TV METERS
catalogue

2013

THE MOST INNOVATIVE TV METERS
FOR DIGITAL TELEVISION

ARTE HD
1920x1080i 25 Hz H.264
Video Rate 9.298 Mbit/s
Audio MPEG Layer II

SERV

PID

NIT

ASI<->

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

Sefram
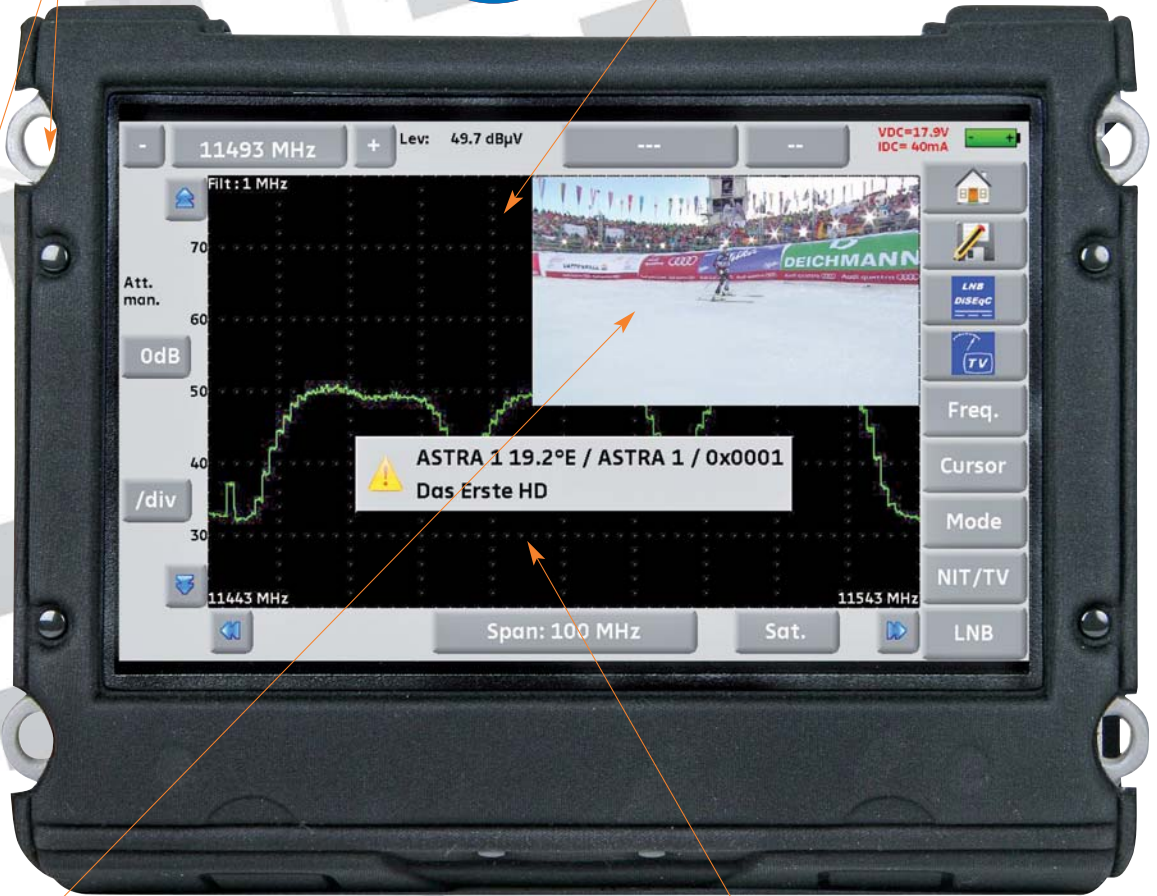### INSTRUMENTS & SYSTEMES

Sefram 7870 series

The feeling of a new way of measurement

New aluminium housing with excellent robustness

2 YEARS warranty

10 inch panoramic touch screen

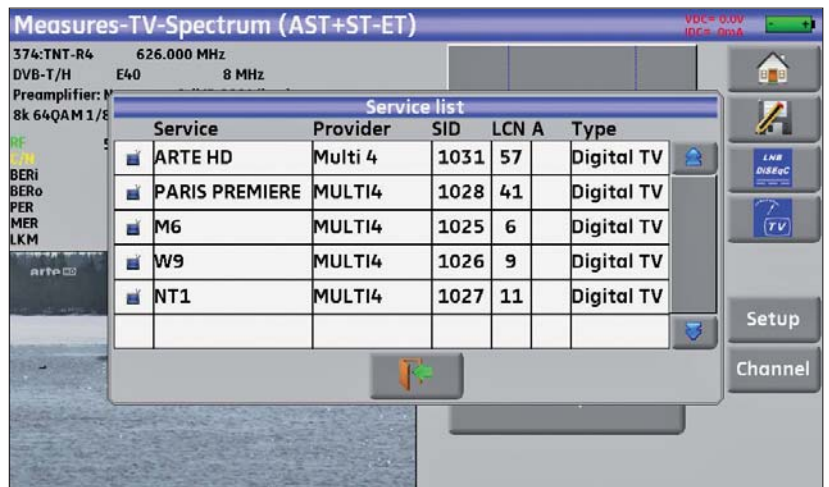
HD TV decoding for all standards

High brightness which makes reading possible under all circumstances

The "hands free" system allows you to perform all the measurements in challenging situations.
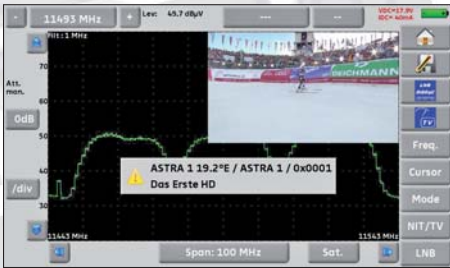
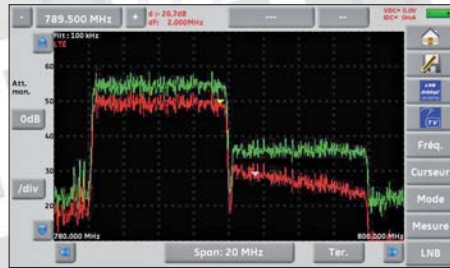*A carrying bag is supplied for better protection and perfect mobility.*

Split screen: you just need a single screen to view all measurements, TV picture and spectrum.
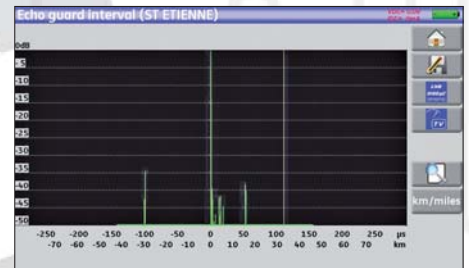
SEFRAM 7871, 7872, 7875, 7876
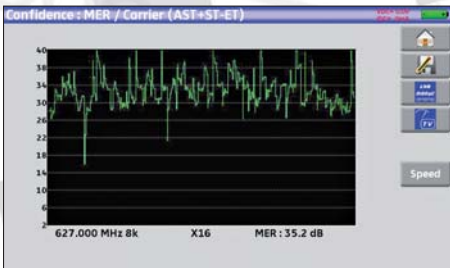## *The feeling of a new way of measurement*

Spectrum analysis from 5 to 900MHz, to view all spurious and signals.

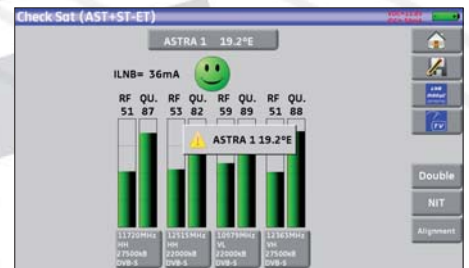*LTE function : simulate the effect of a LTE rejection filter.*

Real time echoes and pre-echoes display, with zoom.

MER per carrier measurement, for each carrier of a multiplex.

All measurements displayed in one screen, with spectrum.

Checksat mode, with NIT. Fast and accurate!

