need for configuration.** H30FLEX will detect at once whether the input signal is analogue or digital, and will determine its constellation, symbol rate and other modulation parameters, providing an instant reading without any user intervention.

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RUGGED AND LIGHT-WEIGHT
Absolute reliability

Its exclusive casing made of **double-injection rubber and polycarbonate plastic guarantees protection and durability.** Weighing only one pound, H30FLEX is convenient to carry and use. You can slip it in your pocket or use its strap around your shoulder... You will barely notice it is there!

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H30FLEX, a functionality
that meets your needs

Comprehensive spectrum analysis, all your DVB and analogue measurements, scan & log, digital signal video, and much more.

A complete set of **easy-to-use functionalities** for installing and monitoring TV analogue and digital signals.

H30FLEX provides a full range of tools required to ensure the quality of television analogue and digital services.

Combining our **powerful and advanced real-time processing technology** and an unprecedented ease of use, H30FLEX is the ideal tool for technicians working on the installation and maintenance of new-generation television networks.

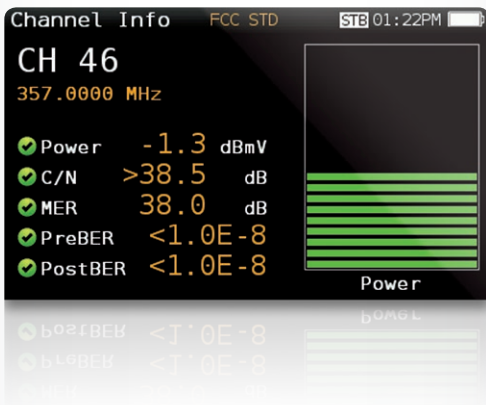| REF.	DESCRIPTION
593301	H30FLEX: DVB-S/S2 + DVB-T
593302	H30FLEX: DVB-S/S2 + DVB-T/T2
593303	H30FLEX: DVB-S/S2 + DVB-C
593304	H30FLEX: DVB-S/S2 + DVB-T/T2 + DVB-C

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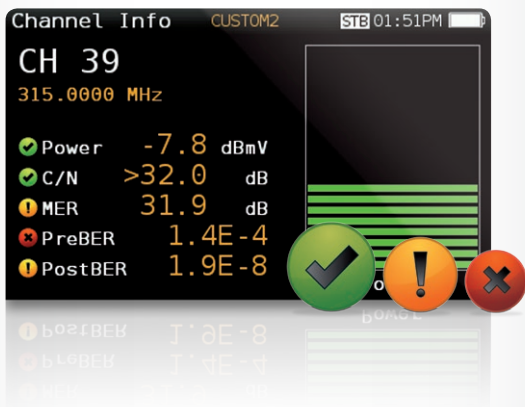
PASS/FAIL INDICATORS
Easy decision-making

Reduce installation mistakes with the on-screen Pass/Fail indicators, a **graphical tool that helps and speeds up the interpretation of measurement results.** Different thresholds are available depending on the network area to be analysed: headend, multi-band amplifiers, bridging connection, connection records, user home, etc. Besides the pre-set values, you will be able to **customize your own threshold values.**

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Channel Info FCC STD STB 01:22PM

CH 46
357.0000 MHz

⊘ Power -1.3 dBmV
⊘ C/N >38.5 dB
⊘ MER 38.0 dB
⊘ PreBER <1.0E-8
⊘ PostBER <1.0E-8

Power

CHANNEL INFORMATION
The less the better

Sometimes, taking a quick glance at one channel is all you need. The advanced H30FLEX single-channel measurement option **automatically detects the channel type,** displaying the audio and video levels, A/V and C/N for analogue signals, and power, C/N, and appropriate quality measures for each type of digital signal. All these measures are taken by means of one single button; at that point, all indicators will **be activated and display the "Pass/Fail" condition** based on the thresholds specified by the user. Easy-to-interpret results, even for junior technicians.

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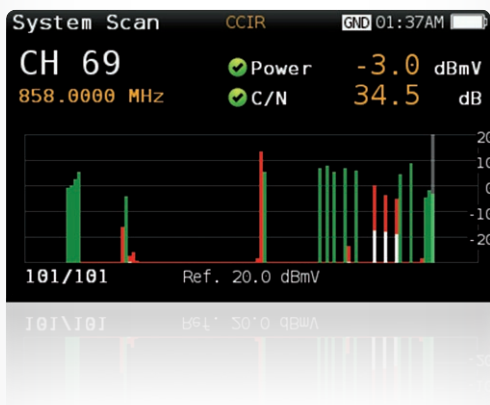
SYSTEM SCAN
Monitored installation

Scan each existing analogue and digital channel in real time to determine the overall system frequency response. This function leverages the location-based thresholds to clearly show whether the signal levels meet the cable systems' specifications with green, yellow and red bars. This feature provides an **easy-to-understand, real-time view of the system,** including the BER and MER values of the selected channel.

