

H30D+ (QAM) spectrum analyzer with Remote Control and DOCSIS 3.0

All the functions you need, also in CATV cable systems

The H30D+ is a lightweight, compact and robust equipment that includes a full range of tools and functionalities to successfully perform installation, maintenance and troubleshooting tasks in both analogue networks and QAM channels. It stands out for incorporating advanced DOCSIS 3.0 measurements, automatic monitoring of the desired channel, double-check connectivity and the information about a QAM channel program content, among other powerful functions.

Operating the meter is more flexible thanks to its multiscreen system: the user can manage it remotely and display its contents on their own mobile device (Android, iOS or PC). In addition, to make the use of the smartphone even more natural, a universal bracelet is provided for devices up to 6".

Just as the rest of the meters fully designed and manufactured in Televes Corporation, this H30D+ takes advantage of the digital processing technology, and provides the user with a speed and mathematical accuracy equivalent to that of laboratory equipment.

Ref.	593961
EAN13	8424450246511

Other features	
Complement	Meter + Protective Sleeve + Smartphone Armband

Physical data	
Net weight	1,600.00 g
Gross volume	7.00 dm^3
Gross weight	1,600.00 g

Packaging info	
Box	1 pcs.

Highlights

- Professional RF signal analyzer: decoding and display of video and audio parameters of QAM signals
- Multiscreen system with touch control: display the meter screen on a mobile device, and control the meter by touch gestures and buttons
- Wireless connectivity
- Real-time digital processing
- Light-weight handheld meter
- User friendly interface
- DOCSIS 3.0
- With Wi-Fi as option
- Automatic parameter detection: this H30D+ automatically detects signal type (A/D) and parameters to be measured (constellation, symbol rate, etc)
- All measurements are carried out by pressing a single button equipped with Pass/Fail indicators to reduce installation errors

Features



Multiscreen and remote control

Controllable from any Android or iOS device or a PC with H30Suite

The H30D+ multiscreen system allows you to display the meter's screen on your smartphone or tablet to wirelessly control the meter or just for the sake of working with a larger screen.
The installer may wirelessly access the equipment at any time from anywhere in the installation (depending on the local network connection range), with the convenience of always using his/her own device.
Simply install the H30Suite App (ref. 100016) on your device and connect it to the Wi-Fi network generated by the meter (AP mode).



Wireless connectivity

Wireless access to the meter

Equipped with Wireless connectivity, the equipment allows secure access through an Android or iOS device, or a PC. The web management application H30Suite (ref. 100016) may be used to check and export stored measurements, access to quality profiles, meter settings cloning, meter registration through a friendlier interface or real-time consultation of the user manual.



Rugged and Light Weight

Total reliability

A unique dual injected rubber and polycarbonate plastic housing ensures the best protection and durability. Weighing only one pound, the H30D+ is comfortable to carry and use. You can put it in your pocket or hang it from its sturdy built-in grommets using the provided shoulder strap... you will hardly know it's there!



Intuitive User Interface

Reducing the learning curve

Easy to use one-level menu structure with very intuitive functions for increased usability, faster operation and maximum productivity. No function requires more than three successive button pushes to achieve the desired operation. It doesn't get any easier than this, you will fly through the functions without ever reading the user manual.



Long Battery Life

Up to 4 hours on a full charge

High quality Li-Ion batteries, in conjunction with our advanced low power consumption technology, provide enough juice for even the largest jobs. One hour of fast charging will provide almost three hours of extended operation.

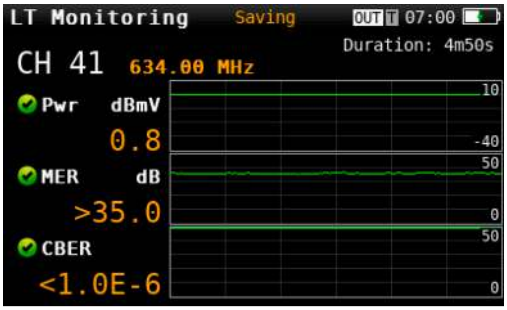


Made in Televes

Your Quality Warranty

The H30D+ is entirely designed by Gsertel, a 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 H30D+ includes more than 5,000 components and integrated circuits.