Electronic compass for dish alignment.

Selection guide	Sefram 7871	Sefram 7872	Sefram 7875	Sefram 7876
Bandwidth from 5MHz up to 2200 MHz (full range)	45MHz-2200MHz	✔	✔	✔
DVB-T, DVB-T2, Full measurement	✔	✔	✔	✔
DVB-S, DVB-S2 (QPSK,8PSK), Full measurement	✔	✔	✔	✔
DVB-C (QAM) Full measurement including return path (5-45MHz)	-	✔	✔	✔
Autoset mode	✔	✔	✔	✔
Fast spectrum analysis	✔	✔	✔	✔
Satellite identification on spectrum (NIT)	✔	✔	✔	✔
Checksat Mode with satellite recognition (NIT)	✔	✔	✔	✔
Measurement Map with record to USB interface	✔	✔	✔	✔
Alignement of dish with compass	✔	✔	✔	✔
Constellation pattern for DVB-T/T2,DVB-S/S2,DVB-C	Not For DVB-C	✔	✔	✔
Impulse response , echoes and pre-echoes for DVB-T /T2	✔	✔	✔	✔
Cell ID	✔	✔	✔	✔
Link margin / noise margin calculation	✔	✔	✔	✔
DiseqC 1.2. , SatCR and	✔	✔	✔	✔
LTE simulation measurement (Long term evolution)	✔	✔	✔	✔
Display HD programs for DVB-T,T2,DVB-C,DVB-S,S2 free TV	Not For DVB-C	✔	✔	✔
NIT (Network Identification table)	✔	✔	✔	✔
Ethernet , USB interface	✔	✔	✔	✔
MER versus carrier for DVB-T/DVB-T2	-	✔	✔	✔
Display encrypted HD programs for DVB-T,T2,DVB-C,DVB-S,S2 *	-	✔	✔	✔
HDMI interface	-	✔	✔	✔
ASI-TS input / output	-	-	✔	✔
Spectrum analysis with expert mode	-	-	✔	✔
PVR memorization (personnal video recorder)	-	-	✔	✔
Multi-stream decoding capability	-	-	-	✔
GPS (usb)	-	-	-	✔
Wi-fi networks measurement (Factory option)	-	option	option	option
Optical power measurement dynamic option	-	option	option	option

