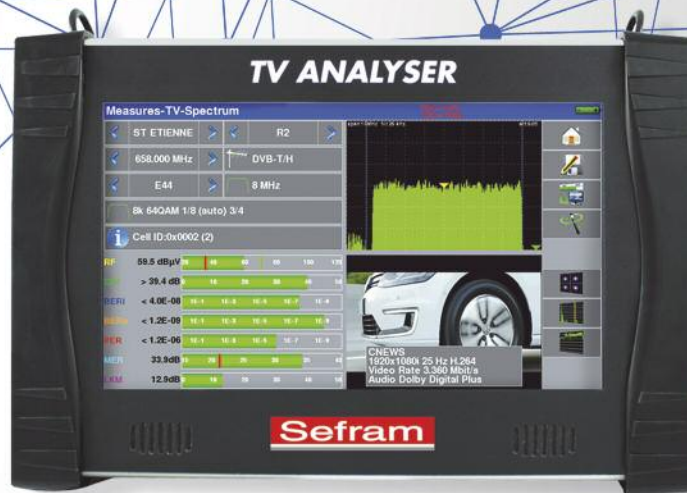


TV METERS

Catalogue

The most innovative TV Meters
for digital television



Designed and manufactured in our plant of Saint-Etienne (France)

7880: A new family of TV Meters to meet the requirements of the XXI century !

NEW

**HEVC H.265 decoding
Weights less than 3Kg**

2 YEAR WARRANTY

10 inch panoramic touch screen



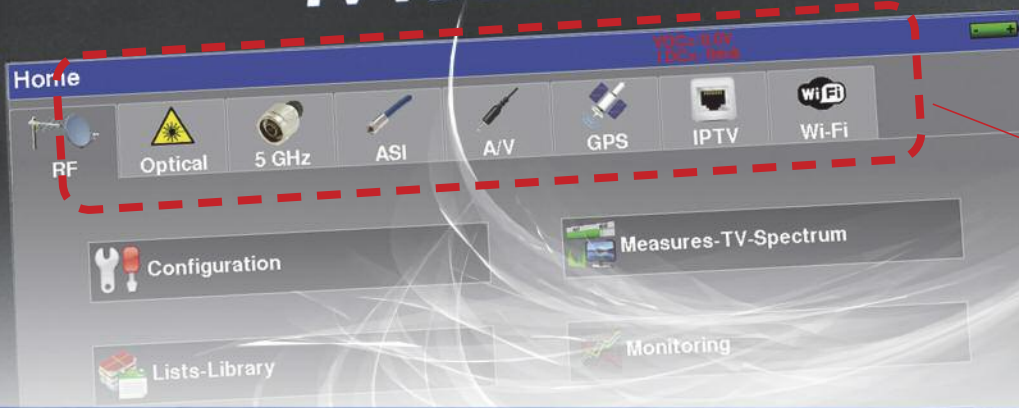
Rugged housing with protective bumpers

- HEVC H.265
- DVB-C/C2 J83B
- DVB-T/T2 Lite
- Analogue TV
- DVB-S/S2, multistream
- Optical fiber
- IPTV
- DAB DAB+
- GPS
- WiFi
- FM-RDS
- ASI
- Network Delay analysis
- Shoulder measurement
- T2MI via IP

IPTV
HD TV
Multistream
Optical fiber
Digital radio
GPS
Shoulder

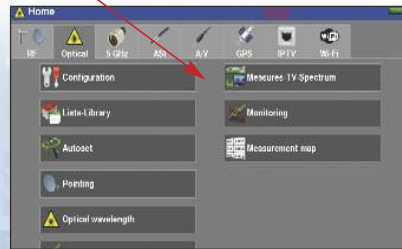
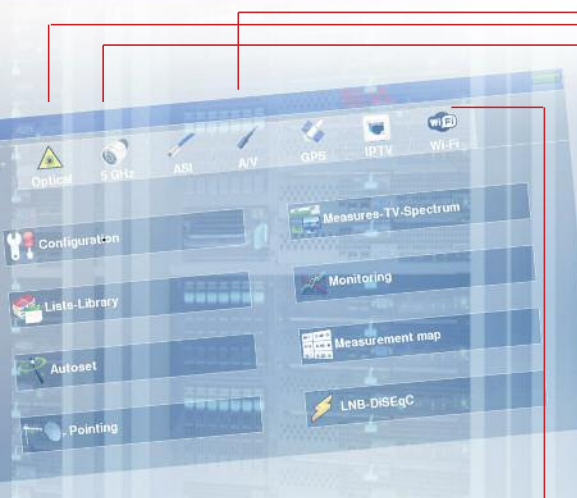
Specific measurements: your TV Meter will meet all your needs

