

# HD MEASURING INSTRUMENTS & SPECTRUM ANALYZERS for: SAT, TV & CABLE

**3** FIELD METERS for: DVB-T2 / C2 / S2 & ATSC / ISDB-T / GB20600



**HD ONE**



**HD SAT**

**SAT: QPSK-8PSK**

**TV: COFDM**

**CATV: QAM**



**HD TV**



**HD CABLE**



V.1.6 17-1-2013

MORE THAN 40 YEARS of INNOVATION

DESIGNED & MADE IN ITALY



ISO 9001



ISO 14001



OHSAS 18001

**CE DVB MPEG DOLBY APPROVED**

1972 > 2012 >> 40° YEARS  
A STEP AHEAD IN DIGITAL TELEVISION

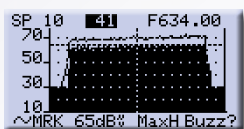
THE MOST ADVANCED & ACCURATE ALL IN ONE FIELD METER

mod. **HD ONE STC** (T2 & C2 opt.)



## MAIN FEATURES

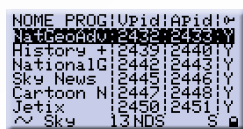
- CATV TUNER with extended band 4-1000 MHz
- SAT TUNER with extended band 930-2250 MHz
- Extended GSM band 860-1000 MHz for telephone repeater installations
- Exclusive patented ROVER **AUTODISCOVERY** system automatically recognises and selects analog TV and digital COFDM & QAM TV signals in both measurement 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 1,2 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)



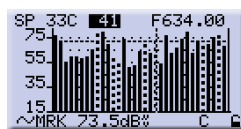
Fast digital TV spectrum with memory peak. Detects and measures the details for you



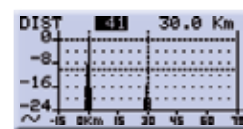
Costell. DVB-S2 = 8PSK, T = COFDM, C = QAM & modulation parameters



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, 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                                         |
| RIGHTS-SMART-1 | APP for authorization code for the SMART PRO. SW, PC management, to create plans & download measurements |



| FUNKTIONEN                                  |                                                               | HD ONE <sub>STC</sub>                      | HD SAT <sub>S2</sub>   | HD TV <sub>T</sub>     | HD CABLE <sub>C</sub>  |            |
|---------------------------------------------|---------------------------------------------------------------|--------------------------------------------|------------------------|------------------------|------------------------|------------|
| EXCLUSIVE<br>ROVER<br>INSTRUM.<br>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                    | 4 h                                        | 4 h                    | 4 h                    | 4 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.                   |                        |                        |            |
|                                             | ALPHANUMERICAL KEYBOARD for CH, TR, FREQ. selection           | •                                          | •                      | •                      | •                      |            |
|                                             | DISPLAY BACKGROUND COLOR SELECTION                            |                                            |                        |                        |                        |            |
|                                             | SHOCK-PROOF & RAIN-PROOF HOUSING, supplied with transport bag | •                                          | •                      | •                      | •                      |            |
| 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<br>STANDARD<br>S                      | 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 |
|                                             |                                                               | ISDB-T JAPAN & BRAZIL                      | ON REQUEST             |                        | ON REQUEST             | ON REQUEST |
|                                             |                                                               | ANALOG TV WW STANDARD "CCIR" B-G-D-K-L-M-N | •                      |                        | •                      | •          |
|                                             | CATV                                                          | 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                                            |                                            |                        |                        |                        |            |
|                                             | ANALOG VIDEO OUTPUT                                           |                                            |                        |                        |                        |            |
| AUDIO                                       | "AAC" AUDIO                                                   |                                            |                        |                        |                        |            |
|                                             | "DOLBY+" AUDIO                                                |                                            |                        |                        |                        |            |
|                                             | ANALOG AUDIO INPUT                                            |                                            |                        |                        |                        |            |
|                                             | ANALOG AUDIO OUTPUT                                           |                                            |                        |                        |                        |            |
| TRANSP.<br>STREAM                           | T.S. ASI INPUT                                                |                                            |                        |                        |                        |            |
|                                             | T.S. ASI OUTPUT (Decoded via C.I.)                            |                                            |                        |                        |                        |            |
|                                             | T.S. READER/RECORDER via LAN/PC                               |                                            |                        |                        |                        |            |
|                                             | INTERNAL T.S. ANALYZER                                        |                                            |                        |                        |                        |            |
|                                             | C.I. DESCRAMBLER                                              |                                            |                        |                        |                        |            |
| GPS                                         | GPS RECEIVER USB                                              |                                            |                        |                        |                        |            |
|                                             | 10 MHz from GPS INPUT                                         |                                            |                        |                        |                        |            |
|                                             | 1 PPS from GPS INPUT                                          |                                            |                        |                        |                        |            |
| OTHERS                                      | USB On The GO for MEMORY STICK                                |                                            |                        |                        |                        |            |
|                                             | Free SW UPGRADES                                              |                                            |                        |                        |                        |            |
|                                             | LAN ETHERNET                                                  |                                            |                        |                        |                        |            |
|                                             | BATTERY TEST FUNCTION                                         | •                                          | •                      | •                      | •                      |            |
|                                             | BATTERY SAVE FUNCTION                                         | •                                          | •                      | •                      | •                      |            |
|                                             | DiSEqC, SCR, USALS MOTOR                                      | •                                          | •                      |                        |                        |            |