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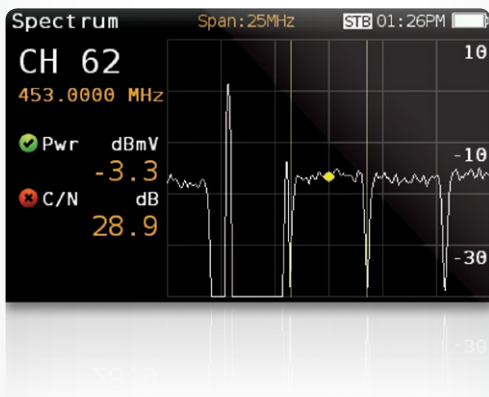
SPECTRUM ANALYSER
From 5MHz to full span

H30FLEX spectrum analyser provides a value range of 5, 10, 20, 50, 100, 200, 500 MHz and Full, as well as a reference level auto-adjust feature. **Real-time processing speeds ensure the capture of any signal incidents.** You will be surprised by the accuracy and the level of detail provided by this ultra-portable pocket spectrum analyser. The ultimate tool for identifying and localising noise, interference, radiation, and any other signals that may be affecting the quality of the television signal distribution service.

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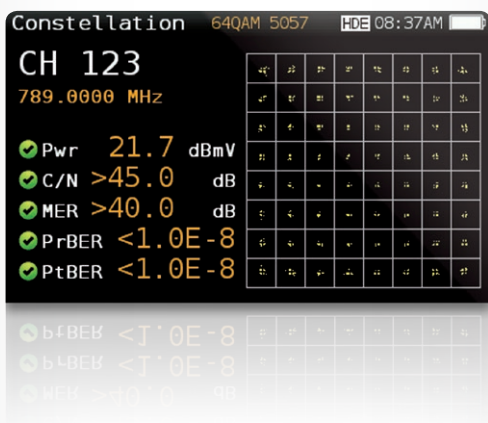
CONSTELLATION DIAGRAM
Fine-tune your digitals

Constellation analysis is essential for determining the quality of digital signals. **Constellation diagrams help detecting noise, jitter, interference and signal saturation,** and all the variables that could impact signal quality, eventually leading to service suspension. By visually inspecting the size and shape of the dots in the constellation matrix, the technician will be able to easily identify the nature of the problem.

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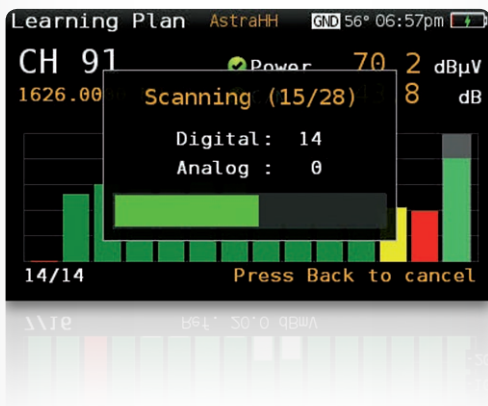
CAPTURE PLAN
Custom channel plans

Identify the channels in your distribution with the ultra-fast Capture Plan function, and from there build your own channel plan containing only the channels you are interested in. Furthermore, each channel will be displayed on a bar chart with the appropriate colour based on the selected quality threshold.
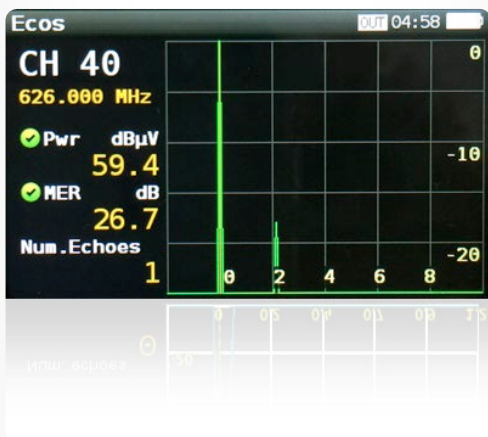
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MPEG
MPEG video and detailed information

Do you wish to know the contents offered on a DIGITAL channel? H30FLEX function MPEG will tell you. In addition to channel services display, you will get their key parameters: Service name, PID, resolution, audio types and figures, and NIT. A valuable help when troubleshooting your encoder configuration.