TV ANALYSER

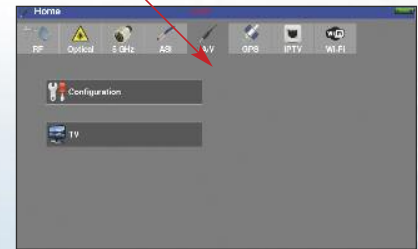


One menu bar to easily select the functions or the specific input.

Specific menus to save time



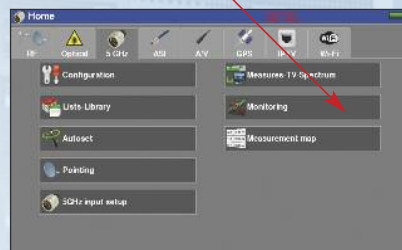
To qualify an optic fiber network for terrestrial, cable or satellite TV.



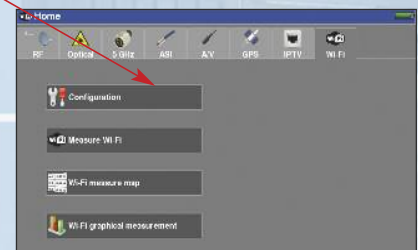
Some TV networks still use analogue programs: your TV analyser will provide the TV programs decoding and display. The analogue input / output are usefull to check signals from HD analogue cameras.



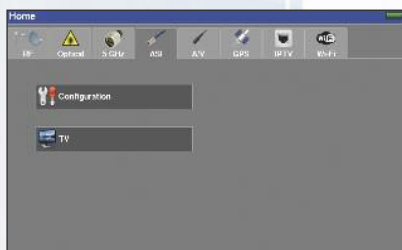
All necessary function to qualify your IPTV networks



The 5GHz input is dedicated to specific 5GHz LNB for dishes.



WiFi networks can be analysed with specific functions and measurements.



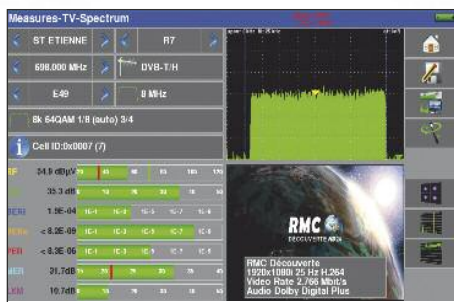
For head broadcasting stations, the ASI input / output will provide the transport stream analysis.



Using the internal GPS makes the mapping of a geographical area very easy and convenient.

Analyse and measure with the best accuracy

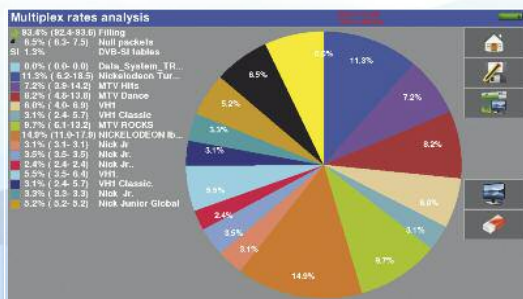
TV ANALYSER



A zoom function is provided to check in detail TV signals and the quality of the TV installation.

A single screen with all necessary information.

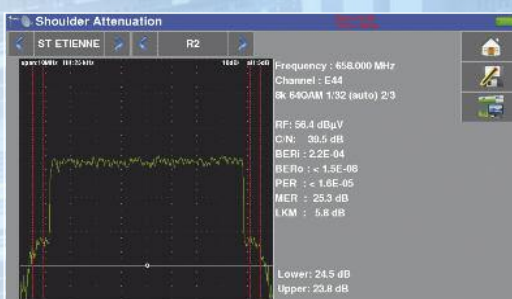
MPEG-2 and MPEG-4 data flow analysis according to ETR 101-290



