

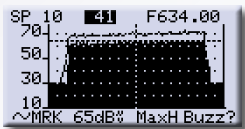
THE MOST ADVANCED & ACCURATE ALL IN ONE FIELD METER

mod. HD ONE STC (T2 & C2 opz.)



MAIN FEATURES

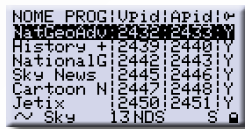
- CATV TUNER with extended band 4-1000 MHz
- SAT TUNER with extended band 930-2250 MHz
- Extended GSM band 860-1000 MHz for telephone repeater installations
- Exclusive patented ROVER **AUTODISCOVERY** system automatically recognises and selects analog TV and digital COFDM & QAM TV signals in both measurement and spectrum mode
- **Detects and measures all MPEG 4HD signals, show the Progr. List, Network Data, A/V PID & Encryption**
- Automatic quality analysis: FAIL-MARGINAL-PASS
- New ultra-bright graphics display
- Automatic and manual memory & Data Logger
- Weighs only 1 kg
- Up to 4 hour battery autonomy
- Battery test function to regenerate/measure battery levels and calibrate the indicator
- Supplied with soft bage for transport, mains adapter and 12 V vehicle adapter
- Free SW upgradeable on-line (USB-2 socket)



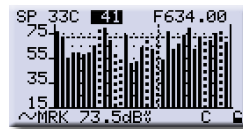
Fast digital TV spectrum with memory peak. **Detects and measures the details for you**



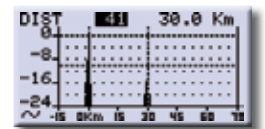
Costell. DVB-S2 = 8PSK, T = COFDM, C = QAM & modulation parameters



MPEG program list and A/V PID & Encryption Status



TV Bars Scan
| = analog | | = digital



Impulse response in real time (ECHOES & MICRO-ECHOES in "SFN" networks)

For technical specifications see the last pages

Mod. HD ONE STC DVB-S & S2 / DVB-T, H (& T2 opt.) / DVB-C (& C2 opt.) / DOCSIS D.S.

ULTRA-PORTABLE, ALL-IN-ONE, PROFESSIONAL ANALYZER, 4-2.250 MHz FOR SAT QPSK/8PSK-TV COFDM & CABLE QAM SIGNALS WITH ANALOG TV





- Pre-memorized Transponder navigation in all worldwide satellites and in all the worldwide standard TV & CATV channel plans
- Assisted satellite dish pointing, double input (DUAL LNB) dish pointing and Sat Finder functions
- All DiSEqC commands and SCR Ready with automatic search and USALS motor protocol
- Measures: Constellation, MER, MER Versus CARRIER (opt.), PER, LDPC, BCH, aBER, bBER, EVM, Noise Margin, Level/Power measurements and Spectrum Analyzer
- CABLE MEAS: DOCSIS downstream, INGRESS mode, LEAKAGE mode, BARS SCAN and TILT













Code	HD ONE "HW" OPTIONS
HD CABLE DVB-C2	HW and FW for DVB-C2. Demodulator for second generation Cable TV
HD DVB EUROPE	HW and SW for DVB CE, specify when ordering *
HD ATSC USA	HW and SW for 8VSB USA, specify when ordering *
HD GB20600 CHINA	HW and SW for CHINA Single and Multicarriers, specify when ordering *
HD ISDB-T JAPAN BRASIL	HW and SW for Standards in Japan and Brazil, specify when ordering *

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











Code	HD ONE "APP" (SW) OPTIONS
HD TV DVB-T2	APP for DVB-T2. Demodulator for second generation Terrestrial TV
HD TV MER versus CARRIER	APP for DVB-T & T2 MER versus CARRIER measurement
RIGHTS-SMART-1	APP for authorization code for the SMART PRO. SW, PC management, to create plans & download measurements