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

| MAIN SPECIFICATIONS                                                                       |        |                | SIZE (mm) H-L-D                                    | 60x323x175                                                                          | 115x245x180                                | 115x245x180                                                                         | 115x245x180                                | 240x140x40                                                                          | 225x130x65                                 | 165x225x80                                                                          | 165x225x80                                 | 165x225x80                                                                          | 165x225x80                                 |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|-------------------------------------------------------------------------------------------|--------|----------------|----------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------|
|                                                                                           |        |                | WEIGHT (Kg)                                        | 3                                                                                   | 2.5                                        | 2.5                                                                                 | 2.5                                        | 1.6                                                                                 | 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                                 | 5 hours                                                                             | 4 hours                                    | 6 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                             | 7" Color 16:9                                                                       | 4,3" Color 16:10                           | 3,45" 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                                           |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                | 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                   |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                | 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                    |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                | 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.                                     | ● 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                 |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                | MPEG2 & 4 HD DECODER                               | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | 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                                                                         | ● REAL TIME                                |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                | DIGITAL QUALITY FAIL-MARG-PASS                     | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                    |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                | CONSTELLATION & REAL TIME ECHOS                    | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ● Constellation                                                                     | ●                                          | ●                                                                                    |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                | DEMODULATED M.E.R.-B.E.R.-PER-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                                               | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   | ●                                          | ●                                                                                   |                                            |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
| 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                                                                       |                                            |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
| 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                                                                       | 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                                                                         |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                |                                                    | 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                                                                         |                                            |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|                                                                                           |        |                |                                                    | 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                                |                                                                                     |                                            |                                                                                      |              |                                                                                       |            |                                                                                       |        |                                                                                       |       |                                                                                       |
|  MODEL |        |                | HD PRO TAB STC01                                   |  | HD PRO STC01                               |  | HD TOUCH STC0                              |  | HD FLASH STC0                              |  | HD TAB 7 STC                               |  | HD COMPACT STC                             |  | HD LIGHT STC |  | HD ONE STC |  | HD SAT |  | HD TV |  |