Priority 1	Priority 2	Priority 3
1.1 TS_sync_error	2.1 Transport_error	3.1 NIT_error
1.2 sync_byte_error	2.2 CRC_error	3.1.1 table_id
1.3 PAT_error	2.3 PCR_error	3.1.2 a_rate (-10%) actual
1.3.1 rate(-0.5s)	2.3.1 repetition (-40ms)	3.1.2 b_rate (-10%) other
1.3.2 table_id	2.3.2 discontinuity	3.2 SI repetition_error (-20ms)
1.3.3 scrambling_err	2.4 PCR_accuracy_error	3.4 Unreferenced_PID
1.4 continuity_count_error	2.5 PTS_error	3.5 SDT_error
1.5 PMT_error	2.6 CAT_error	3.5.1 a_rate (-2s) actual
1.5.1 rate (-0.5s)	2.6.1 no_CAT	3.5.1 b_rate (-2s) other
1.5.2 scrambling_err	2.6.2 table_id	3.5.2 table_id
1.6 PID_error	3.6 ETI_error	3.6.1 a_rate (-2s) actual
		3.6.1 b_rate (-2s) other
		3.6.2 table_id
		3.7 RST_error
		3.8 EDT_error
		3.8.1 rate (-30s)
		3.8.2 table_id

Checking the content of the multiplex data flow is now possible with log file capability.

Shoulder measurement for DVB-T and DVB-T2 reception

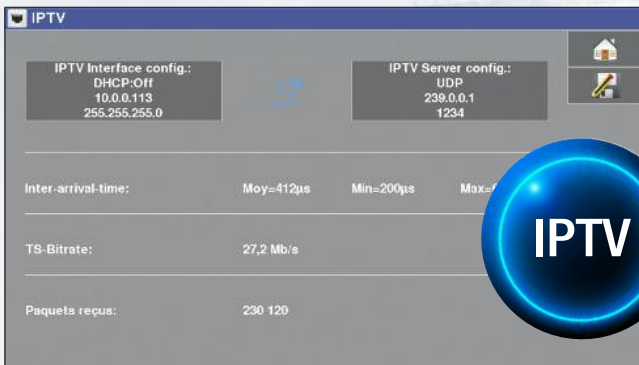


Today's and tomorrow's measurements



**HEVC
H.265**

Decoding and display of H.265 (2k) HD TV programs.



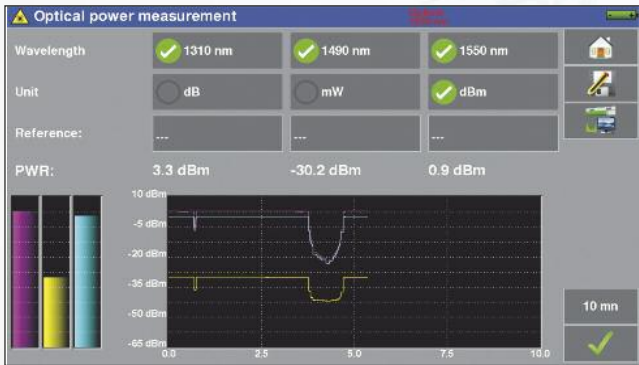
IPTV

The ideal tool to test your IPTV network: hotels, hospitals, industry,...



**T2MI
via IP**

T2MI analysis including display TV programs.



**Optic
Fiber**

All measurements for optic fiber are provided.

**DAB
DAB+**



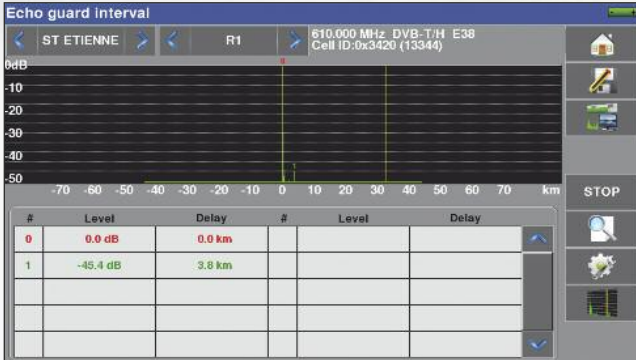
FM-RDS

DAB, DAB+, FM with RDS analysis is provided. Stereo sound is available with headphone output.

