Sefram

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http://www.sefram.fr

SEFRAM 7866

State-of-art specifications with unique design

SEFRAM 7866

Capabilities

- Panoramic 7 inch LCD coloured screen
- Weight: 2,1kg only
- Display free to air programs for digital terrestrial, cable and satellite
- Full measurements DVB-T, DVB-C, DVB-S and DVB-S2
- Ultra fast spectrum analysis and expert spectrum analysis
- OSD, PID audio and video, impulse response
- ASI ouput
- GPS for mapping signals
- Checksat function
- Battery with 1 hour charging time
- Rugged carrying bag
- Water proof front panel with sensitive button
- Simplified procedure to update internal software : USB memory stick
- Wi-fi networks measurements*

All digital measurements

The SEFRAM 7866 provides all necessary measurements for DVB-T (COFDM), DVB-C (QAM), DVB-S and DVB-S2 (QPSK/8PSK). The panoramic display will show all parameters for the selected channel

Specific features to save time

With its ultra fast spectrum, NIT, Cell-ID, checksat mode and auto-set, the SEFRAM 7866 will save your precious time during antennas setup. ASI output and GPS module make the 7866 expert for mapping signals and for fine analysis of MPEG stream.

Easy to use

Direct access to functions makes the SEFRAM 7866 very easy to use. Getting started with this TV Meter will be like a game!

Optimized design for your safety

With only 2,1kg, the SEFRAM 7866 will be your 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.

PC software: common for all SEFRAM TV meters

All SEFRAM TV Meters use the same PC software: TR7836 KITTR7836 (P/N 978551000) includes the USB cable and the software CD-ROM. To get the best from your instrument, we recommand to order this kit with your TV Meter.

Selection guide	SEFRAM 7861	SEFRAM 7862	SEFRAM 7863	SEFRAM 7865	SEFRAM 7856
Frequency range	Terrestrial 45-865MHz Satellite 950-2150MHz	Terrestrial 45-865MHz Satellite 950-2150MHz	Cable/Terrestrial 5-865MHz	Terrestrial 5-865MHz Satellite 950-2150MHz	Terrestrial 5-865MHz Satellite 950-2150MHz
DVB-T / COFDM	✔	✔		✔	✔
DVB-S, DVB-S2 / 8PSK-QPSK	✔	✔		✔	✔
DVB-C / QAM		✔, (45-865 MHz)	✔	✔	✔
DVB-C / QAM with return path			✔		
TV pictures MPEG-2	✔	✔	✔	✔	✔
Fast spectrum analysis	✔	✔	✔	✔	✔
Check sat mode	✔	✔		✔	✔
Constellation pattern, audio/video PID				✔	✔
Graphical display of measurements				✔	✔
DiSEqC 1.2	✔	✔		✔, full	✔, full
GPS and ASI output					✔
Wi-fi measurements	✔*	✔*		✔*	✔*

* with optional accessory

CE

For more information, contact our local distributor or us on **+33 (0).4.77.59.36.81**

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SEFRAM 7866

Panoramic TV Meter.