FEATURES FUNZIONI FUNKTIONEN FUNCIONES FONCTIONS		HD ONE _{stc}	HD SAT _{s2}	HD TV _t	HD CABLE _c	
						
EXCLUSIVE ROVER INSTRUM. FUNCTIONS	COMPLETE, SIMPLE, EASY-TO-USE	•	•	•	•	
	16:10 LED TFT DISPLAY, HIGH BRIGHTNESS	GRAPHIC DISPLAY	GRAPHIC DISPLAY	GRAPHIC DISPLAY	GRAPHIC DISPLAY	
	"LI-ION-POLIMER" BATTERIES, hours capacity	5 h	5 h	5 h	5 h	
	TOUCH &/or CLASSIC &/or COMBINED COMMANDS	MECHANICAL	MECHANICAL	MECHANICAL	MECHANICAL	
	MAXIMUM ERGONOMICS and OPERATING SAFETY	•	•	•	•	
	SIX SELECTABLE LANGUAGES: UK-IT-FR-ES-DE-PO	•	•	•	•	
	MULTI MEASUREMENTS: Spect, Meas, Picture, Echoes, Constell.					
	AUTODISCOVERY Analog./Digital and TV/CATV	•	•	•	•	
	AUTOQUALITY Fail-Marginal-Pass	•	•	•	•	
	AUTOMEMORY Automatic memorization TV and CATV	•	•	•	•	
	MANUMEMORY Mixed Memoriz., SAT-TV-CATV and RD	•	•	•	•	
	HELP FUNCTION with Auto lock in SAT, CATV and SPECTRUM	•	•	•	•	
	SAT-TV-CATV DIRECT SELECTION	•	•	•	•	
	TV & CATV SEPARATE CHANNEL PLANS	•	•	•	•	
	DVB-S/S2 AUTOMATIC SELECTION	•	•	•	•	
	DVB-T/T2 AUTOMATIC SELECTION	•	•	•	•	
	SEPARATE MENUS for EACH FUNCTION	•	•	•	•	
	DRIVE ALL LNB's & MULTISWITCHES DiSeqC & SCR	•	•	•	•	
	ALL MAIN WORLDWIDE SATELLITES & TRANSPONDERS PRE-STORED	•	•	•	•	
	SATEXPERT FUNCTION, SAT pointing in 1 sec.	opt.	opt.			
BANDS	Extended SAT BAND - MHz					
	TV & RD BAND - MHz	TV 41-887		TV 41-887	TV 41-887	
	CATV extended BAND & return path - MHz				TV 4 – 1.000	
	GSM TELECOM BAND - MHz			860 – 1.000	860 – 1.000	
RF FILTERS	REJECTION FILTERS for "LTE" BAND - MHz					
CONNECT	INTERCHANGEABLE RF CONNECTOR	•	•	•	•	
OPTICS	OPTICAL INPUT, FC, ST, SC INTERCHANGEABLE CONNECTOR					
WORLD STANDARD SATS	SAT	DVB-S	•	•		
		DVB-S2	•	•		
		DVB-S2 MULTISTREAM				
	TV	DVB-T	•		•	
		DVB-T2	opt.		opt.	
		ATSC USA	ON REQUEST		ON REQUEST	ON REQUEST
		GB20600 CHINA	ON REQUEST		ON REQUEST	ON REQUEST
	CATV	ISDB-T JAPAN & BRAZIL	ON REQUEST		ON REQUEST	ON REQUEST
		ANALOG TV WW STANDARD "CCIR" B-G-D-K-L-M-N	•	•	•	•
		DVB-C & annex A	•		•	•
DVB-C & annex B	•		•	•		
DVB-C2	opt.			opt.		
VIDEO	MPEG 2 SD					
	MPEG 2 & 4 HD	Net. Id. Program. List	Net. Id. Program. List	Net. Id. Program. List	Net. Id. Program. List	
	HDMI OUTPUT					
	ANALOG VIDEO INPUT					
AUDIO	ANALOG VIDEO OUTPUT					
	"AAC" AUDIO					
	"DOLBY++" AUDIO					
	ANALOG AUDIO INPUT					
TRANSP. STREAM	ANALOG AUDIO OUTPUT					
	T.S. ASI INPUT					
	T.S. ASI OUTPUT (Decoded via C.I.)					
	T.S. READER/RECORDER via LAN/PC					
GPS	INTERNAL T.S. ANALYZER					
	C.I. DESCRAMBLER					
	GPS RECEIVER USB					
	10 MHz from GPS INPUT					
OTHERS	1 PPS from GPS INPUT					
	USB On The GO for MEMORY STICK					
	Free SW UPGRADES					
	LAN ETHERNET					
	BATTERY TEST FUNCTION	•	•	•	•	
BATTERY SAVE FUNCTION	•	•	•	•		
DiSeqC, SCR, USALS MOTOR	•	•				