All necessary measurements

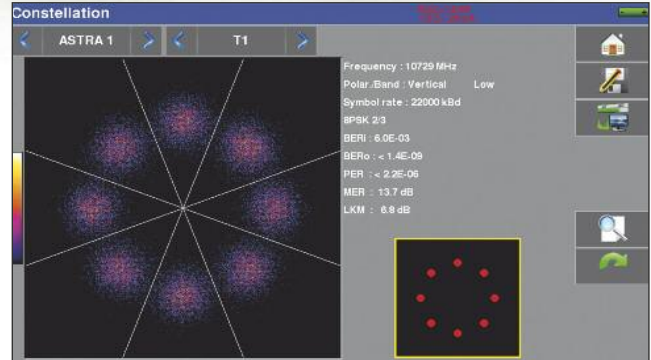
TV ANALYSER

Real time echoes and impulse response



Real time echoes and pre-echoes.

Constellation diagram



Display of the constellation diagram for all digital standards.

Antenna pointer



A dedicated function to save time: check sat mode and pointing function for terrestrial.

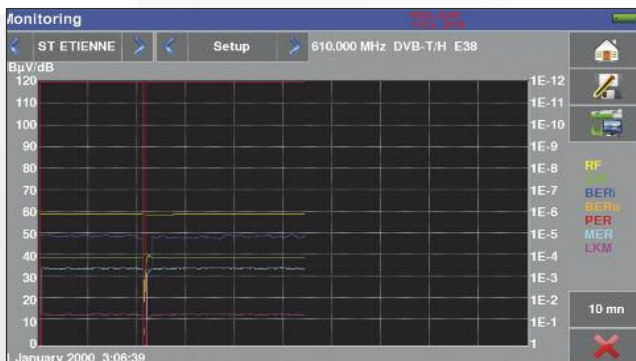
Measurement map

freq.	std	RF	C-N	BERi	BERo	PER	MER	LKM
E38	DVB-T/H	59.6	>39.6	7.6E-06	<2.4E-06	<2.4E-05	35.2	14.2
E44	DVB-T/H	61.0	>41.0	5.3E-05	<2.4E-06	<2.4E-05	34.7	13.7
E59	DVB-T/H	58.6	>38.6	5.6E-05	<2.3E-06	<2.3E-05	34.0	13.0
E40	DVB-T/H	61.0	>41.0	1.1E-05	<2.4E-06	<2.4E-05	33.4	12.4
E46	DVB-T/H	59.2	>39.2	8.7E-05	<2.4E-06	<2.4E-05	32.4	11.4
E49	DVB-T/H	54.7	>34.7	2.1E-04	<2.4E-06	<2.4E-05	31.6	10.6
10714 HL	DVB-S2	67.3	6.7	Sync?	Sync?	Sync?
10729 VL	DVB-S2	71.0	8.1	4.2E-03	<1.4E-06	<2.3E-05	13.8	6.9
10743 HL	DVB-S	70.4	11.4	4.5E-06	<3.1E-06	<5.1E-05	14.4	7.5

Measurements recording (for all TV standards) in the TV Meter memory.

To find all TV signals issues

Monitoring



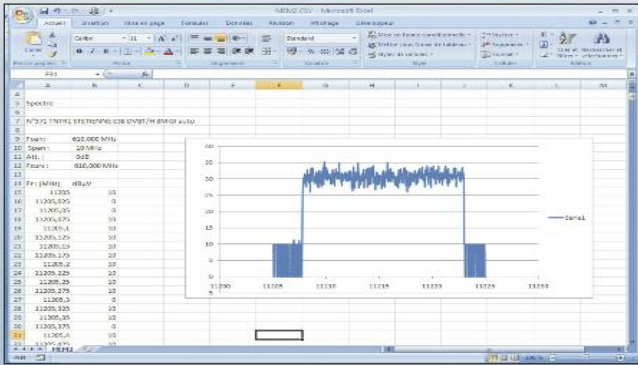
Graphical display of several parameters versus time is provided.