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

| MAIN SPECIFICATIONS                                                                                                                  |  |  | SIZE (mm) H-L-D                                                                                 | 115x245x180                                                                                      | 115x245x180                                                                                          | 195x225x80                                                                                     | 165x225x80                                                                                       | 165x225x80                                                                                    | 165x225x80                                                                                         | 165x225x80                                                                                   | 65 x 226 x 105                                                                                           | 65 x 226 x 105                                                                                            | 215 x 125 x 60                        |                                       |
|--------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|
|                                                                                                                                      |  |  | WEIGHT (Kg)                                                                                     | 2.5                                                                                              | 2.5                                                                                                  | 1,4                                                                                            | 1.2                                                                                              | 1.2                                                                                           | 1.2                                                                                                | 1.1                                                                                          | 1.1                                                                                                      | 1.1                                                                                                       | 1.3                                   |                                       |
|                                                                                                                                      |  |  | Soft Bag Protection                                                                             | ●                                                                                                | ●                                                                                                    | ●                                                                                              | ●                                                                                                | ●                                                                                             | ●                                                                                                  | ●                                                                                            | ●                                                                                                        | ●                                                                                                         | ●                                     |                                       |
|                                                                                                                                      |  |  | Battery Duration (hours)                                                                        | 2 to 3 hours                                                                                     | 2 to 3 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                                                                                  |                                       |                                       |
|                                                                                                                                      |  |  | TFT Color Display                                                                               | 4.5" Color                                                                                       | 6.5" Color 16:9 TOUCH SCREEN                                                                         | 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                                                                                                        | 99                                    | 99                                    |
|                                                                                                                                      |  |  |                                                                                                 | PROGS per PLAN                                                                                   | 199                                                                                                  | 199                                                                                            | 199                                                                                              | 199                                                                                           | 199                                                                                                | 199                                                                                          | 199                                                                                                      | 1                                                                                                         | 199                                   | 199                                   |
|                                                                                                                                      |  |  |                                                                                                 | Total PLANS                                                                                      | 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                                                 | 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                                                                     | 1.0 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 - 110 TV                                                                       | 5-110 dBuV                                                                                         | 30 - 115 SAT 5 - 115 TV                                                                      | 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.                                                                                             |                                                                                              |                                                                                                          |                                                                                                           |                                       |                                       |
|                                                                                                                                      |  |  | REMOTE POWER SUPPLY VOLTAGES                                                                    | 5V-12V-18V-24V                                                                                   | 5V-12V-18V-24V                                                                                       | 5V-12V-18V-24V                                                                                 | 5-12V-18V-24V                                                                                    | 5-12V-18V-24V                                                                                 | 5V-12V-18V-24V                                                                                     |                                                                                              |                                                                                                          |                                                                                                           |                                       |                                       |
|                                                                                                                                      |  |  | BARSCAN and TILT                                                                                | ●                                                                                                | ●                                                                                                    | ●                                                                                              | ●                                                                                                |                                                                                               | ●                                                                                                  | ●                                                                                            | ●                                                                                                        | ●                                                                                                         | ●                                     | ●                                     |
|                                                                                                                                      |  |  | INGRESS and LEAKAGE                                                                             | ●                                                                                                | ●                                                                                                    | ●                                                                                              | ●                                                                                                | ●                                                                                             | ●                                                                                                  | ●                                                                                            | ●                                                                                                        | ●                                                                                                         | ●                                     | ●                                     |
| AUDIO-VIDEO                                                                                                                          |  |  | CVBS & HDMI                                                                                     | ●                                                                                                | ●                                                                                                    | CVBS                                                                                           |                                                                                                  |                                                                                               |                                                                                                    |                                                                                              |                                                                                                          |                                                                                                           |                                       |                                       |
|                                                                                                                                      |  |  | DIRECT CONDIT. ACCESS SYSTEM                                                                    | ●                                                                                                | ●                                                                                                    |                                                                                                |                                                                                                  |                                                                                               |                                                                                                    |                                                                                              |                                                                                                          |                                                                                                           |                                       |                                       |
|                                                                                                                                      |  |  | AN. TV SOUND and RADIO                                                                          | ●                                                                                                | ●                                                                                                    | ●                                                                                              | ●                                                                                                |                                                                                               |                                                                                                    | ●                                                                                            | ●                                                                                                        | ●                                                                                                         | ●                                     |                                       |
|                                                                                                                                      |  |  | ANALOG TV PICT                                                                                  | ● SAT and TV Analog Picture                                                                      | ●                                                                                                    | ●                                                                                              |                                                                                                  |                                                                                               | Network Id PROG & PID only                                                                         |                                                                                              |                                                                                                          |                                                                                                           |                                       |                                       |
|                                                                                                                                      |  |  | MPEG2 & 4 HD DECODER                                                                            | ●                                                                                                |                                                                                                      |                                                                                                | Network Iden. PROGS & PID only                                                                   | Network Iden. PROGS & PID only                                                                | Network Id PROG & 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                                                              | ●                                                                                                | ●                                                                                                    | ●                                                                                              | ●                                                                                                | ●                                                                                             | ● REAL TIME                                                                                        | ●                                                                                            | ●                                                                                                        | ●                                                                                                         | ●                                     |                                       |
|                                                                                                                                      |  |  | 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.                                                                                            |                                                                                                |                                                                                                  |                                                                                               |                                                                                                    |                                                                                              |                                                                                                          |                                                                                                           |                                       |                                       |
|                                                                                                                                      |  |  |                                                                                                 | 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                                                                                            | 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                                                                                      |                                                                                              |                                                                                                          |                                                                                                           |                                       |                                       |
|                                                                                                                                      |  |  |                                                                                                 | TV                                                                                               | 4-1.000 MHz                                                                                          | 4-1.000 MHz                                                                                    | 4-1.000 MHz                                                                                      | 4-1.000 MHz                                                                                   |                                                                                                    | 40-1.000 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                                                                                              | 4-1000 MHz                                                                                                | 4-1000 MHz                            | 4-1000 MHz                            |
| <br>114 STEP PHASE IN DIGITAL TELEVISION<br>MODEL |  |  | ATOM HD  STC | DIGICUBE  STC | ATOM LIGHT/+  STC | MASTER  STC | MASTER SAT 2  | HD CABLE  | MASTER CABLE  | FAST-C  | OMNIA-7  DOCSIS 2,0 | OMNIA-10  DOCSIS 3,0 |                                       |                                       |



# HOW TO FIND US: in Sirmione, Lake Garda

Lake Garda is in the north of Italy, near the borders of Austria, Switzerland and Germany and is in the foothills of the Alps. Lake Garda has a micro-climate, tropical in summer and temperate in winter, and where palms, olives, lemons, oranges, bouganville and even banana trees can grow. Exploited by the Romans as long ago as 350 a.C., it is now one of the most important lakeside, spa and tourist resorts in Europe. Please find below photographs of some of the most important tourist attractions in the area.