"HD FAMILY" SAT-TV-CATV & OPTIC METER - Technical Specifications

		SIZE (mm) H-L-D	115x245x180	115x245x180	115x245x180	115x245x180	225x130x65	165x225x80	165x225x80	165x225x80	165x225x80	165x225x80	
		MAIN SPECIFICATIONS		WEIGHT (Kg)	3	2.5	2.5	2.5	1.6	1.4	1.2	1.2	1.2
Soft Bag Protection	●			●	●	●	●	●	●	●	●	●	●
Battery Duration (hours)	6 hours			8 hours	8 hours	8/10 hours	6 hours	6 hours	4 hours	4 hours	4 hours	4 hours	4 hours
Graphics Display Multi-language	●			●	●	●	●	●	●	●	●	●	●
TFT Color Display	10" Color 16:10 TOUCH SCREEN			7" Color 16:10 TOUCH SCREEN	7" Color 16:10 TOUCH SCREEN	7" Color 16:10	4,3" Color 16:10	3,5" Color 4:3					
MEMORY	Total Logger			99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED
	PROGS per PLAN			199	199	199	199	199	199	199	199	199	199
	Total PLANS			99	99	99	99	99	99	99	99	99	99
Tuning System and NAVIGATION	Transp./ Ch./ Freq./ Prog. in Meas and Spect			Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect
Level Accuracy (dB)	1.5 Typ. SAT 1.0 Typ. TV			1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV
Dynamic Range dBuV-(dBmV-dBm)	30 - 126 SAT 5 - 126 TV	30 - 126 SAT 5 - 126 TV	30 - 126 SAT 5 - 126 TV	30 - 126 SAT 5 - 126 TV	30 - 115 SAT 5 - 115 TV	30 - 115 SAT 5 - 115 TV	30 - 115 SAT 5 - 115 TV	30 - 115 SAT 5 - 115 TV	30 - 115 SAT 5 - 115 TV	30 - 115 SAT 5 - 115 TV	30 - 115 SAT 5 - 115 TV		
SPECIAL FUNCTIONS		USB & SW Upgrades via Internet	● USB2 O.T.G.	● USB2 O.T.G.	● USB2 O.T.G.	● USB2 O.T.G.	● USB2	● USB2	● USB2	● USB2	● USB2	● USB2	
		NAVIGATION ENCODER & NUMERIC KEYPAD	●	●	●	●	●	●	●	●	●	●	
		TRANSPONDER DIRECT NAVIGATION	●	●	●	●	●	●	●	●	●	●	
		NETWORK DATA & PROGRAM. NAMES	●	●	●	●	●	●	●	●	●	●	
		TV PROGRAMS AUTOMEMORY	●	●	●	●	●	●	●	●	●	●	
		DRIVER for LNB S.C.R.	●	●	●	●	●	●	●	●	●	●	
		DiSeqC a-b-c-d & USALS MOTOR	●	●	●	●	●	●	●	●	●	●	
		Dual LNB SAT POINTER	●	●	●	●	●	●	●	●	●	●	
		SAT EXPERT	● opt.	● opt.	● opt.	● opt.	● opt.	● opt.	● opt.	● opt.	● opt.	● opt.	
		REMOTE POWER SUPPLY VOLTAGES	●	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V
		BARSCAN and TILT	●	●	●	●	●	●	●	●	●	●	
		INGRESS and LEAKAGE	●	●	●	●	●	●	●	●	●	●	
AUDIO-VIDEO		CVBS & HDMI	●	●	●	●							
		DIRECT CONDIT. ACCESS SYSTEM	●	●	●	●							
		AN. TV SOUND and RADIO	●	●	●	●	●	●					
		ANALOG TV PICT	●	●	●	●	●	●	Network Id PROG & PID only	Network Id PROG & PID only	Network Id PROG & PID only	Network Id PROG & PID only	
		MPEG2 & 4 HD DECODER	●	●	●	●	●	●	Network Id PROG & PID only	Network Id PROG & PID only	Network Id PROG & PID only	Network Id PROG & PID only	
		MPEG2 DECODER	●	●	●	●	●	●					
MEASUREMENTS		SPECTRUM ANALYSIS with MEMORY PEAK	● REAL TIME	● REAL TIME	● REAL TIME	● REAL TIME	● REAL TIME	● REAL TIME	● REAL TIME	● REAL TIME	● REAL TIME		
		DIGITAL QUALITY FAIL-MARG-PASS	●	●	●	●	●	●	●	●	●	●	
		CONSTELLATION & REAL TIME ECHOS	●	●	●	●	●	●	● Constellation	●	●	●	
		DEMODULATED M.E.R.-B.E.R.-P.E.R.-SNR-EVM NOISE MARGIN	Optical IN & IPTV	● opt. Optic	● opt. Optic ● opt. IPTV	● opt. Optic	● opt. Optic						
			QAM	●	●	●	●	●	●	●	●	●	
			COFDM	● T2 ON BOARD	● T2 ON BOARD	● T2 ON BOARD	● T2 opt.	● T2 opt.	● T2 opt.	● T2 opt.	● T2 opt.	● T2 opt.	
8PSK	●		●	●	●	●	●	●	●	●			
QPSK	●	●	●	●	●	●	●	●	●				
FREQUENCY RANGE		INPUT CONNECTOR	"N" 50 Ω	"N" 50 Ω	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	
		BAND	SAT	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz		
			TV	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	40-1.000 MHz	40-1.000 MHz
			CATV	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz		4-1.000 MHz
RADIO	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz						
MIROVER MODEL		HD TAB STC01											

