



SEFRAM 7872

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/T2 Lite, DVB-C/C2, DVB-S and DVB-S2**
- All measurements for MPEG-2 and MPEG-4
- DAB measurement (option)
- 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 alignment
- 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



**DVB-T/T2/T2 Lite
DVD-S/S2
DVD-C/C2**



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.

All digital measurements, optimized features to save time

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.

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 10.2" 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!

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 7872 is fast and easy.

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.

Selection guide	7871	7872	7875	7876
Frequency range	45-2200MHZ	5-2200MHZ	5-2200MHZ	5-2200MHZ
DVB-T/T2/T2 Lite	✓	✓	✓	✓
DVB-S/S2	✓	✓	✓	✓
DVB-C/C2	-	✓	✓	✓
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	-	✓*	✓*	✓*
DAB/DAB+ measurements	✓*	✓*	✓*	✓*

(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.



Technical specifications **Terrestrial band** **Satellite band**

Frequency	5-900 MHz			900-2200 MHz		
Range	measurement: 50 kHz, display: 1 kHz			measurement: 1MHz, display: 1MHz		
Resolution						
Level measurements	20-120 dBuV (30-120 dBuV for 5-45MHz)			30-110 dBuV		
Dynamic range						
Noise floor level	10 dBuV typical			20 dBuV typical		
Units	dBuV, dBmV, dBm, V			dBuV, 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 measurement	DVB-T/H	DVB-T2/T2 Lite	DVB-C/C2	DVB-S, DSS	DVB-S2	
Bit Error Rate (BER)	CBER (before Viterbi BER) VBBER (after Viterbi BER) UNC (lost packets PER) Noise margin	LDPC (BER) BCH (BERo) FER (frame error PER) Noise margin	BER (before Reed Solomon BER) UNC (lost packets PER) Noise margin	CBER (before Viterbi BER) VBBER (after Viterbi BER) UNC (lost packets PER) Link margin	LDPC (BER) 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 and 32k + bandwidth extension, auto	-	-		-
Constellation	QPSK, 16 and 64QAM, auto	QPSK, 16, 64 and 256QAM auto	16, 32, 64, 128 and 256QAM	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						
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		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 with 10 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			scrolling of 50 programs maximum		
Display	graphical (bargraph), tilt measurement			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)			internal non volatile memory, or USB memory stick (not supplied)		
Data	places, measure (level, BER/MER, frequency map, spectrums,...)			places, measure (level, BER/MER, frequency map, spectrums,...)		
Capacity	512 Kb (1000 files or folders max.)			512 Kb (1000 files or folders max.)		
TV picture and sounds						
Digital programs (free to air)	SD (standard definition MPEG2) and HD (high definition MPEG4 / H.264)			SD (standard definition MPEG2) and HD (high definition MPEG4 / H.264)		
Sounds	MPEG-1, MPEG-2, AAC, HE AAC, Dolby® Digital, Dolby® Digital Plus			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			75 Ohm, F and BNC with adaptor supplied		
Max permissive voltage	80 V DC, 80 Vrms /50Hz			80 V DC, 80 Vrms /50Hz		
Entrées et sorties auxiliaires						
Interfaces	USB A, USB mini B, Ethernet 10baseT (RJ45)			USB A, USB mini B, Ethernet 10baseT (RJ45)		
Power supply input	jack 5.5 mm, 15 V max, 5 A max			jack 5.5 mm, 15 V max, 5 A max		
HDMI output	yes			yes		
WiFi antenna input	factory option			factory option		
Remote supply and control						
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.		
General Specifications						
Display	10.1 inches color LCD 16/9, backlight with high brightness (1000 cd/m²), 1280x800 dots, capacitive touch pad			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			main adaptor 110/230 VAC, jack with 5.5mm diameter, 15 V/5 A		
Battery (non removable)	LiOn battery 70Wh			LiOn battery 70Wh		
Autonomy	4 hours typical			4 hours typical		
Built-in charger	1 hour charging time for 80% capacity			1 hour charging time for 80% capacity		
Operating temperature	-5°C to 45°C			-5°C to 45°C		
Storage temperature	-10°C to 60°C			-10°C to 60°C		
EMC and safety	NF-EN 61362-1 / NF-EN 61326-3 / NF-EN 61010-1			NF-EN 61362-1 / NF-EN 61326-3 / NF-EN 61010-1		
Dimensions	280 x 230x 85 mm			280 x 230x 85 mm		
Weight	2,9 kg (battery and pouch included)			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** DAB measurement : **P/N. 978755000**

(*): 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.

FT7872A01 - Specifications can be updated without notice

For assistance and ordering

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*Dolby is a trade mark of Dolby Laboratories.