Measurement map

freq.	std	RF	C-N	BERi	BERo	PER	MER	LKM
E38	DVB-T/H	59.6	>39.6	7.6E-06	<2.4E-06	<2.4E-05	35.2	14.2
E44	DVB-T/H	61.0	>41.0	5.3E-05	<2.4E-06	<2.4E-05	34.7	13.7
E59	DVB-T/H	58.6	>38.6	5.6E-05	<2.3E-06	<2.3E-05	34.0	13.0
E40	DVB-T/H	61.0	>41.0	1.1E-05	<2.4E-06	<2.4E-05	33.4	12.4
E46	DVB-T/H	59.2	>39.2	8.7E-05	<2.4E-06	<2.4E-05	32.4	11.4
E49	DVB-T/H	54.7	>34.7	2.1E-04	<2.4E-06	<2.4E-05	31.6	10.6
10714 HL	DVB-S2	67.3	6.7	Sync?	Sync?	Sync?
10729 VL	DVB-S2	71.0	8.1	4.2E-03	<1.4E-06	<2.3E-05	13.8	6.9
10743 HL	DVB-S	70.4	11.4	4.5E-06	<3.1E-06	<5.1E-05	14.4	7.5

Select the frequencies you want to monitor: all measurements will be recorded with timestamped information. Your records can be transferred on USB memory stick. Files (.csv) can be read and worked with Excel™.

TR7837: a unique software for all SEFRAM TV Meters Set up, measure and analyse!



The screenshot shows a table titled 'Section - Portage satellite'. The table lists various satellite channels with columns for Name, Position, Orientation, Frequency, and other technical specifications. The table is color-coded by channel type.

Name	Position	Orientation	F1	F2	F3	F1 - offset	F2 - offset	F3 - offset	F1 - offset	F2 - offset	F3 - offset	F1 - offset	F2 - offset	F3 - offset	F1 - offset	F2 - offset	F3 - offset	
TURKSAT 2	40.2	E	11016	H	11016	0000	1012	V	018-02	0000	1187	V	018-01	0700	1270	H	018-01	2700
ASTRA 2	28.2	E	11000	H	11000	2000	1018	V	018-01	0000	1207	V	018-01	0700	1270	H	018-01	2700
ASTRA 3	23.5	E	11070	V	11070	2000	1197	H	018-02	0000	1178	H	018-02	0700	1260	H	018-02	1700
ASTRA 4	19.2	E	10700	V	10700	2000	10770	H	018-02	0000	10800	V	018-02	0700	10870	H	018-02	1700
EURO-MS	16.2	E	10700	H	10700	2000	11912	V	018-02	0000	11831	V	018-02	0000	11827	H	018-02	1000
HOTBIRD	13	E	10011	H	10011	2000	10700	0000	018-02	0700	11700	V	018-02	0700	12670	H	018-02	2000
AUTELANT 5	10	W	11610	V	11610	2000	11608	V	018-02	0000	11604	V	018-02	0000	11607	H	018-02	2000
FRAN	5.8	W	12042	H	12042	2000	11727	V	018-01	0000	12147	V	018-02	0000	11957	H	018-02	2000
HOTBIRD	10	W	10000	V	10000	2000	10700	0000	018-01	0700	11700	V	018-01	0700	12620	H	018-01	2700

The screenshot shows the 'SEFRAM TR7837 Version 2.0' configuration window. It displays a list of TV channels with columns for Set number, Set name, Place name, Standard, Frequency, Channel, Requirement, Polarization, LNB band, Audio mode, Condition, Bandwidth, Symbol rate, Guard interval, and Selection. The list includes channels like DIGITAL, HD, and TVP HD.

Set number	Set name	Place name	Standard	Frequency	Channel	Requirement	Polarization	LNB band	Audio mode	Condition	Bandwidth	Symbol rate	Guard interval	Selection
1	DIGITAL	ASTRA 1	DVB-S2	10750.000	H	1	H	L	L		20000	20000	1/4	
2	HD	ASTRA 1	DVB-S2	10750.000	H	1	H	L	L		20000	20000	1/4	
3	HD	ASTRA 1	DVB-S2	10770.000	H	1	H	L	L		20000	20000	1/4	



Select the most appropriate solution to protect and carry your TV analyser



*This carrying bag is supplied as standard accessory.
P/N 978851000*



*The rugged transport case is optional.
P/N: 978852000*

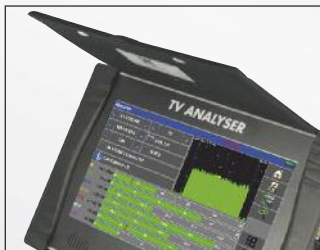


*Car cigar lighter converter.
P/N: 978361000*



*Audio-video cable.
P/N: 978853000*

The sun protector is standard for all models. You can work in the best conditions using this protector.