Sirmione Castle, 1500 a.C.



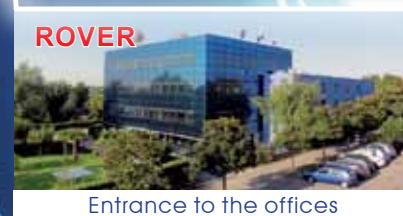
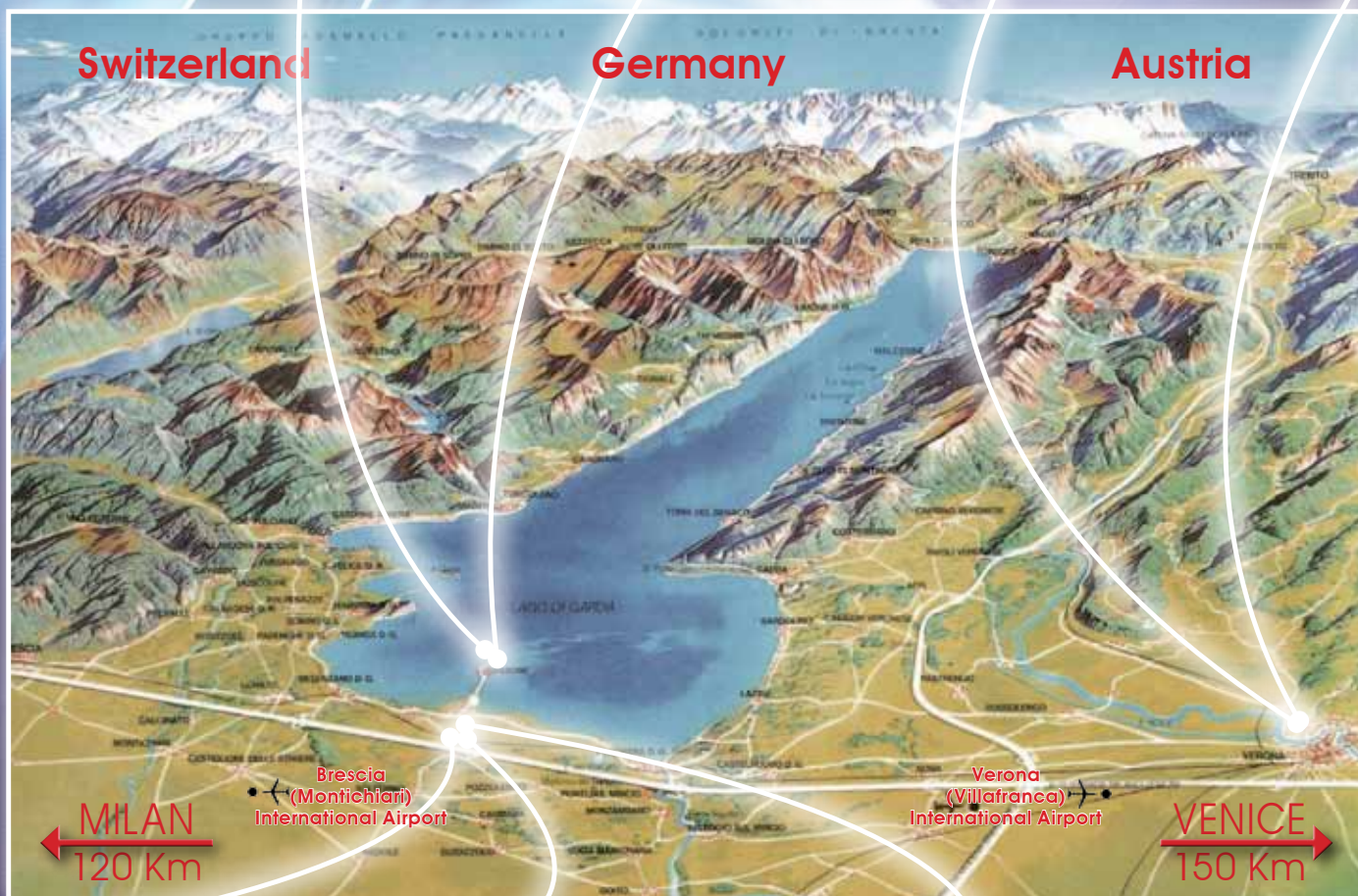
Catullus Roman ruins, 350 b.C.



Verona Roman Arena, 120 b.C.



Verona, Juliet's balcony



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