

Sefram
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SEFRAM 7835B, 7835BM

**New technology, light weight (2,5kg)
the new field strength
meter SEFRAM 7835B
will fully check and guarantee
your system's performance.**

Innovating design

With it's light weight (2,5 Kg), your can measure your system's performance in total safety.



Excellent accuracy

The SEFRAM 7835B will allow you to qualify digital systems. All required measurements for a good reception can be performed :

- Constellation pattern
- BER, MER
- Carrier noise ratio C/N and MER
- DiSEqC 1.2

Easy to use

The SEFRAM 7835B has been designed to simplify and speed up your measurements. With it's large memory (10000 measurements), you can record on the field, save your measurements and store a lot of frequency maps.



Perfect TV picture

With its 5 inches TFT LCD display, analogue TV pictures are perfectly displayed.

The 7835BM includes the MPEG-2 decoding capability. It will display digital pictures and channels informations.

The MPEG board can receive all PCMCIA read access card.

	7829B	7833C	7834B	7835B
Frequency range	5-2,150GHz	5-865MHz	5-2,150GHz	5-2,150GHz
COFDM	yes	-	yes	yes
QAM	-	yes	-	yes
QPSK	yes	-	yes	yes
MPEG-2 with PCMCIA interface	7829BM	7833CM	7834BM	7835BM



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

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INSTRUMENTS & SYSTEMES

TECHNICAL SPECIFICATIONS

• Frequency	
Ranges	5 to 865 MHz, terrestrial band (return path, VHF/UHF, FM) 920 MHz to 2150 MHz, satellite band 5 MHz to 2150 MHz, RF band (continuous)
Resolution	measurement : 25 kHz; display : 1 kHz
• Level measurements	
	20 dB μ V to 120 dB μ V from 5 MHz to 865 MHz 30 dB μ V to 110 dB μ V from 865 MHz to 2150 MHz
Display units	dB μ V, dBmV, dBm, dB or V
Accuracy	± 1 dB from 0°C to 25°C ± 5 °C ± 2 dB from -5 °C to 45 °C ± 0.5 dB for dT = 10 °C 0.1 dB
Filters	30 kHz, 100 kHz, 300 kHz, 1 MHz
Input	75 Ω BNC, TOS > 15 dB
Max. permissible voltage	80 VDC/ 80 Vrms / 50 Hz
Standards	B, G, D, K, I, L, M, N, NICAM, FM, QPSK, QAM, COFDM, carrier
Measurements	peak, average or effective power
Display	numerical or graphical (recording from 10 min to 7 days)
• Spectrum analysis	
Sweep time	250 ms typ.
Filters	30 kHz, 100 kHz, 300 kHz, 1 MHz
Attenuator	0 to 50 dB (in 10 dB steps)
Dynamic	(display) 60 dB
Span	0, 5, 10, 20, 50, 100, 200, 500, 1000, 2000 MHz/div and full
Measurements	level, between 2 cursors, power, C/N
Modes	normal, single-shot, maximum, smoothing
• Measurement map	
Capacity	scrolling 100 programmes max
Display	numerical or graphical
Measurement	threshold detection, slope / Tilt
Memory	
Saving	internal battery memory (keeps information 5 years)
Data	sites, programmes, frequency map, measurements, spectrums,
• measurement map, graphical recordings	
Capacity	512 Ko, 1000 files maxi. per type of datas
• Auxiliary Inputs and Outputs	
RS 232 Interface	SUB D 9-pin connector, RS 232, DTE
Video input	RCA type phono connectors
Audio and Video output	RCA type phono connectors
Power Supply	input 3.5 mm jack, 10 to 18 V max (3 A max)
• Image, Audio, and On screen Display	
Image	Analogue reception PAL, SECAM, NTSC
Audio	Analogue and NICAM
Other	OSD, scope mode

