


# H30FLEX sprectrum analyzer

## All the functions you need in your hand

H30FLEX meter is designed to meet the requirements of TV installers for both satellite and terrestrial signals.

H30FLEX is a light-weight handheld meter packed with all the features required to install and maintain TV systems using different modulation standards, like satellite (DVB-S/S2) or terrestrial/cable (analogue channels, DVB-T/T2 or DVB-C).

Available for the first time in an economic product, digital processing brings installers the opportunity to take measurements with a high level of accuracy, essential to give the installer the peace of mind of a job well done. It allows you to customize upgrade choice with download software.

Different standards included in each reference. Choose and only pay for the features you need.

| | |
|---|---|
| Ref. | 593361 |
| Logical ref. | H30S2IS |
| EAN13 | 8424450190036 |

| Other features | |
|---|---|
| Complement | Meter + Carrying Case + Protective Sleeve |
| Standards included | DVB-S/S2 + ISDB-T/Tb |

| Physical data | |
|---|---|
| Net weight | 1,200.00 g |
| Gross volume | 7.64 $dm^3$ |
| Gross weight | 1,200.00 g |

| Packaging info | |
|---|---|
| Box | 1 pcs. |

## Highlights

- Light-weight handheld meter

- User friendly interface
- Multi standard
- All measurements are carried out by pressing a single button equipped with Pass/Fail indicators to reduce installation errors

## Discover

**Meter from H30 series: How to choose the most convenient model?**

The H30 series consists of different customizable multistandard meters, all of them designed to carry out installation, maintenance and monitoring of telecommunications networks. Each model stands out for offering new functionalities, while preserving all the advantages of the previous model.
Through the following comparative table, it is possible to choose the most suitable meter model for each professional:

| | | H30FLEX | H30EVOLUTION | H30CRYSTAL |
|---|---|---|---|---|
| Multi-standard customizable | | OK | OK | OK |
| Frequency range | Return P.: 5-50 MHz | X | X | OK |
| | Terrestrial: 50-880 MHz | OK | OK | OK |
| | Satellite: 250-2400 MHz | OK (up to 2200MHz) | OK | OK |
| Screen | | 2.8" TFT 400 x 240 full color | 2.8" TFT 400 x 240 full color | 2.8" TFT 400 x 240 full color |
| Multi-screen with touch control on mobile device | | X | OK | OK |
| Smartphone armband | | X | OK | OK |
| Wireless connectivity | | X | OK | OK |
| WiFi analyzator | | X | OK(*) | OK(*) |
| IPTV analyzator | | X | OK(*) | OK(*) |
| Ethernet interface | | OK | OK | OK |
| USB interface | | USB (A-type) | USB (A-type) | USB (A-type) |
| Optical measures | | X | X | OK |
| Guided satellite pointing | | X | OK | OK |
| LNB Wideband compatible | | X | OK | OK |
| 4K - UHD displaying (HEVC) | on the meter | X | X | OK |
| | on the mobile device | X | OK(*) | OK |
| Terrestrial input level to 120dBuV | | OK(**) | OK(**) | OK(**) |
| dCSS compatible | | OK(**) | OK(**) | OK(**) |
| Management interface access (datalogs, channel plan...) | | Ethernet cable | Wireless / Ethernet cable | Wireless / Ethernet cable |
| Dimensions | | 175x100x52 mm | 175x100x52 mm | 175x100x52 mm |
| Weight | | 510 g. | 510 g. | 550 g. |

| | | | | |
|---|---|---|---|---|
| Color | | Black & White | Black & Grey | Light & dark grey |

* According to reference
** Free activation of the options with the meter registration

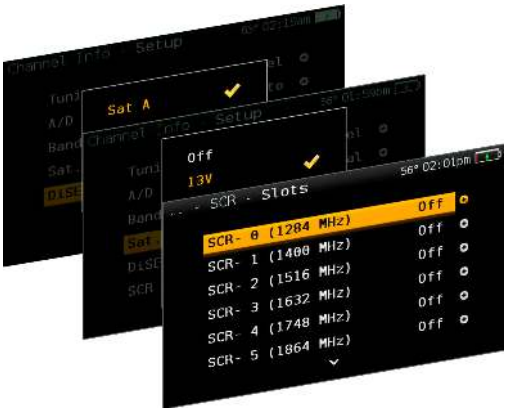
## Features




### 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 satellite band, but also on the 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.




