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# SEFRAM 7881

## State-of-Art specifications for High Definition TV The feeling of a new way of measurement

### Capabilities

- Panoramic LCD touch screen: **10 inches (16:9)**
- Display free to air programs for digital terrestrial, cable and satellite
- Display High Definition TV programs MPEG4-H264 and HEVC (H265)
- Display analogue TV programs
- All measurements for **DVB-T/T2, DVB-C/C2 (J83-A and B), DVB-S, DVB-S2**
- Ultra fast spectrum analysis and expert spectrum analysis
- Checksat mode with NIT (satellite recognition)
- LTE function to help the diagnostic of filter
- Real time echoes and pre-echoes measurement with zoom
- Constellation diagram with zoom
- **Three in one display:** measurement, TV picture, mini spectrum
- Graphical display of measurements
- HDMI interface
- Analog input and output
- **Multistream capability**
- **Shoulder measurement**
- Memorize and export/import data with USB memory stick
- Battery with 1 hour charging time and 4 hours autonomy
- Supplied with **carrying bag and protection pouch**
- Weight: 2,8kg

**NEW**



**HEVC-H265  
CAM CI**

### The most complete TV Meter of the market

Time is money! With its fast and expert spectrum analysis, the checksat mode with NIT, the Cell ID function, real time echoes and pre-echoes, the MER per carrier, the constellation diagram, the fast Autoset, Multistream capability, the LTE function to help the diagnostic of spurious filtering, no doubt that you can setup a TV receiving system in record time.

### Easy to use

Direct access to function from the touch screen is like a game: dedicated icons, special "home" function to go back to main menu, virtual keyboard to enter your specific data, possibility to export / import file on USB memory stick,... Getting started with the new SEFRAM 7881 is fast and easy.

### A new design optimized for your safety

To protect your TV meter, we have design a robust metal housing with a protective pouch. For your safety, we supplied an ingenious system of belts and clip and a light transportation bag for non dedicated situation.

### Panoramic touch screen

With the largest and brightest LCD of the market, using the new TV meter is possible in all conditions of light, including in sunny environment. With the 10.1" touch screen, you will use your new TV meter like a smartphone or a tablet: no need to worry where and which button to push, everything is displayed on the large screen in a clear and easy way. Incredibly user friendly!



