



SEFRAM 7876

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 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 alignment
- **GPS**
- **Multistream** capability
- 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**

**HDMI
DOLBY
DIGITAL PLUS**



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 friendly!

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.

All digital measurements, optimized features to save time

Time 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.

Guide de sélection	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	✓*	✓*	✓*	✓*

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

Technical specifications	Terrestrial band	Satellite band
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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			20 dBuV typical		
Noise floor level			dBuV, dBmV, dBm, V		
Units			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, portouse, 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/T2 Lite	DVB-C/C2	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	30 dB, 75km (en 8k)		50 dB, -75km +75km (en 8k)	-	-
Dynamic range	μs, km, miles		μs, km, miles	-	-
Units				-	-
Constellation diagram	yes	yes	yes	yes	yes
Fast spectrum analysis	350 ms typ. (3 times/s)		350 ms typ. (3 times/s)		
Ultra fast mode	yes, with all measurement information on the spectrum		yes, with all measurement information on the spectrum		
Expert mode	100kHz, 300kHz, 1 MHz		1MHz, 3MHz, 10MHz		
Filters (automatic with selected span)	automatic ou manuel (0 to 50 dB with 10 dB steps)		automatic ou manuel (0 to 50 dB with 10 dB steps)		
Attenuator	60 dB (10 dB/div)		60 dB (10 dB/div)		
Dynamic (display)	yes		yes		
With NIT(OSD) and TV picture	5MHz to full span in 1, 2, 5 sequences		10MHz to full span in 1, 2, 5 sequences		
Span					
Measurement map	scrolling of 50 programs maximum				
Capacity	graphical (bargraph), tilt measurement				
Display					
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	internal non volatile memory, or USB memory stick (not supplied)				
Saving	places, measure (level, BER/MER, frequency map, spectrums,...)				
Data	512 Kb (1000 files or folders max.)				
Capacity					
TV picture and sounds	SD (standard definition MPEG2) and HD (high definition MPEG4 / H.264)				
Digital programs (free to air)	MPEG-1, MPEG-2, AAC, HE AAC, Dolby® Digital, Dolby® Digital Plus				
Sounds	yes		yes		
Digital programs (*)					
RF input	75 Ohm, F and BNC with adaptor supplied				
Input	80 V DC, 80 Vrms /50Hz				
Max permissive voltage					
Entrées et sorties auxiliaires	USB A, USB mini B, Ethernet 10baseT (RJ45)				
Interfaces	jack 5.5 mm, 15 V max, 5 A max				
Power supply input	yes, BNC for input and output				
ASI TS input/output	yes				
HDMI output	factory option				
HDMI input					
WiFi antenna input					
Remote supply and control	5V/13V/18 V/24V, 500 mA max (300mA pour 24V)		13/18 V, 500 mA max		
Voltage			DiSEqC 1.2, dish rotor control, committed & uncommitted switches		
DiSEqC			22 kHz, ToneBurst		
Mini DiSEqC (22kHz)			DiSEqC protocol extension, control of 8 slots max.		
SatCR					

General Specifications		
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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 70Wh	
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)	
	GPS module (USB)	
	Frequency :	L1 code C/A (standart positioning service)
	Channels :	20 channels
	Position accuracy :	15 meter CEP) 95% without scrambling
	Geodesic datum :	WGS84 (default)
	Acquisition time :	38s typ. if powered on (130s typ. at first power-on)
	Acquisition time after signal lost :	<1s
	Antenna :	included in GPS module

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

Wifi option (factory option) : **P/N. 978752000**
 HDMI cable : **P/N. 978759100**
 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.

FT7876A01 - Specifications can be updated without notice



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 ISO 9001
 Qualité
 AFNOR CERTIFICATION
 1997/7001

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For assistance and ordering

