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# SEFRAM 7865HDT2

## State-of-Art Specifications for High Definition TV

### Capabilities :

- Panoramic 7 inch LCD coloured screen
- Weight: 2,1kg
- Display free to air programs for digital terrestrial, cable and satellite
- Display High Definition TV programs MPEG4-H264
- Full measurements DVB-T2, DVB-T/H, DVB-C, DVB-S and DVB-S2
- Full measurements for MPEG-2 and MPEG-4
- Ultra fast spectrum analysis and expert spectrum analysis
- Checksat mode with NIT (satellite recognition)
- Real time echoes and pre-echoes measurement with zoom
- Constellation diagram with zoom
- OSD TV, PID audio and video, impulse response
- ASI TS input and output
- Graphical display of measurements
- Memorise and export/import data with USB memory stick
- Battery with 1 hour charging time and 4 hours autonomy
- Rugged carrying case
- Water proof front panel with sensitive button
- Optional PC software to create reports



**SEFRAM 7865HDT2**

### All digital measurements

The SEFRAM 7865HDT2 provides all necessary measurements for DVB-T2, DVB-T/H, DVB-C, DVB-S and DVB-S2. The panoramic TFT display will show all parameters and measurements for the selected channel.

### Specific features to save time

Time is money! With the ultra fast spectrum analysis, NIT, Checksat mode, autoset, real time echoes constellation diagram, impulse response, MER versus carrier (DVB-T and T2), complete OSD the SEFRAM 7865HDT2 will save your precious time during antenna setup.

### Easy to use

Direct access to functions makes the SEFRAM 7865HDT2 intuitive and very easy to use. Getting started with the TV meter is like a game !

### Optimized design for your safety

With only 2,1kg, the SEFRAM 7865HDT2 will be the ideal companion for all your measurements on the field. Its compact size will provide better safety and makes your work easier.

### Panoramic Display

With its panoramic 7 inch LCD screen (16:9), the reading of measurements will be easier than any other product available on the market.

### HD TV display with all digital sounds decoding

The new SEFRAM 7865HD displays high definition TV programs (MPEG4-H264) with the **decoding of all digital sounds in standard**, including Dolby, Dolby Digital, AAC and HE-AAC.

	7861	7861HDT2	7862HDT2	7865HDT2	7866HDT2
Frequency Band	Terrestrial 45-865MHz Satellite 950-2150MHz	Terrestrial 45-865MHz Satellite 950-2150MHz	Terrestrial 45-865MHz Satellite 950-2150MHz	Terrestrial 5-865MHz Satellite 950-2150MHz	Terrestrial 5-865MHz Satellite 950-2150MHz
DVB-T/H	✓	✓	✓	✓	✓
DVB-S, DVB-S2	✓	✓	✓	✓	✓
DVB-C			✓ (45-865MHz)	✓	✓
TV MPEG2 display	✓	✓	✓	✓	✓
TV MPEG4 - H264 display (HD TV)		✓	✓	✓	✓
Fast spectrum analysis	✓	✓	✓	✓	✓
Check sat mode with NIT	✓	✓	✓	✓	✓
Constellation diagram with zoom			✓	✓	✓
Graphical display of measurements				✓	✓
OSD, Audio & video PID				✓	✓
Wifi measurements *	✓*	✓*	✓*	✓*	✓*
TS-ASI Input/Output				✓	✓
GPS					✓

