Sefram

SEFRAM 7875

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
- All measurements for **DVB-T/T2, DVB-C, DVB-S and DVB-S2**
- All measurements for MPEG-2 and MPEG-4
- 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
- ASI TS input and output and HDMI interface
- **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 YEAR WARRANTY

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

All digital measurements, optimized features to save time

VTime is money! With its fast and expert 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 7875 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!

Options

With the factory option OPM (Optical Power measurement),you can use your TV meter to make level measurements on fiber networks. With the Wifi factory option, you can use your TV meter for measurements on Wifi networks.

Guide de sélection	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
** user must have a valid subscription and encryption protocol must be supported. Please check with our sales dept.

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Technical specifications — Terrestrial band / Satellite band

Frequency

	Terrestrial band	Satellite band
Range	5-900 MHz	900-2200 MHz
Resolution	measurement: 50 kHz, display: 1 kHz	measurement: 1MHz, display: 1MHz

Level measurements

	Terrestrial band	Satellite band
Dynamic range	20-120 dBµV (30-120 dBµV for 5-45MHz)	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-C, DVB-T/H, DVB-T2	PAL, SECAM, NTSC, DVB-S, DVB-S2, DSS
Measurements	RF, C/N	RF, C/N

Digital Measurements

	DVB-T/H	DVB-T2	DVB-C	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	BER (before Reed Solomon BERi) UNC (lost packets 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	20 - 40dB	0-20dB	
MER per carrier	yes	yes	-	-	-
Symbol rate	-	-	1 to 7.224 Ms/s (J.83A)	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 and 64QAM, auto	QPSK, 16, 64 and 256QAM auto	16, 32, 64, 128 et 256 QAM	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	auto
HP/LP	yes	-	-	-	-
PLP choice	-	yes	-	-	-
Standards	ETS 301-701	ETS 302-755	ITU J83-AppendixA	ETS 300-421	ETS 302-307

Pre-echoes /Echoes / Impulse response

	DVB-T/H	DVB-T2	DVB-C	DVB-S, DSS	DVB-S2
Dynamic range	30 dB, 75km (en 8k)	50 dB, -75km +75km (en 8k)	-	-	-
Units	µs, km, miles	µs, km, miles	-	-	-

Constellation diagram

	DVB-T/H	DVB-T2	DVB-C	DVB-S, DSS	DVB-S2
	yes	yes	yes	yes	yes

Fast spectrum analysis

	Terrestrial band	Satellite band
Ultra fast mode	350 ms typ. (3 times/s)	350 ms typ. (3 times/s)
Expert mode	yes, with all measurement information on the spectrum	yes, with all measurement information on the spectrum
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

	Terrestrial band	Satellite band
	-	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

	DVB-T/H	DVB-S2
Digital 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	
Digital programs (*)	yes	yes

RF input

Input	75 Ohm, F and BNC with adaptor supplied
Max permissive voltage	80 V DC, 80 Vrms /50Hz

Entrées et sorties auxiliaires

Interfaces	USB A, USB mini B, Ethernet 10baseT (RJ45)
Power supply input	jack 5.5 mm, 15 V max, 5 A max
ASI TS input/output	yes, BNC for input and output
HDMI output	yes
WiFi antenna input	factory option

Remote supply and control

	Terrestrial band	Satellite band
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.

Caractéristiques générales

Display	10 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.

Option and accessories : Optical Power Measurement (OPM): **P/N. 978754000** Wifi option (factory option): **P/N. 978752000**
Car cigar lighter : **P/N. 978361000** HDMI cable : **P/N. 978759100**
Transportation bag for 787X and accessories: **P/N. 978751000**

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

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FT7875A00 - Specifications can be updated without notice

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