Functionalities



LT Monitoring

Automatic monitoring of the desired channel

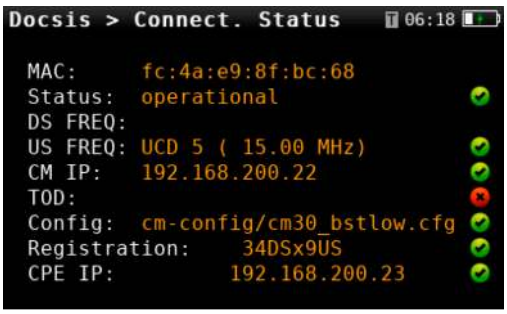
This H30D+ Long Term Monitoring Function allows the automatic monitoring of the selected channel. Once the time interval between two consecutive measurements has been selected, the H30D+ will automatically take all the measurements of the channel selected and store them in memory.



Tilt Function

Always in balance

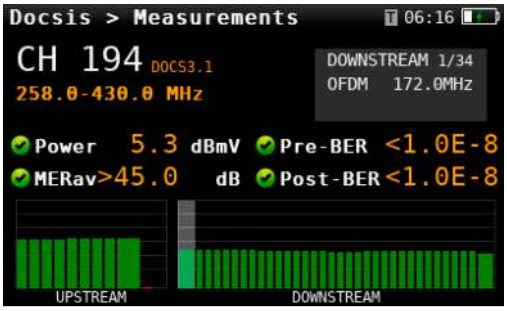
Get a quick view of your signal level differences over a specified frequency range so you can apply attenuation or equalization to adjust them. Take the meter to your farthest extents and see at a glance what carriers' power levels are out by their red, yellow, and green colors. Any number between 2–12 analog, digital or DOCSIS channels can be measured using the tilt measurement, and you can even select which carriers are your reference points to determine the tilt between any of the channels included in the measurement.



CMTS Synchronization Status

Synchronizing with the headend

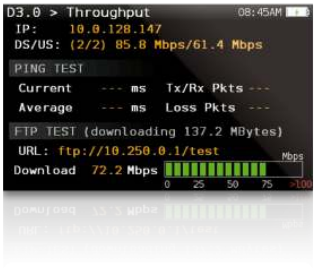
Obtain a step-by-step indication of a Pass/Fail test, as the modem finds, connects, and registers to a headend (CMTS), and also obtains critical parameters in the process. Confirm that the modem first finds the downstream channel and, right after that, the upstream channel. Later obtain the configuration as the DHCP address server, TOD server time, the complete configuration file and the registration information.



Downstream and Upstream Measurements

At a glance

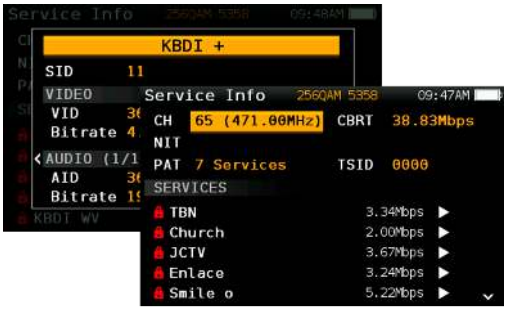
See a summary pass/fail view of up to 34 downstream (32 QAM + 2 OFDM) and 10 upstream channels (8 QAM + 2 OFDM) at once. Select one of the channels and see the critical measurements all on the same screen. Select from one of the factory configured or user created profiles to set the appropriate pass/fail thresholds. Get all the pertinent details at a glance for any given channel including the modulation, symbol rate, frequency, power, MER, and both the pre and post error correction Bit Error Rates.



Throughput Test

Speedometer

This function measures the upstream and downstream rates of the DOCSIS network. The rate measurements are performed using an FTP server that must be configured by the user (URL, file, get/put, user, password). This feature shows the IP modem within the DOCSIS network and the maximum speed negotiated (DS/ US). When you start the speed test, the speed value is constantly updated.



Service Info

Study MPEG details

Do you want to know what program content is on that QAM channel? The H30D3's Service Info feature will tell you. In addition to the short description of the service, you will get the important parameters including the NIT, PAT, and TSID for the channel, and for the individual service you will get the SID and the PID, encode type, resolution, and bitrate for both the audio and video, all of which greatly help when troubleshooting your encoder configuration.



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.