ECHO
Optimal signal reception

In terms of DVB-T and DVB-T2 signal reception, controlling the absence of any echoes that could jeopardize reception is crucial. H30FLEX displays the echoes of the received signal, allowing the installer to minimize them for optimal signal reception.

DATALOGS
Save and download

While you are taking measurements or looking for possible problems, **you can save sample signal parameters for further in-depth analysis or just for record and use in your reports**. It can also prove to be a useful tool for training purposes.

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MECHANICAL **SPECIFICATIONS**

Screen	2.8"TFT 400 x 240 Full colour
Weight	510 g.
Dimensions	175 x 100 x 52 mm (HxWxD)
Battery	Li-ion (7,2VDC, 2300mAh)
Range	4 hours without LNB supply
Interfaces	USB 2.0 for Data log download and software update
Storage capacity	400 MB (internal) for measurements
Impedance	F-type connector - 75 Ohm

TECHNICAL **SPECIFICATIONS**

Frequency	
Range	50- 880 Mhz and 950- 2200 Mhz
Resolution	125 kHz
Tuning	Frequency or channel
Spectrum analyser	
Span	5, 10, 20, 50, 100, 200, 500 MHz and Full
Escale	5 and 10 dB/div
Reference level	Automatic and manual
DVB-T digital measurements (Ref. 593301, 593302, 593304 and Opt. 593231)	
Modulation	COFDM (QPSK, 16QAM, 64QAM)
Power	From 45 to 110 dBμV (120 Opt. 593235)
CBER	9.9E-2 – 1.0E-6
VBER	1.0E-3 – 1.0E-8
MER	Up to 35 dB
C/N	Automatic
DVB-T2 digital measurements (Ref. 593302, 593304 and Opt. 593232)	
Modulation	COFDM (QPSK, 16QAM, 64QAM and 256 QAM)
Power	From 45 to 110 dBμV (120 Opt. 593235)
LDPCBER	9.9E-2 – 1.0E-6
BCHBER	1.0E-3 – 1.0E-8
Link Margin	Up to 30 dB
MER	Up to 35 dB
C/N	Automatic

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DVB-C digital measurements	
(Ref. 593303, 593304 and Opt. 593233)	
Modulation	16QAM, 32QAM, 64QAM, 128QAM and 256 QAM
Power	From 45 to 110 dBµV (120 Opt. 593235)
CBER	1.E-2 – 1.0E-8
MER	Up to 38 dB
C/N	Automatic
DVB-S digital measurements	
Power	From 45 to 110 dBµV
CBER	9.9E-2 – 1.0E-6
VBER	1.0E-4 – 1.0E-8
MER	Up to 20 dB
C/N	Automatic
DVB-S2 digital measurements	
Modulation	QPSK, 8PSK
Power	From 45 to 110 dBµV
Link Margin	Up to 10 dB
MER	Up to 20 dB
LDPCBER	9.9E-2 – 1.0E-6
BCHBER	9.9E-2 – 1.0E-8
Analogue measurements	
Level	25 and 125 dBµV
V/A	✓
C/N	✓
Configuration	
Standard terrestrial plans	✓
Standard satellite plans	✓
User plans	✓
Units	dBµV, dBmV, dBm
LNB supply	13, 18 Vdc
LNB tone	22 kHz
DiSEqC	✓
SCR | dCSS (EN 50494 | EN 50607)	✓ | Option 593534
Functionality	
Channel information	✓
System scan	✓
Capture plan	✓
Constellation	✓
MPEG	✓
Echo	DVB-T/T2

There is a whole lot more than meets the eye, click here for a detailed listing of functions h30flex.televes.com

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⊦H3OFLEX Televes

H30Flex
DVB-S/S2 + DVB-T/T2
Ref. 593302

A00383

Recycle or dispose of used electrical and electronic devices properly.
Deposite los residuos de aparatos eléctricos y electrónicos en los contenedores al efecto.

Replace the batteries only with the same type.
Reemplace las baterías sólo por el tipo recomendado.

Input power / Alimentación: 12V⎓; 2A, 24W
Connector / Conector: P1J ⊖–◉–⊕

100% Designed, Developed, and Manufactured by Televes Corporation

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Made in Spain

EAC CE