GENERAL SPECIFICATIONS

Display	5 inch TFT colour LCD (320 x 234 pixels) with back-light
External power adaptor	Input 90/245 VAC, 2-pin IEC mains cord connector, 2.5 mm jack output 18 V 2.5 A max
Removable battery	NiMH DR35 type, 10.8 V, 3.5 AH (12.5 V when fully charged)
Battery life	3 h max depending on usage
Printing	Directly to DPU414, FX80, LaserJet, Epson Stylus, HP DeskJet
Built-in charger	Recharges in 3 hours
Operating temperature	- 5 °C to 45 °C
Storage temperature	-10 °C to 60 °C
Mechanical	CSEI 13-20
EMC and safety	CE EN 61326-1 / EN 61326-3, EN 61010-1 and A2
Dimensions	210 x 297 x 90 mm (with carrying pouch)
Weight	3 kg (including battery)

Accessories
Supplied with :

- 978360100** - Carrying pouch
- 202211080** - NiMH DR 35 Battery
- 978362000** - Power supply 90/245VAC input -18V output

Optional accessories :

- 7835BM** - 7835B equipped with MPEG-2 board and PCMCIA socket
- 978360000** - Carrying case
- 978361000** - Car cigarette lighter power supply 12-18V
- 978363000** - Fast external charger unit
- 978369000** - Acquisition software TR7836
- 978309000** - RS 232 Kit (cable and adapter)
- 978370000** - Connecting Kit for Centronics printers
- 213200010** - TV plug (f)/ BNC (m) adapter
- 213200011** - BNC (m) / F adapter
- 213200002** - Cable F adapter

TECHNICAL SPECIFICATIONS
QAM
QPSK
COFDM

	46 to 865 MHz	950 to 2150MHz	470 to 865Mhz
Frequency range	46 to 865 MHz	950 to 2150MHz	470 to 865Mhz
Bit Error Ratio	before Reed Solomon (BER) after Reed Solomon (UNC)	before Viterbi (CBER) after Viterbi (VBER) after Reed Solomon (UNC)	before Viterbi (CBER) after Viterbi (VBER) after Reed Solomon (UNC)
Modulation Error Ratio	20 to 40 dB (MER)	0 to 20 dB (MER)	0 to 35 dB (MER)
Carrier to Noise ratio	-	0 to 20 dB (C/N)	0 to 35 dB (C/N)
Symbol rate	5 to 7 Mega symbols	1 to 45 Mega symbols	1 to 30 Mega symbols
Bandwidth	-	-	6/7/8 MHz
Number of carriers	-	-	2k / 8 k (automatic)
Constellation	16, 32, 64, 128, 256	-	16 QAM, 64 QAM, QPSK (automatic)
Viterbi rate	-	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Constellation interval	-	-	1/4, 1/8, 1/16, 1/32 (automatic)
Integration time	1 s, 3 s, 30 s, 5 min, continuous	1 s, 3 s, 30 s, 5 min, continuous	1 s, 3 s, 30 s, 5 min, continuous
Measurement type	MAX or average	MAX or average	MAX or average
Impulse response	-	-	20dB dynamic, units in μ s, km, miles
Scan function	by frequency, symbol rate	by frequency, symbol rate	by frequency, channel
Graphical recording function	BER, UNC and MER	VBER, UNC, CBER and C/N	VBER, UNC, CBER and MER
Recording duration	10 min, 1 h, 8 h, 24 h, 7 days	10 min, 1 h, 8 h, 24 h, 7 days	10 min, 1 h, 8 h, 24 h, 7 days
Constellation pattern display	yes	yes	yes
Graphical display of confidence rate	-	-	yes
Display channel frequency response	-	-	yes
Standards	UIT-TJ.83 ANNEX A and B	ETS 300-421	ETS 301-70

Specifications subject to change without notice - FT7835B A00



32, rue Edouard Martel • 42100 - St Etienne
direct sales lines :
+33 (0).4.77.59.36.81 ou +33 (0).4.77.59.36.80
 Fax. +33 (0).4.77.57.23.23
 Web : www.sefram.fr • e-mail : sales@sefram.fr

For assistance and ordering
