Sefram

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http://www.sefram.fr

SEFRAM 7871

Panoramic TV Meter for digital 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 and satellite
- Display SD and HD free to air TV programs
- All measurements for **DVB-T/T2, DVB-S and DVB-S2**
- All measurements for MPEG-2 and MPEG-4
- Ultra fast 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
- **Electronic compass** for dish alignement
- 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 : 2,9kg

2 WARANTY YEARS

DVB-T/S DVB-T2/S2 DOLBY DIGITAL PLUS

All digital measurements, optimized features to save tim

Time is money! With its fast spectrum analysis, the checksat mode with electronic compass and NIT, the Cell ID function real time echoes and pre-echoes, the MER per carrier, the constellation diagram, the fast Autoset, 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 7871 is fast and easy.

A new design optimized for your safety

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

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" 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 firendly!

Selection guide	7871	7872	7875	7876
Frequency range	**45-2200MHz**	**5-2200MHz**	**5-2200MHz**	**5-2200MHz**
DVB-T/T2	✔	✔	✔	✔
DVB-S/S2	✔	✔	✔	✔
DVB-C	-	✔	✔	✔
MPEG2 TV decoding**	✔	✔	✔	✔
MPEG4 - H264 TV decoding**	-	✔	✔	✔
Fast spectrum analysis	✔	✔	✔	✔
Expert spectrum analysis	-	-	✔	✔
Checksat mode with NIT	✔	✔	✔	✔
LTE function	✔	✔	✔	✔
HDMI interface	-	✔	✔	✔
TS-ASI input and output	-	-	✔	✔
PVR (1) function	-	-	✔	✔
GPS and Multistream capability	-	-	-	✔
Optical power measurement	-	✔*	✔*	✔*
Wifi network measurement	-	✔*	✔*	✔*

(1): Personnal Video Recorder
** factory option for Wifi and option for OPM*
*** user must have a valid subscription and encryption protocol must be supported. Please check with our sales dept.*

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SEFRAM 7871

Panoramic TV Meter

Technical specifications	Terrestrial band		Satellite band	
Frequency				
Range	45-900 MHz		900-2200 MHz	
Resolution	measurement: 50 kHz, display: 1 kHz		measurement: 1MHz, display: 1MHz	
Level measurements				
Dynamic range	20-120 dBµV		30-110 dBµV	
Noise floor level	10 dBµV typical		20 dBµV typical	
Units	dBµV, dBmV, dBm, V		dBµV, dBmV, dBm, V	
Accuracy	±2dB +/- 0.05dB/°C		±2dB +/- 0.05dB/°C	
Resolution	0,1dB		0,1dB	
Measurement filters	automatic according to standard: 100KHz - 300 kHz - 1MHz		automatic according to standard: 1MHz - 3MHz - 10MHz	
Standards	BG, DK, I, L, MN, FM, porteuse, DVB-T/H, DVB-T2		PAL, SECAM, NTSC, DVB-S, DVB-S2, DSS	
Measurements	RF, C/N		RF, C/N	
Digital measurement	**DVB-T/H**	**DVB-T2**	**DVB-S, DSS**	**DVB-S2**
Bit Error Rate (BER)	CBER (before Viterbi BERi) VBER (after Viterbi BERo) UNC (lost packets PER) Noise margin	LDPC (BERi) BCH (BERo) FER (frame error PER) Noise margin	CBER (before Viterbi BERi) VBER (after Viterbi BERo) UNC (lost packets PER) Link margin	LDPC (BERi) BCH (BERo) PER Link margin
Modulation Error Rate (MER)	5 - 35dB	5 - 35dB	0-20dB	0-20dB
MER per carrier	yes	yes		
Symbol rate	-	-	1 to 45Ms/s	1 to 45Ms/s
Bandwidth	6MHz, 7 MHz, 8 MHz	5MHz, 6MHz, 7 MHz, 8 MHz	-	-
Mode	-	SISO, MISO, PLP simple or multiple	-	-
FFT size	2k and 8k, auto and manuel	1k, 2k, 4k, 8k, 16k et 32k + bandwidth extension, auto	-	-
Constellation	QPSK, 16 et 64QAM, auto	QPSK, 16, 64 et 256QAM auto	QPSK	QPSK, 8PSK, 16APSK, 32APSK
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)	1/2, 2/3, 3/4, 5/6, 6/7, 7/8 (auto)	2/5, 1/2, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (auto)
Guard interval	auto and manuel	auto	-	-
Inverted spectrum	auto	auto	auto	auto
HP/LP	yes	-	-	-
PLP choice	-	yes	-	-
Standards	ETS 301-701	ETS 302-755	ETS 300-421	ETS 302-307
Pre-echoes /Echoes / Impulse response				
Dynamic range	30 dB, 75km (en 8k)	50 dB, -75km +75km (en 8k)	-	-
Units	µs, km, miles	µs, km, miles	-	-
Constellation diagram				
	yes	yes	yes	yes
Fast spectrum analysis				
Ultra fast mode	350 ms typ. (3 times/s)		350 ms typ. (3 times/s)	
Filters (automatic with selected span)	100kHz, 300kHz, 1 MHz		1MHz, 3MHz, 10MHz	
Attenuator	automatic ou manuel (0 to 50 dB with 10 dB steps)		automatic ou manuel (0 to 50 dB with10 dB steps)	
Dynamic (display)	60 dB (10 dB/div)		60 dB (10 dB/div)	
With NIT(OSD) and TV picture	yes		yes	
Span	5MHz to full span in 1, 2, 5 sequences		10MHz to full span in 1, 2, 5 sequences	
Measurement map				
Capacity	scrolling of 50 programs maximum			
Display	graphical (bargraph), tilt measurement			
Check sat mode				
	-		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	
Memory				
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.)			
TV picture and sounds				
PDigital programs (free to air)	SD (standard definition MPEG2) and HD (high definition MPEG4 / H,264)			
Sounds	MPEG-1, MPEG-2, AAC, HE AAC, Dolby® Digital, Dolby® Digital Plus			
RF input				
Input	75 Ohm, F and BNC with adaptor supplied			
Max permissive voltage	80 V DC, 80 Vrms /50Hz			
Auxiliary input / output				
Interfaces	USB A, USB mini B, Ethernet 10baseT (RJ45)			
Power supply input	jack 5.5 mm, 15V max, 5 A max			
Remote supply and control				
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 22kHz)	-		22 kHz, ToneBurst	
SatCR	-		DiSEqC protocol extension, control of 8 slots max.	

General Specifications	
Display	10.1 inches color LCD 16/9, backlight with high brightness (1000 cd/m²), 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 70W
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	280 x 230x 85 mm
Weight	2,9 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 (ruck back)

Option and accessories Car cigar lighter : **P/N 978361000**
Transportation bag for 787X and accessories : **P/N 978751000**

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FT7871A00 - Specifications can be updated without notice

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