**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.



**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.



**Rugged and Light-Weigh**

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!



**Made in Televes**

Your Quality Warranty

The H30FLEX is entirely designed by Gsertel, company within Televes Corporation, where our team of experienced and highly qualified telecommunication engineers managed to integrate digital processing in a handheld unit of 1lb of weight. Each H30FLEX includes more than 5,000 components and integrated circuits.

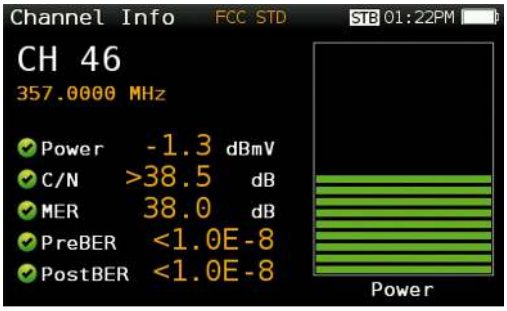
## Functionalities




**Pass/Fail Indicators**

Easy decision-making

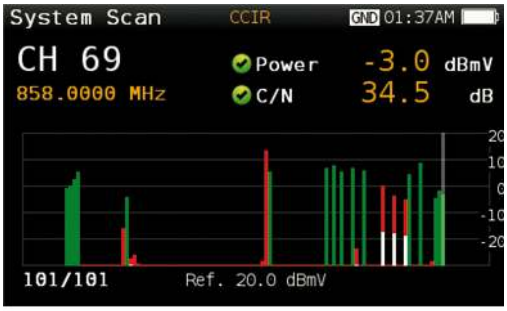
Reduce installation mistakes with the on-screen Pass/Fail indicators, a graphical tool that helps and speeds up the interpretation of measurement results. Different thresholds are available depending on the network area to be analysed: headend, multi-band amplifiers, bridging connection, connection records,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




**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.




**System Scan**

Monitored installation

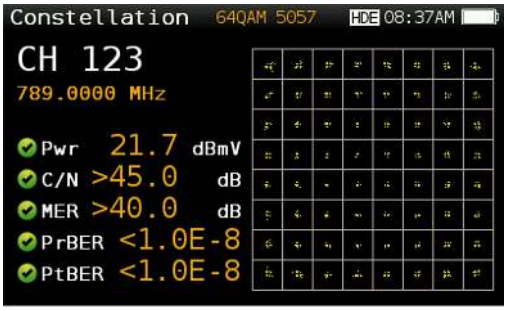
Scan each existing analogue and digital channel in real time to determine the overall system frequency response. This function leverages the location-based thresholds to clearly show whether the signal levels meet the cable systems’ specifications with green, yellow and red bars. This feature provides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




**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.




**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




**Capture Plan**

Custom channel plans

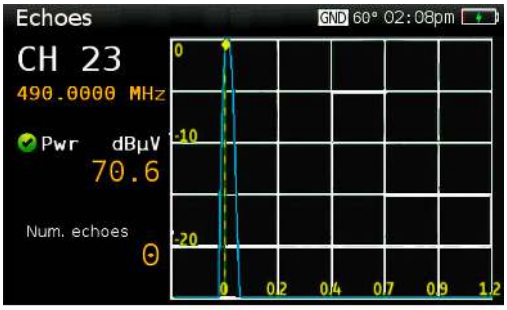
Identify the channels in your distribution with the ultra-fast Capture Plan function, and from there build your own channel plan containing only the channels you are interested in. Furthermore, each channel will be displayed on a bar chart with the appropriate colour based on the selected quality threshold.