\* with optional adapter





# SEFRAM 7865HDT2

Panoramic TV Meter

## Specifications **Terrestrial band** **Satellite band**

<b>Frequency</b>	5-865 MHz			950-2150 MHz	
Resolution	measure 25 kHz, display 1 kHz			measure 25 kHz, display 1 kHz	
<b>Level measurements</b>	20-120 dBµV (30-120 dBµV for 5-45MHz)			30-110 dBµV	
Dynamic range	5dBµV typical			5dBµV typical	
Noise floor level	dBµV, dBmV, dBm, V			dBµV, dBmV, dBm, V	
Units	±2dB +/- 0.05dB/°C			±2dB +/- 0.05dB/°C	
Accuracy	0.1dB			0.1dB	
Resolution	automatic with selected standard 100 - 300 kHz			1MHz	
Filters	B, G, D, K, I, L, M, N, FM, carrier, DVB-C, MCNS, DVB-T/H, DVB-T2			PAL, SECAM, NTSC, DVB-S, DVB-S2, DSS	
Standards	V, C/N, Noise margin, V/A1, V/A2 according to selected standard			RF, C/N, link margin	
Measurements					
<b>Digital measurements</b>					
Bit Error Rate (BER)	<b>DVB-T/H</b> CBER (before Viterbi) VBER (after viterbi) UNC (lost packets)	<b>DVB-T2</b> LDPC, BCH, FER (frame error)	<b>DVB-C</b> BER (before Reed Solomon) UNC (lost packets)	<b>DVB-S</b> CBER, VBER, UNC	<b>DVB-S2</b> LDPC, BCH, PER
Modulation Error Rate (MER)	5 - 35dB			0-20dB	
Symbol rate	-			1 to 45Ms/s	
Bandwidth	6MHz, 7 MHz, 8 MHz	5MHz, 6MHz, 7 MHz, 8 MHz	1 to 7.224 Ms/s (J.83A) 1 to 5.563 Ms/s (J.83B)	-	
Mode	SISO, MISO, single and multi PLP			-	
FFT size	2k and 8k, auto and manual	1k, 2k, 4k, 8k, 16k and 32k + bandwidth extension, auto	-	-	
Constellation	QPSK, 16 and 64QAM, auto	QPSK, 16, 64 and 256QAM auto	16, 32, 64, 128 and 256QAM	QPSK and 8PSK	
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (auto)	1/2, 3/5, 2/3, 3/4, 4/5, 5/6 (auto)	-	QPSK DVB-S: 1/2, 2/3, 3/4, 5/6, 6/7, 7/8 (auto) QPSK DVB-S2: 2/5, 1/2, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (auto) 8PSK DVB-S2: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (auto)	
Guard interval	Automatic and manual	Automatic	-	-	
Inverted spectrum	Manual	Automatic	-	-	
Standard	ETS 301-701	ETS 302-755	ITU J83-Appendix A and B	ETS 300-421	ETS 302-307
<b>Pre-echoes / Echoes / Impulse response</b>					
Dynamic range	30 dB, 75km (in 8k)	50 dB, -75km +75km (in 8k)	-	-	
Units	µs, km, miles	µs, km, miles	-	-	
	<b>NICAM</b>				
Frequency	45-865MHz / Level measurement			-	
Standard	B, G, D, K, I, L			-	
<b>Fast spectrum analysis</b>					
Ultra fast mode	100 ms typ. (10 times/s)			350 ms typ. (10 times/s)	
Expert mode	yes, with all measurements information in the spectrum			yes, with all measurements information in the spectrum	
Filters (automatic with selected span)	100kHz, 300kHz, 1 MHz			1MHz, 3MHz, 10MHz	
Attenuator	automatic with selected frequency (0 to 50 dB with 10 dB steps)			automatic (0 to 50 dB with 10 dB steps)	
Dynamic (display)	60 dB (10 dB/div)			60 dB (10 dB/div)	
Span	5 MHz to full span in 1, 2, 5 steps			5 MHz to full span in 1, 2, 5 steps	
<b>Measurement map</b>					
Capacity	scrolling 11 programs			-	
Display	graphical (bargraph)			-	
<b>Check sat mode</b>				fast search of satellite, single or double LNC, with NIT 30 satellites typical, with European database loaded 4 transponders per satellite, can be modified by user	
<b>Memory</b>					
Saving	Saving internal, non volatile memory, USB stick (not supplied with)			-	
Data	places, measure (level, BER/MER, frequency map, Spectre,...)			-	
Capacity	320 Ko (1000 files max or folders)			-	
<b>TV picture and sounds</b>					
Analogue programs	yes (PAL, SECAM, NTSC)			-	
Digital programs	(free to air) SD (standard definition MPEG2) and HD (high definition MPEG4 / H.264)			-	
Sounds	analogue, MPEG-1, MPEG-2, AAC, HE AAC, Dolby® Digital, Dolby® Digital Plus			-	
Digital programs (*)	yes			yes	
<b>RF input</b>					
Input	75 Ohm, F and BNC with adaptor supplied			-	
Max permissive voltage	80 V DC, 80 V rms/50Hz			-	
<b>Auxiliary inputs and outputs</b>					
Interfaces	2 x USB (A and mini B), 10baseT Ethernet (RJ45)			-	
Power supply input	jack 5,5 mm, 15 V max, 5 A max			-	
Audio / Video	Input/Output audio (0dBm) and video (1Vrms)			-	
ASI TS input/output	yes, 2 x BNC on the upper panel			-	
<b>Remote supply and control</b>					
Voltage	5V/13V/18 V/24V, 500 mA max (300mA for 24V)			13/18 V, 500 mA max	
DiSeqC	-			DiSeqC 1.2, dish rotor control, committed & uncommitted switches	
Mini DiSeqC	-			22 kHz, ToneBurst	
SatCR	-			DiSeqC protocol extension, control of 8 slots max.	

## General Specifications

Display	LCD TFT Coloured 7 inch (178mm) 16/9, backlighted, 800x480 dots (W-VGA)
Power supply	main adaptor 110/230 VAC, jack 5,5mm, 15 V 5 A
Battery (non removable)	LiOn battery 70Wh
Autonomy	3 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	EN 55022-A2 / EN 61326-1 / EN 61010-1
Dimensions	210 x 90 x 297 mm
Weight	2,1 kg (including battery and pouch)

Supplied with : main adaptor (90-245V with European plug), user's manual on CD ROM, F/F and F/BNC adaptor, a rugged carrying pouch for accessories.

Optional accessories :  
 Wifi adaptor: P/N 978651000  
 Pouch for accessories: P/N 978656500  
 KitTR7836: kit with TR7836 software (CD-ROM) and USB cable  
 Car cigarette lighter power supply: P/N 978361000

Dolby is a trade mark of Dolby Laboratories.



(\*) 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.  
 FT7865HDT2A00- Specifications can be updated without notice



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