| Technical specifications                      |  | Terrestrial band  |  |   |   | Satellite band  |   |
|---|--|---|--|---|---|---|---|
| <b>Frequency</b>                              |  |   |  |   |   |   |   |
| Range   | 5-1005 MHz   |   |  |   | 900-2200 MHz  |   |   |
| Resolution                                    | measurement: 50 kHz, display: 1 kHz  |   |  |   | measurement: 1MHz, display: 1MHz  |   |   |
| <b>Level measurements</b>                     |  |   |  |   |   |   |   |
| Dynamic range                                 | 20-120 dB $\mu$ V  |   |  |   | 20-120 dB $\mu$ V   |   |   |
| Noise floor level                             | 10 dB $\mu$ V typical  |   |  |   | 20 dB $\mu$ V typical   |   |   |
| Units   | dB $\mu$ V, dBmV, dBm  |   |  |   | dB $\mu$ V, dBmV, dBm   |   |   |
| Accuracy                                      | $\pm$ 2dB +/- 0.05dB/ $^{\circ}$ C   |   |  |   | $\pm$ 2dB +/- 0.05dB/ $^{\circ}$ C  |   |   |
| Resolution                                    | 0,1dB  |   |  |   | 0,1dB   |   |   |
| Measurement filters                           | 25kHz  |   |  |   | 125kHz  |   |   |
| Standards                                     | BG, DK, I, L, MN, FM, DAB/DAB+, Porteuse, DVB-T/T2/T2lite, DVB-C/C2, J83B  |   |  |   | PAL, SECAM, NTSC, Porteuse, DVB-S/S2, DSS   |   |   |
| Measurements                                  | RF, C/N, V/A   |   |  |   |   |   |   |
| <b>Mesures numériques</b>                     |  |   |  |   |   |   |   |
| Bit Error Rate (BER)                          | <b>DVB-T/H</b><br>CBER<br>(before Viterbi BER)<br>VBER<br>(after Viterbi BER)<br>UNC<br>(lost packets PER)<br>Noise margin | <b>DVB-T2/T2lite</b><br>LDPC<br>(BER)<br>BCH<br>(BER)<br>FER<br>(frame error PER)<br>Noise margin | <b>DVB-C</b><br>BER<br>(before Reed Solomon<br>BER)<br>UNC<br>(lost packets PER)<br>Noise margin | <b>DVB-C2</b><br>BER<br>(before Reed Solomon<br>BER)<br>UNC<br>(lost packets PER)<br>Noise margin | <b>J83B</b><br>BER<br>after Reed Solomon<br>BER)<br>UNC<br>(lost packets PER)<br>Noise margin | <b>DVB-S, DSS</b><br>CBER<br>(before Viterbi BER)<br>VBER<br>(after Viterbi BER)<br>UNC<br>(lost packets PER) | <b>DVB-S2</b><br>LDPC (BER)<br>BCH (BER)<br>PER<br>Link margin<br><br>Link margin |
| Modulation Error Rate (MER)                   | 5 - 35dB   | 5 - 35dB  | 20 - 40dB  | 20 - 40dB   | 20 - 35dB   | 0-20dB  |   |
| MER per carrier                               | yes  | yes   | -  | yes   | -   | -   |   |
| Symbol rate                                   | -  | -   | 1 to 7,224 Ms/s<br>(J.83A)   | -   | 1 to 5,563 Ms/s   | 1 to 45Ms/s   | 1 to 45Ms/s   |
| Bandwidth                                     | 5, 6, 7, 8 MHz   | 1,7, 5, 6, 7, 8 MHz   | -  | 6, 8 MHz  | -   | -   | -   |
| Mode  | -  | SISO, MISO, PLP<br>simple or multiple   | -  | PLP<br>simple or multiple,<br>data slice  | -   | -   | -   |
| FFT size                                      | 2k and 8k, auto<br>and manuel  | 1k, 2k, 4k, 8k, 16k<br>and 32k +<br>bandwidth extension,<br>auto                                  | -  | 4k  | -   | -   | -   |
| Constellation                                 | QPSK,<br>16 and 64QAM, auto  | QPSK,<br>16, 64 and 256QAM, auto  | 16, 32, 64, 128<br>and 256QAM  | 16, 64, 256,<br>1024, 4096QAM   | 64, 256QAM  | QPSK  | QPSK, 8PSK,<br>16APSK, 32APSK   |
| Code rate                                     | 1/2, 2/3, 3/4, 5/6,<br>7/8 (auto)  | 1/2, 3/5, 2/3, 3/4,<br>4/5, 5/6 (auto)  | -  | 2/3, 3/4, 4/5, 5/6,<br>8/9, 9/10  | -   | 1/2, 2/3, 3/4, 5/6,<br>6/7, 7/8 (auto)  | 2/5, 1/2, 3/5, 2/3, 3/4,<br>5/6, 8/9, 9/10 (auto)                                 |
| Guard interval                                | auto and manuel  | auto  | -  | auto  | -   | -   | -   |
| Inverted spectrum                             | auto   | auto  | auto   | auto  | auto  | auto  | auto  |
| HP/LP   | yes  | -   | -  | -   | -   | -   | -   |
| PLP choice                                    | -  | yes   | -  | yes   | -   | -   | -   |
| Multistream                                   | -  | -   | -  | -   | -   | -   | -   |
| Standards                                     | ETS 301-701  | ETS 302-755   | ITU J83-AppendixA  | ETS 302-769   | ETS 302-769   | ETS 300-421   | oui, PL descrambling<br>ETS 302-307   |
| <b>Pre-echoes / Echoes / Impulse response</b> |  |   |  |   |   |   |   |
| Dynamic range                                 | 30 dB, 75km (en 8k)  | 50 dB, -75km +75km<br>(en 8k)   | -  | 50 dB, -5km +5km  | -   | -   | -   |
| Units   | $\mu$ s, km, miles   | $\mu$ s, km, miles  | -  | $\mu$ s, km, miles  | -   | -   | -   |
| Constellation diagram                         | yes  | yes   | yes  | yes   | yes   | yes   | yes   |
| <b>Spectrum analysis</b>                      |  |   |  |   |   |   |   |
| Span  | 1MHz to full span in 1, 2, 5 sequences   |   |  |   |   |   |   |
| sweep time                                    | 100ms mini, 500 ms maxi  |   |  |   |   |   |   |
| Filters (automatic<br>with selected span)     | 1,25k, 2,5k, 6,25k, 12,5k, 25k, 62,5k, 125k, 250k, 625kHz, 1,25MHz, 2,5MHz   |   |  |   |   |   |   |
| Attenuator                                    | automatic ou manuel (0 to 50 dB with 10 dB steps )   |   |  |   |   |   |   |
| Dynamic (display)                             | 60 dB (10 dB/div)  |   |  |   |   |   |   |
| With NIT(OSD)<br>and TV picture               | yes  |   |  |   |   |   |   |
| <b>Measurement map</b>                        |  |   |  |   |   |   |   |
| Capacity                                      | scrolling of 100 programs maximum  |   |  |   |   |   |   |
| Display                                       | graphical (bargraph), tilt measurement   |   |  |   |   |   |   |
| <b>Antenna Check mode</b>                     |  |   |  |   |   |   |   |
| Goal  | fast antenna pointing  |   |  |   | fast antenna pointing,<br>single or double LNB  |   |   |
| Places/Satellites                             | 30 places typical  |   |  |   | 30 satellites typical,<br>with European database loaded                                       |   |   |
| NIT ckeck                                     | yes<br>ckcek 4 channels per place, can be modified by user   |   |  |   | yes<br>ckcek 4 channels per place,<br>can be modified by user                                 |   |   |
| <b>Signal Monitoring</b>                      |  |   |  |   |   |   |   |
| measurements                                  | all, level and digital measurements  |   |  |   |   |   |   |
| duration                                      | 10mn, 60mn, 8h, 24h, 7d  |   |  |   |   |   |   |
| <b>Memory</b>                                 |  |   |  |   |   |   |   |
| Saving  | internal non volatile memory, or USB memory stick (not supplied)   |   |  |   |   |   |   |
| Data  | places, measure (level, BER/MER, frequency map, spectrums,...)   |   |  |   |   |   |   |
| Capacity                                      | 512 Kb (1000 files or folders max.)  |   |  |   |   |   |   |
| <b>TV picture and sounds</b>                  |  |   |  |   |   |   |   |
| Analog programs                               | PAL, SECAM, NTSC   |   |  |   |   |   |   |
| Digital programs                              | MPEG2, MPEG4, HEVC, SD and HD definition   |   |  |   |   |   |   |
| Sounds  | MPEG-1, MPEG-2, AAC, HE AAC, Dolby® Digital, Dolby® Digital Plus   |   |  |   |   |   |   |
| Encrypted programs (*)                        | yes  |   |  |   |   |   |   |
| <b>RF input</b>                               |  |   |  |   |   |   |   |
| Input   | 75 Ohm, F and BNC with adaptor supplied  |   |  |   |   |   |   |
| Max permissive voltage                        | 50 Vrms /50Hz  |   |  |   |   |   |   |