Voltmeter & Hum

Cover all your bases

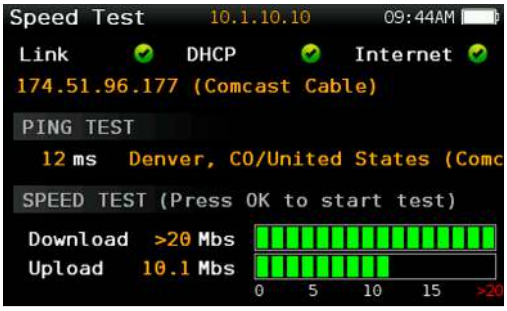
Don't want to worry about bringing a separate volt meter with you...? No problem, the H30D+ will do that too. The H30D+ will also give you a Hum percentage to help you diagnose those ground and power interference problems that may result from a defective power supply or faulty/overloaded power inserters.



Reverse Path Ingress Scan

Maximum, average, peak

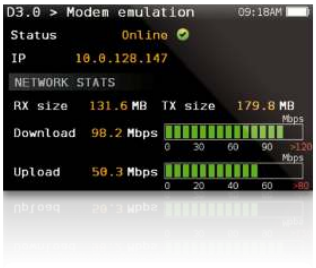
Help identify reverse path problems before your customers are affected. Poorly shielded coaxial cable and faulty terminations are important sources of ingress noise, which can easily add up in the return due to the large number of subscriber-generated signals that are sent back to the headend. The combined and amplified interference is often responsible for service disruption, so having a good reverse path ingress scan tool is always a must.



IP Speed Test

Double-check connectivity

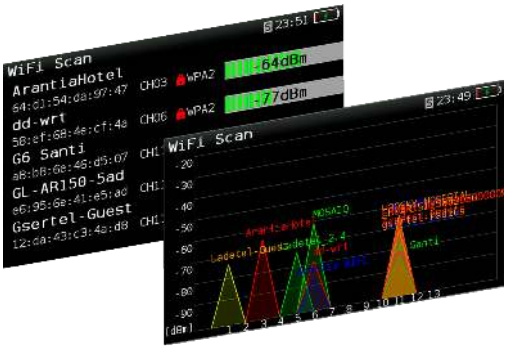
Need a quick check of your data network at the headend or at a customer's unit? The H30D+'s IP Speed Test allows you to check your basic network performance parameters, so you don't need to get your laptop out. This includes your upload and download speed, as well as your ping times and lost packets statistics.



Modem Emulation

Building a bridge

This function sets the H30D+ to be used as a DOCSIS modem and to use it to give to another device a connection to the DOCSIS network via the H30D+'s Ethernet port. This feature shows the connection status of the modem as well as the instantaneous speed and the size of the data sent through the modem.



Wi-Fi Analyser (*)

All bands (2.4 and 5 GHz)

This functionality allows a full analysis of the Wi-Fi band for the automatic detection of all the networks. Each of them is identified by name, and the power of the signal at the access point is also displayed. Two display modes are provided for the user to choose. The "list" mode provides a list of the detected networks with the associated data and power, while the "map" mode represents them on a dual-axis map: power vs. frequency.

(*) Optional feature: Ref. 593250.

Allows the demodulation and analysis of total Bitrates of each service. In addition, this option presents all the information of each of the services, such as SID, VPID, AID, video profile, or bit rate per audio and video.

Technical specifications

Ref. 593961

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	
Mains frequency		50 Hz / 60 Hz	
PSU output voltage	Vdc	12	
Max PSU output current	A	2	
RF connectors		"F" female	
Ethernet port		Gigabit Ethernet (10/100/1000BASE-T)	
USB port		USB 2.0	
Storage capacity	MB	400	
Frequency range	MHz	5 ... 1002	
Measurements resolution	kHz	125	
Bluetooth		Yes	
Ethernet		Yes	
Scale (dB/div)		10 / 5	
Reference level		Automatic / Manual	
Standards		DVB-C	Analog Measures
Modulation format		128QAM / 16QAM / 256QAM / 32QAM / 64QAM / QPSK	--
Digital channel format (ITU-T J.83)		Annex A / Annex B / Annex C	--
Signal level	dBmV	-15 ... 50	-30 ... 60
C/N	dB	< 45	< 50
V/A	dB	--	< 30
MER	dB	< 45	--
Pre-BER		1.0E-3 – 1.0E-8	--
Post-BER		1.0E-3 – 1.0E-8	--
BER		1.0E-3 – 1.0E-8	--
Constellation		Yes	--
TILT		Yes	
Voltmeter		Yes	
IP speed test		Yes	
Upload/Download speeds	Mbps	20	
Full HD display (MPEG2/MPEG4)		Yes	