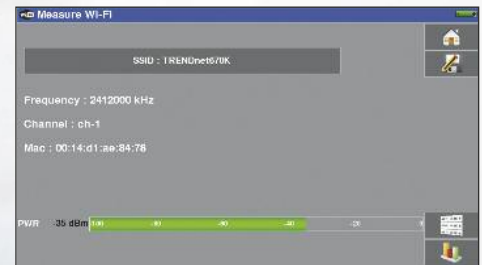
Remotely control your TV analyser: it will make everything you desire!



The GPS provides a very powerful mapping function for the signals received



Check all WiFi networks working with 2,4GHz or 5,8GHz



Network Delay analysis for DVB-T Reception



Selection guide

Selection guide

	Sefram 7880	Sefram 7881	Sefram 7882	Sefram 7885
Bandwidth	5-MHz à 1005 MHz , 900 MHz à 2200MHz			
HEVC H.265 decoding	✓	✓	✓	✓
MEPG-2, MPEG-4 HEVC H,264 decoding	✓	✓	✓	✓
DVB-T/T2/T2Lite,DVB-C/C2,DVB-S/S2(MS)	✓	✓	✓	✓
DVB-C/C2 : J83A, J83B	✓	✓	✓	✓
Fast spectrum analysis	✓	✓	✓	✓
Impulse response: echoes and pre-echoes in DVB-T and DVB-T2	✓	✓	✓	✓
Constellation diagram for all standards	✓	✓	✓	✓
DCSS and SatCR (EN50607)	✓	✓	✓	✓
External software compatibility (TR7837)	✓	✓	✓	✓
Expert spectrum analysis	✓	✓	✓	✓
Display free HD 2k programs for terrestrial, cable and satellite	✓	✓	✓	✓
Analogue program decoding and display	✓	✓	✓	✓
Video I/O	✓	✓	✓	✓
HDMI output	✓	✓	✓	✓
MER per carrier	-	✓	✓	✓
Ethernet interface with webserver	-	✓	✓	✓
CAM common interface	-	✓	✓	✓
ASI I/O	-	-	✓	✓
IPTV decoding and analysis	-	-	✓	✓
WiFi (2,4GHz & 5,6GHz)	-	-	✓	✓
Shoulder measurement	-	-	-	✓
T2MI via IP	-	-	-	✓
Network Delay analysis	-	-	-	✓
MPEG TS analysis (ETR 101-290, bit rate)	-	-	-	✓
TV programs recording on SD memory card	-	-	-	✓
Optical input	-	-	-	✓
DAB, DAB+, FM RDS	-	-	-	✓
GPS	-	-	-	✓



SEFRAM 7848: TV Meter for digital terrestrial and digital satellite TV

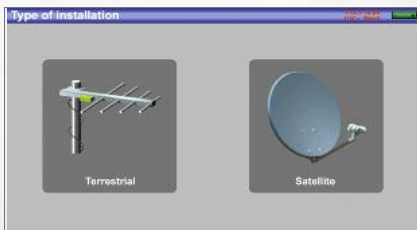
The ideal companion for the electrician

The SEFRAM 7848 has been designed to ease the installation of terrestrial and satellite antennas : we have optimized the man-machine interface, taking the best benefit of the touch screen, to ease the process and save time.

7 inch touch screen



Rugged metal housing with protective bumpers



Choice between terrestrial and satellite.



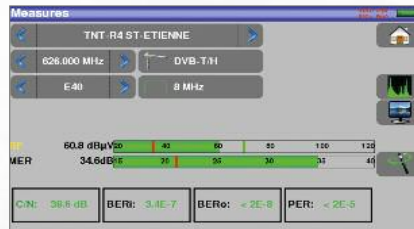
A detailed menu is provided for each type of installation.



New terrestrial pointing function, with the name of multiplex found.



In satellite mode, the checksat provides the NIT. No error possible!



All measurements are displayed with a clear color set: green if measurement is OK, red if measurement is out-off limits.