**MPEG**

MPEG video and detailed information

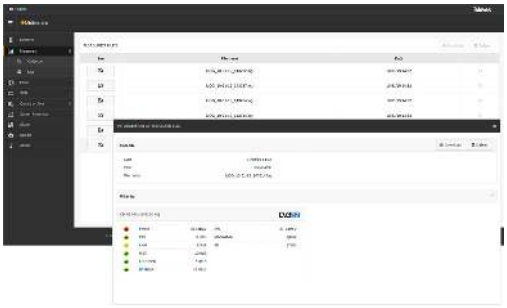
Do you wish to know the contents offered on a DIGITAL channel? H30FLEX function MPEG will tell you. In addition to channel services display, you will get their key parameters: Service name, PID, resolution, audio types and figures, and NIT. A valuable help when troubleshooting your encoder configuration.




**Echo**

Optimal signal reception

In terms of terrestial 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.




**Analog Audio/Video (*)**

Camera display

Installations of video surveillance systems are increasing. To display and monitor surveillance analog cameras, H30FLEX meters add a new software option and an USB video capture converter with Audio, Video and CVBS input connectors. H30FLEX displays NTSC and PAL video formats. The best option to verify the right functioning of the system.

(*) Optional feature: Ref. 593236

# **Technical specifications** : Ref. 593361

| | | | | | |
|---|---|---|---|---|---|
| **Screen** | | Color TFT | | | |
| **Screen size** | in | 2.8 | | | |
| **Battery power** | Vdc | 7.2 | | | |
| **Battery capacity** | mAh | 2300 | | | |
| **Battery range** | h | 4 | | | |
| **Operating temperature** | °F | 23 ... 113 | | | |
| **PSU input voltage** | Vac | 100 ... 240 | | | |
| **PSU output voltage** | Vdc | 12 | | | |
| **Max PSU output current** | A | 2 | | | |
| **RF connectors** | | "F" female | | | |
| **Number of Fast Ethernet ports (10/100BASE-T)** | | 1 | | | |
| **Storage capacity** | MB | 400 | | | |
| **Frequency range** | MHz | 50 ... 2200 | | | |
| **Measurements resolution** | kHz | 125 | | | |
| **Scale (dB/div)** | | 10 / 5 | | | |
| **Reference level** | | Automatic / Manual | | | |
| **Standards** | | ISDB-T/Tb | DVB-S | DVB-S2 | Analog Measures |
| **Modulations** | | 16QAM / 64QAM / DQPSK / QPSK | QPSK | 8PSK / QPSK | -- |
| **Signal level** | dBmV | -15 ... 50 | -15 ... 50 | -15 ... 50 | -35 ... 65 |
| **C/N** | dB | < 40 | < 20 | < 20 | < 45 |
| **V/A** | dB | -- | -- | -- | < 30 |
| **MER** | dB | < 35 | < 20 | < 20 | -- |
| **Pre-BER** | | 1.0E-2 – 1.0E-8 | -- | -- | -- |
| **CBER** | | -- | 9.9E-2 – 1.0E-6 | -- | -- |
| **VBER** | | -- | 1.0E-4 – 1.0E-8 | -- | -- |
| **LDPCBER** | | -- | -- | 9.9E-2 – 1.0E-6 | -- |
| **BCHBER** | | -- | -- | 9.9E-2 – 1.0E-8 | -- |
| **Link margin** | dB | -- | -- | < 10 | -- |
| **Echoes** | | Yes | -- | -- | -- |
| **Constellation** | | Yes | Yes | Yes | -- |
| **Powering per preamps** | Vdc | 13 ... 24 | | | |
| **Max. current preamps** | mA | 140 ... 475 | | | |
| **Powering LNB** | Vdc | 13 ... 18 | | | |
| **Max current for LNB** | mA | 370 ... 475 | | | |
| **LNB tone (22KHz)** | | Yes | | | |
| **DiSEqC-commands** | | Yes | | | |