"STANDARD" SAT-TV-CATV & OPTIC METER - Technical Specifications

		SIZE (mm) H-L-D	115x245x180	115x245x180	215x225x115	195x225x80	165x225x80	165x225x80	165x225x80	65 x 226 x 105	65 x 226 x 105	215 x 125 x 60									
		WEIGHT (Kg)	2.5	2.5	2.2	1,4	1.2	1.2	1.1	1.1	1.1	1.1	1.3								
MAIN SPECIFICATIONS		Soft Bag Protection	●	●	●	●	●	●	●	●	●	●									
		Battery Duration (hours)	2 to 3 hours	2 to 3 hours	3 to 4 hours	4 hours	4 hours	4 hours	4 hours	4.5 hours	2.5 hours	2.5 hours	4 hours								
		Graphics Display Multi-language	64 x 128 high brightness					64 x 128 high brightness	64 x 128 high brightness	64 x 128 high brightness	64 x 128 high brightness	64 x 128 high brightness	64 x 128 high brightness								
		TFT Color Display	4.5" Color	6.5" Color 16:9 TOUCH SCREEN	4,4" Color		3,1" LIGHT 3,5" LIGHT PLUS							3.5" Color							
		MEMORY	Total Logger	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99 ITC FENITEL APPROVED	99	99	99							
			PROGS per PLAN	199	199	199	199	199	199	199	199	1	199	199							
			Total PLANS	99	99	99	99	99	99	99	99	9	99	99							
		Tuning System and NAVIGATION	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Transp./ Ch./ Freq./ Prog. in Meas and Spect	Chan./ Freq./ Prog. in Meas and Spect	Chan./ Freq./ Prog. in Meas and Spect	Chan./ Freq./ Prog. in Meas and Spect	Chan./ Freq./ Prog. in Meas and Spect	Chan./ Freq./ Prog. in Meas and Spect							
		Level Accuracy (dB)	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.5 Typ. SAT 1.0 Typ. TV	1.0 Typ.	1.0 Typ.	1.0 Typ.	1.0 Typ.	1.0 Typ.							
		Dynamic Range dBuV-(dBmV-dBm)	30 - 126 SAT 5 - 126 TV	30 - 126 SAT 5 - 126 TV	30 - 126 SAT 5 - 126 TV	30 - 126 SAT 5 - 126 TV	30 - 126 SAT 5 - 126 TV	30 - 126 SAT 5 - 110 TV	30 - 126 SAT 5 - 110 TV	5-110 dBuV	5-110 dBuV	5-110 dBuV	0-126 dBuV	0-126 dBuV							
SPECIAL FUNCTIONS		USB & SW Upgrades via Internet	● USB2	● USB2	● USB2	● USB2	● USB2	●	● USB2	●	● USB2	● USB2 O.T.G.									
		NAVIGATION ENCODER & NUMERIC KEYPAD	●	●	●	●	●	●	●	●		Numeric KEYPAD	Numeric KEYPAD								
		TRANSPONDER DIRECT NAVIGATION	●	●	●	●	●	●	●	●											
		NETWORK DATA & PROGRAM. NAMES	●	●	●	●	●	●	●	●											
		TV PROGRAMS AUTOMEMORY	●	●	●	●	●	●	●	●		●	●								
		DRIVER for LNB S.C.R.	●	●	●	●	●	●	●	●											