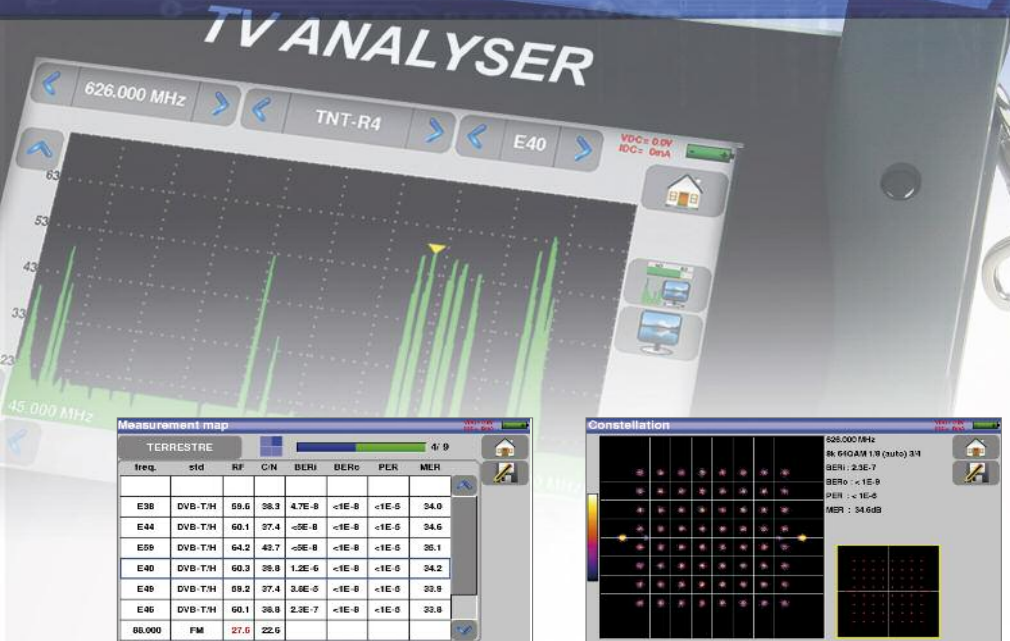


Display of free-to-air SD and HD programs.



Simplified spectrum analysis.

Sefram 7849: TV Meter for digital terrestrial, cable and satellite TV



A single screen for all measurements and spectrum.

Measurement map for terrestrial, cable and satellite.

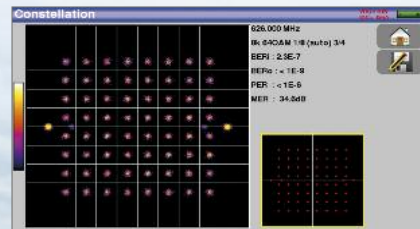
Constellation diagram in terrestrial, cable and satellite.

Fast spectrum analysis.

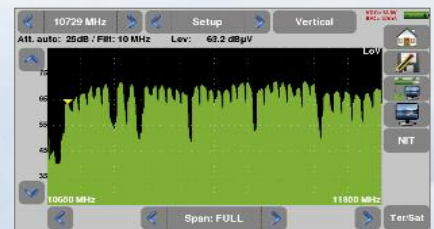
Sefram 7859: dedicated to optic fiber networks



Measurement map for terrestrial, cable and satellite.



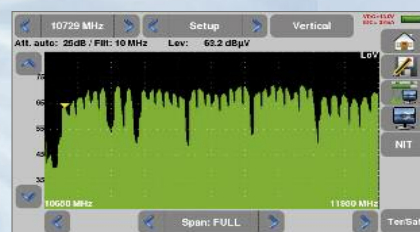
Constellation diagram in terrestrial, cable and satellite.



Fast spectrum analysis.



Optical power measurement



Fast spectrum analysis

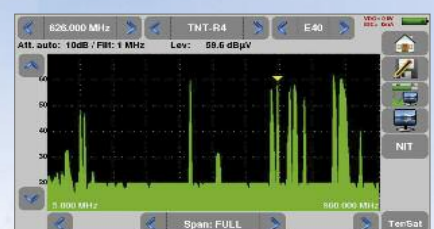
Sefram 7817: dedicated to digital cable and terrestrial TV.



Powerful Autoset for terrestrial, cable.



A single screen for all measurements and spectrum.



Fast spectrum analysis.