Technical Specifications	Terrestrial Band		Satellite Band	
Frequency				
Range	5-865 MHz		950-2150 MHz	
Resolution	measure 25 kHz, display 1 kHz		measure 25 kHz, display 1 kHz	
Level measurements				
Dynamic range	20-120 dBµV		30-110 dBµV	
Noise floor level	5dBµV typical			
Units	dBµV, dBmV, dBm, V		dBµV, dBmV, dBm, V	
Accuracy	±2dB ±0.05dB/°C		±3dB ±0.05dB/°C	
Resolution	0,1dB		0,1dB	
Filters	automatic with selected standard 100 - 300 kHz			
Input	BNC 75 Ohm		BNC 75 Ohm	
Max. permissible voltage	80 V DC, 80 Vrms/50Hz		80 V DC, 80 Vrms/50Hz	
Standards	B, G, D, K, I, L, M, N, FM, carrier, C-OFDM, QAM		PAL, SECAM, NTSC, DVB-S, DVB-S2, DSS	
Measurements	V, C/N, V/A1, V/A2 according to selected standard		RF, C/N	
Spectrum analysis				
Ultra fast mode	100 ms typ. (10 times/s)		100 ms typ. (10 times/s)	
Expert mode	yes, with all measurement information		yes, with all measurement information	
Filters	automatic with selected span (100, 300, 1000 kHz)		1MHz	
Attenuator	automatic with selected frequency(0 to 60 dB, 5 dB steps)		automatic (0 to 60 dB, 5 dB steps)	
Dynamic	60 dB (10 dB/div), 30 dB (5dB/div)		60 dB (10 dB/div), 30 dB (5dB/div)	
Span	10 MHz to full span with 1, 2, 5 steps		10 MHz to full span with 1, 2, 5 steps	
Measurement map				
Capacity	scrolling of 12 programs			
Display	graphical or text			
Checksat mode				
	-		fast search of satellite, simple or double LNC	
	-		30 satellites typical, with European database loaded	
	-		4 transponders per satellite, can be modified by user	
Memory				
Saving	internal, non volatile memory			
Data	s, measure (level, BER/MER, Frequency map, Spectrum,...)			
Capacity	512 Ko (max 1000 files or folders)			
Auxiliary Inputs and Outputs				
USB interface	mini USB connector			
Power supply	jack 5,5 mm, 15 Vmax. 5A max			
Video input	yes, with RCA connector			
Audio / Video output	yes, with RCA connector			
ASI output	yes, 2 output with BNC connector			
Remote supply and control				
Voltage	5/13/18 V, 500 mA max		13/18 V, 500 mA max	
DiSEqC	-		DiSEqC 1.2 (full)	
22 kHz	-		22 kHz, MiniDiSEqC, ToneBurst	
Digital measurements	**C-OFDM**	**QAM**	**DVB-S**	**DVB-S2**
Bit Error Ratio	CBER (before Viterbi) VBER (after viterbi) UNC (lost packets)	BER (before Reed Solomon) UNC (lost packets)	CBER, VBER, UNC	LDPC, BCH, PER
Modulation Error Ratio (MER)	5-35dB	20 to 40dB	0-20dB	
Symbol rate	-	5 to 7 Ms/s	DVB-S : 1-45Ms/s, DVB-S2 : 1-36MHz (QPSK), 1-31Ms/s (8PSK)	
Bandwidth	6MHz, 7 MHz, 8 MHz			
Constellation	automatic	automatic	QPSK and 8PSK	
Viterbi rate	automatic	-	1/2, 2/3, 3/4, 5/6, 7/8, 8/9, 9/10 (auto)	
Audio and video PID	yes	yes	yes	
Standards	EN 300-744	ITU J83-Appendix A and B	EN 300-421	EN302 307
NICAM				
FFrequency	45-865MHz		-	
Standard	B, G, D, K, I, L		-	
Error measurement	BER (parity)		-	
Symbol rate	728 kbits/s		-	
Standards	EN 300-163			
Impulse response				
Dynamic	20 dB		-	
Units	µs, km, miles		-	
TV picture display				
Analogue programs	yes		-	
Digital programs (free to air)	yes, C-OFDM and QAM		yes	
Digital programs (*)			yes	

General specifications

Display	LCD TFT Coloured 7 inch 16/9, backlighted, 800x480 dots (wide VGA)
Interface	2 x USB (A and mini B) and Ethernet
Power supply	main adaptor 110/230 VAC, jack 5,5mm, 15 V 4,5A
Battery	LiOn battery 70W
Autonomy	3 hours typical
Built-in charger	1 hour for 80% capacity
Operating emperature	0°C to 40°C
Storage temperature	-10°C to 60°C
EMC and Safety	NF-EN 61362-1 / NF-EN 61326-3 / NF-EN 61010-1
Dimensions	205 x 90 x 290 mm
Weight	2,1 kg (including battery and pouch)

GPS module (USB)	
Frequency :	L1 Code C/A (standard poistioning service)
Channels :	20 channels
Position accuracy :	15 meters (CEP) 50% without scrambling
Geodesic Datum :	WGS84 (default)
Acquisition time :	38s typ. (130s typ. At first power-on)
Aquisition time after signal lost :	<1s
Antenna :	included in GPS module

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

Supplied with : main adaptor (90-245V), a rugged carrying pouch, F/BNC adaptor, a user manual

Optional accessories : Pouch for accessories: P/N 978656500
Wi-fi adaptor: P/N 978651000
KitTR7836: USB cable + TR7836 software (CD-ROM) for Windows ®
Car cigarette lighter power supply (P/N 978361000)
F/BNC adaptor: P/N 213200011
BNC / TV adaptor: P/N 213200010
TR7836 software is common for all SEFRAM TV Meters

SEFRAM TV Meters are designed and manufactured in our plant of Saint-Etienne (France)

Specifications subject to change without notice - FT7866A00

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