

THE PROFESSIONAL & ACCURATE ANALYZER

mod. **HD FLASH STCO**



TFT 7"  
16:10



& Easy-to-use

Automatic, Fast

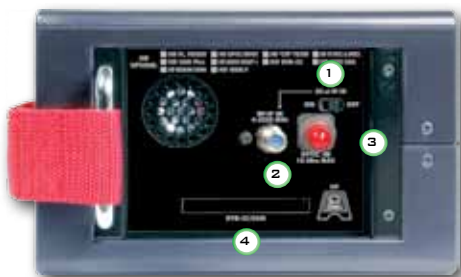
DUAL COMMANDS:

- Mechanical
- Touch (excludable)

- DVB-T2 opt.
- OPTIC INPUT opt.
- FULL MPEG2 & 4 SD & HD
- REAL TIME SPECTRUM with MAX HOLD
- LCN PROGRAM CODE

- MER Versus CARRIERS MEASUR. opt.
- TOUCHSCREEN opt.
- ECHOES, MICROECHOES & PREECHOES in REAL TIME
- CONDITIONAL ACCESS
- 8h LI-ION POL. BATTERIES

RIGHT SIDE



- 1 = Remote Power Supply switch - DC at RF IN ON/OFF
- 2 = IF/RF input connector, type "F" 75 Ω interchangeable
- 3 = Optic Input connector, TC-ST & SC interchangeable (opt.)
- 4 = Common Interface Slot for CAM module

LEFT SIDE



- 5 = Power Supply Input (12 V DC - 3A)
- 6 = Analog Audio / Video Input connector
- 7 = Analog Audio / Video Output connector
- 8 = HDMI output connector
- 9 = USB OTG micro connector for SW upgrades and memory stick

## HD FLASH MAIN FEATURES

DVB-S & S2 DVB-T/H & T2 M-PLP/DVB-C/(C2 opt.), Analog Radio TV & DOCSIS D.S.

**COMBINED HD PROFESSIONAL ANALYZER, 4-2.250 MHz, for SAT QPSK/8PSK - TV COFDM & CATV QAM signals, with MPEG-2/4 H264 decoder and Analog TV Pictures & Radio**

- Pre-memorized SAT transponder navigation, can be upgraded but not cancelled, all the main satellite and TV channel plans worldwide
- Assisted satellite dish pointing, double input (DUAL LNB) and sat finder functions
- All DiSEqC commands, SCR with automatic search, USALS motor protocol
- MEASUREMENTS: MER, PER, LDPC, BCH, aBER, bBER, EVM, ECHOES, Noise Margin, Level/Power, Real time spectrum analyzer and constellation visualization
- CATV MEASUREMENTS: DOCSIS downstream, INGRESS mode, LEAKAGE mode, BARS SCAN and TILT
- Optional: ATSC 8VSB for USA, or GB20600-2006 single and multicarriers for CHINA, or ISDB-T for JAPAN and BRAZIL, etc.
- **HW upgrades in factory: DVB-C2 (up to 31.12.2013)**



## HD FLASH MEASUREMENT EXAMPLES



DVB-T2 rotated Constellation 256 QAM mod., on the right relative modulation parameters & M-PLP



DVB-S2 multistream Constellation 8PSK mod., on the right relative modulation parameters



ECHO MEASUREMENT in SFN networks, with impulse response in real time, green area shows the guard interval



MICROECHO MEASUREMENT in SFN networks, with impulse response in real time and relative guard interval



Spectrum in real time, fast and super-fast with memory peak. **Detects and memorizes all the details for you.**



All the measurements, A/V PID, the picture and settings on one screen



Bars Scan TV & CATV function from 10 to 100 channels  
█ = analog █ = digital



MER Versus CARRIER MER measurement for carriers (optional)

## HD FLASH MAIN FUNCTIONS

*For technical specifications see product cross reference table*

- TV and CATV TUNER, extended band, 4-1000 MHz
- SAT TUNER, extended band, 930-2250 MHz
- GSM extended band, 860-1000 MHz for telephone repeater installation, see application note
- **LTE FILTER, manual or automatic opt.**
- Exclusive patented **ROVER AUTODISCOVERY** system: auto-matically detects and selects analog and digital COFDM/QAM TV signals in both measurement and spectrum mode
- Spectrum in real time, fast and super fast with memory peak
- Dual spectrum, Single and Multichannel simultaneously opt.
- **Detects, measures and SHOWS pictures of MPEG 2 and 4 H264 HD High Definition programs**
- **All the measurements, program lists, A/V PIDs, NET ID, LCN, settings and pictures on one screen**
- **Automatic quality analysis: FAIL-MARG-PASS and ITU Q1/Q5 opt.**
- HELP function automatically identifies all the signals with any digital modulation SAT, TV and CATV
- **Barscan TV and CATV function from 10 to 100 channels on one screen**
- Automemory, Manual memory and Datalogger functions
- TV & IF SAT test ICT FENITEL Spain
- **Stereo, Audio AAC supplied, DOLBY optional**
- New 7" TFT display, 16:10, high resolution
- **Audio Video Input/Output (analog)**
- **Slot for Conditional Access Common Interface**
- **CAM for C.I. plus opt.**
- Weighs only 2.5 kg, dim: H 11.5 x L 24.5 x D 18 cm
- **LI-ION-POLIMER 10A battery with 8 hour battery capacity**
- Battery test function, to regenerate and measure the batteries and calibrate the battery indicator
- Supplied with transport padded bag, accessories, mains and vehicle battery chargers, USB-OTG and Audio Video cables
- Free SW upgradeable on-line (USB-2 OTG socket)

Code	<b>HD FLASH "HW" OPTIONS</b>
<b>HD FL. TOUCH</b>	HW and SW for TOUCH-SCREEN function for mod. HD FLASH
<b>HD OPTIC INPUT</b>	HW and SW for TV & SAT optic input with interchangeable "FC", "ST", "SC" connectors for optic power measurements and spectrum
<b>HD "LTE" FILTER</b>	HW and SW for built-in and selectable rejection filters to select and attenuate "LTE" Telecom TX
<b>HD MULTIMEASURES TV</b>	HW and SW for simultaneous representation of: MEASUREMENT, PICTURES, SPECTRUM, CONSTELLATION, ECHOES
<b>HD CAM Plus</b>	HW, CAM for C.I. Plus (only for some standards)
<b>HD AUDIO DOLBY +</b>	HW and SW for Dolby AC3-AC3E-DD+ and "AAC" Audio
<b>HD DVB-C2</b>	HW and SW for DVB-C2, factory upgrade
<b>HD ATSC USA</b>	HW and SW for 8VSB USA, specify when ordering *
<b>HD GB20600 CHINA</b>	HW and SW for CHINA Single and Multicarriers, specify when ordering *
<b>HD ISDB-T JAPAN BRASIL</b>	HW and SW for Standards in Japan and Brazil, specify when ordering *

\* Specify one standard when ordering, only one TV standard per country

Code	<b>HD FLASH "APP" (SW) OPTIONS</b>
<b>HD SATEXPERT FUNCTION</b>	APP, To point a satellite dish in 1 second
<b>RIGHTS-SMART-1</b>	APP for Authorization code for the SMART PRO. SW, PC management SW, to create plans & download measurements
<b>DVB-T2</b>	APP for DVB-T2. Demodulator for second generation Terrestrial TV
<b>HD MER versus CARRIER</b>	APP for MER measurement for DVB-T & T2