Selection guide and optional accessories

Selection guide

	Sefram 7817	Sefram 7848	Sefram 7849	Sefram 7859
Bandwidth	5-865MHz	45-2200Mz	5-2200MHZ	5-2200MHZ
DVB-T, DVB-T2, DVB-T2 Lite, full measurements	✓	✓	✓	✓
DVB-S, DVB-S2, full measurements	-	✓	✓	✓
DVB-C, DVB-C2 (J-83A), full measurements	✓	✓	✓	✓
NIT (Network Identification Table) for satellite	-	✓	✓	✓
Cell Id (for terrestrial band)	✓	-	✓	✓
Pointing mode for satellite (checksat)	-	✓	✓	✓
Pointing mode for terrestrial	✓	✓	✓	✓
Display free-to-air HD terrestrial programs	✓	✓	✓	✓
Display free-to-air HD satellite programs	-	✓	✓	✓
Echoes display in DVB-T and DVB-T2	✓	✓	✓	✓
DiSEqC 1.2	-	✓	✓	✓
SatCR and DCSS (EN50607)	-	✓	✓	✓
Remote supply 5V/13V/18V:24V	✓	✓	✓	✓
USB interface	✓	✓	✓	✓
Free software update from Sefram website	✓	✓	✓	✓
Optical measurements for terrestrial, cable and satellite	-	-	-	✓
Optical power measurement	-	-	-	✓
Rain and sun protector, with belt clip	option	option	option	option



Rugged transportation case
P/N: 978852000



Rain and sun protector kit for 7817, 7848, 7849, 7859. This kit includes the belt. clip. P//: contact us



Sun protector for 7817, 7848, 7849, 7859. P/N: contact us



Replacement carrying bag (supplied with each TV meter). P/N: 978481000

Sefram 7940

Optical power meter

- Optical power measurement in dBm or mW
- 5 wavelengths available: 850nm, 980nm, 1300nm and 1550
- Insertion loss measurement
- Panoramic LCD with backlight
- Auto power-off



Specifications

Display	graphical LCD with backlight
Wavelength	850, 980, 1300, 1310, 1550nm
Dynamic	-50 à +26 dBm
Accuracy	linear: 0.1% - non linear: 0.01dBm

Supplied with: batteries, manual, protective holster, carrying pouch, connectors.



Sefram 7951

Optical light source

- Provides 2 wavelenhgts for single mode fiber
- Output modulated
- Compact housing with protective holster
- Easy-to-use

Specifications

Display	graphical LCD with backlight
Wavelength	1310, 1550
Modulation	270Hz, 1KHz, 2KHz
Output powe:	-7 dBm

Supplied with: batteries, manual, protective holster, carrying pouch, connectors.

Sefram 7951M: Provides 2 wavelenghts (850 and 1300 nm) for multi-mode fiber

Sefram 7950

Visual fault finder

- Low cost solution for testing the continuity of fibers
- Laser source with 650nm (visible)
- CW or pulse mode
- Robust metal case

Specifications

Output wavelength	650 +/- 10
Output power	3mW
Pulse mode	2-3 Hz

Supplied with: batteries, manual, carrying pouch



Optical fiber not supplied

Sefram customer support



Technical support

Our technical support team is ready to help you to get the most out of all of our Sefram products. We will answer all your technical questions:

- Help to start with your instrument
- Technical information on products
- Software install and setup
- Selection of products for specific applications

Contact us: +33.(0)4.77.59.36.97

Free software updates for all Sefram products

Our website provides the latest embedded software for all products. Please browse our website to check the latest updates for your products.

www.sefram.com

Sefram's Services:

To contact our after-sales department by e-mail: services@sefram.fr.

To ship back material for calibration or repair:

SEFRAM - SAV - 32, rue Edouard Martel BP 55 - F42009 SAINT-ETIENNE Cedex 2 - France.

To ease the receipt, we ask you to download from our website and fill the RMA as indicated on the PDF.

The RMA filled should be inserted in the parcel with the product returned (one RMA per product).

Using SEFRAM's services, you will:

- Get the best price for repair and maintenance
- Get a quote in a very short period of time
- Get a warranty for your repair or upgrade

Sefram is also:



Do not hesitate to ask for our Data acquisition solution catalogue



Non contractual photos - sefram 2018



FTMESCH2018UK - Specifications can be updated without notice

For assistance and ordering



Sefram



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Fax. +33 (0) 4.77.57.23.23
Web : www.sefram.fr - e-mail : sales@sefram.fr