| Technical specifications         | Terrestrial band  | Satellite band   |
|----------------------------------|---|--|
| <b>Remote supply and control</b> |   |  |
| Voltage                          | 5V/13V/18 V/24V, 500 mA max (300mA pour 24V)  | 13/18 V, 500 mA max  |
| DiSEqC                           | -   | DiSEqC 1.2, dish rotor control, committed & uncommitted switches |
| Mini DiSEqC 22kHz)               | -   | 22 kHz, ToneBurst  |
| SatCR                            | -   | DiSEqC protocol extension, control of 8 slots max.               |
| DCSS                             | -   | SatCR protocol extension, control of 32 slots max.               |
| <b>Aux Input/output</b>          |   |  |
| Interfaces                       | USB A, Ethernet 10baseT (RJ45)  |  |
| Power supply input               | jack 5.5 mm, 15 V max, 5 A max  |  |
| Audio/Video                      | HDMI output 720p, A/V jack for analog video input and earphones output                            |  |
| <b>General specifications</b>    |   |  |
| Display                          | 10.1 inches color LCD 16/9, backlight 500 cd/m <sup>2</sup> , 1280x800 dots, capacitive touch pad |  |
| Power supply                     | main adaptor 110/230 VAC, jack with 5,5mm diameter, 15 V/5 A                                      |  |
| Battery (non removable)          | LiOn battery 100Wh  |  |
| Autonomy                         | 4 hours typical   |  |
| Built-in charger                 | 1 hour charging time for 80% capacity   |  |
| Operating temperature            | -5°C to 45°C  |  |
| Storage temperature              | -10°C to 60°C   |  |
| EMC and safety                   | NF-EN 61362-1 / NF-EN 61326-3 / NF-EN 61010-1   |  |
| Dimensions                       | 310 x 210 x 80 mm   |  |
| Weight                           | 2,8 kg (battery and pouch included)   |  |

**Supplied with:** main adaptor (90-245V with European plug), user's manual on CD ROM, F/F and F/BNC adaptor, carrying protective pouch, belt clip, transportation pouch.

**Optional accessories:**

|                         |               |
|-------------------------|---------------|
| Car cigar lighter       | P/N 978361000 |
| Transportation hardcase | P/N 978852000 |
| A/V cable               | P/N 978852000 |



**978852000**  
Transportation  
handcase



**978361000**  
Car cigar  
lighter  
adapter



**978853000**  
Audio/video  
cable

(\*): the display of digital encrypted programs is possible, if user has a valid subscription card and if the encryption type is supported by the TV Meter. Please check with our sales department when ordering. **Dolby is a trade mark of Dolby Laboratories.**



FT7881 A00 - Specifications can be updated without notice

**For assistance and ordering**




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