		DiSEqC a-b-c-d & USALS MOTOR	●	●	●	●	●	●	●	●											
		Dual LNB SAT POINTER	●	●	●	●	●	●	●	●											
		SAT EXPERT	●	● opt.	● opt.	● opt.	● opt.	● opt.	● opt.	● opt.											
		REMOTE POWER SUPPLY VOLTAGES	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5V-12V-18V-24V	5-12V-18V-24V	5-12V-18V-24V												
		BARSCAN and TILT	●	●	●	●	●	●	●	●	●	●	●								
		INGRESS and LEAKAGE	●	●	●	●	●	●	●	●	●	●	●								
AUDIO-VIDEO		CVBS & HDMI	●	●	●	●	●	●	●												
		DIRECT CONDIT. ACCESS SYSTEM	●	●	●	●	●	●	●												
		AN. TV SOUND and RADIO	●	●	●	●	●	●	●	●	●	●	●								
		ANALOG TV PICT	● SAT and TV Analog Picture	●	●	●	●	●	●	●											
		MPEG2 & 4 HD DECODER	●	● opt.				Network Iden. PROGS & PID only	Network Iden. PROGS & PID only	Network Iden. PROGS & PID only											
		MPEG2 DECODER	●	●	●	●	●	Network Iden. PROGS & PID only	Network Iden. PROGS & PID only	Network Iden. PROGS & PID only											
MEASUREMENTS		SPECTRUM ANALYSIS with MEMORY PEAK	●	●	●	●	●	●	●	●	●	●									
		DIGITAL QUALITY FAIL-MARG-PASS	●	●	●	●	●	●	●	●	●	●	●								
		CONSTELLATION & REAL TIME ECHOS	●	●	●	●	●	●	●	●	●	●	●								
		DEMODULATED M.E.R.-B.E.R.-PER-SNR-EVM NOISE MARGIN	Optical IN & IPTV	Opt. Optical input & IPTV										● Optical IN							
			QAM	●	●	●	●	●	●	●	●	●	● QAM & CABLE MODEM DOCSIS 2.0	● QAM & CABLE MODEM DOCSIS 3.0							
			COFDM	● T2 opt.	● T2 opt.	● T2 opt.	● T2 opt.	●	●	●	●										
8PSK	●		●	●	●	●	●	●	●												
QPSK	●	●	●	●	●	●	●	●													
INPUT CONNECTOR	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F - BNC - IEC	F	F	F										
FREQUENCY RANGE BAND		SAT	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz	930-2.250 MHz													
		TV	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz		47-1.000 MHz	4-1000 MHz	4-1000 MHz	4-1000 MHz									
		CATV	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz		4-1.000 MHz	4-1000 MHz	4-1000 MHz	4-1000 MHz									
		RADIO	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz	4-1.000 MHz		4-1.000 MHz	4-1000 MHz	4-1000 MHz	4-1000 MHz									
 MODEL		ATOM HD STCOOL		DIGICUBE STC		ATOM POWER STC		ATOM LIGHT/+ STC		MASTER STC		MASTER SAT 2		MASTER CABLE		FAST-C		OMNIA-7 DOCSIS 2.0		OMNIA-10 DOCSIS 3.0	