*user must have a valid subscription and encryption type must be compatible (check with our sales department)

TV Meters fully compatible with all standards.
DVB-T/H, DVB-T2, DVB-S, DVB-S2, DVB-C

DVB-T2

ASTRA HD
1440x1080i 25 Hz H.264
Video Rate 10.306 Mbit/s
Audio Dolby Digital

new7wonders.com

2 YEARS warranty

Senstive keypad

Sensitive encoding wheel

EXPERT TV ANALYSER

Sefram 7865HD-T2, Sefram 7866HD-T2:

■ Frequency range: 5MHz to 2150MHz. Full measurements for all modulations : QPSK, 8PSK, C-OFDM, MPEG-2 and MPEG-4
■ Power, BER, MER for digital terrestrial TV, starting at 35dBµV
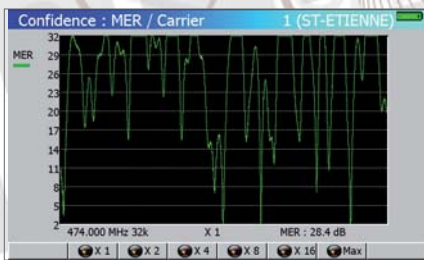■ Constellation pattern and OSD

Selection guide	Sefram 7861HD-T2	Sefram 7862HD-T2	Sefram 7865HD-T2	Sefram 7866HD-T2
DVB-T, DVB-T2 (C-OFDM). Full measurement	✔	✔	✔	✔
DVB-S / DVB-S2 (QPSK/8PSK). Full measurement	✔	✔	✔	✔
DVB-C (QAM)-Full measurement including return path	-	✔ (45-865MHz)	✔	✔
Fast spectrum analysis	✔	✔	✔	✔
Spectrum analysis with expert mode	-	-	✔	✔
Satellite identification on spectrum	✔	✔	✔	✔
Display HD TV programs for terrestrial and satellite *	-	✔	✔	✔
Display TV programs for DVB-S and DVB-S2 free TV	✔	✔	✔	✔
Display encrypted programs DVB-T, DVB-S and DVB-S2*	-	✔	✔	✔
Full OSD TV (On Screen Display)	-	-	✔	✔
Audio & video PID information	-	-	✔	✔
Measurement monitoring (graphical) with datalogger	✔	✔	✔	✔
MER versus carrier measurement	✔	✔	✔	✔
Impulse response, echoes and pre-echoes analysis	✔	✔	✔	✔
Cell ID	✔	✔	✔	✔
NIT (Network Identification Table)	✔	✔	✔	✔
Constellation pattern for DVB-T, DVB-T2, DVB-C, DVB-S and DVB-S2	✔	✔	✔	✔
Link margin / Noise margin calculation	✔	✔	✔	✔
Checksat Mode with satellite recognition	✔	✔	✔	✔
DISEqC 1.2 and SatCR	✔	✔	✔	✔
Audio / Video input and output	✔	✔	✔	✔
GPS	-	-	-	✔
ASI-TS input/ output	-	-	✔	✔
Wi-fi networks measurements	option	option	option	option

* user must have a valid subscription and encryption type must be compatible (check with our sales department).
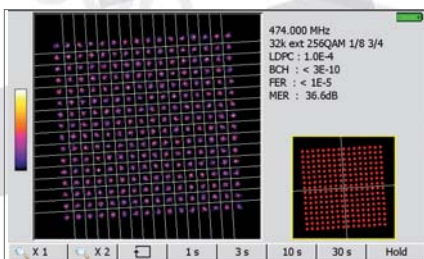
Sefram 7860 series

MER versus carrier (real time)
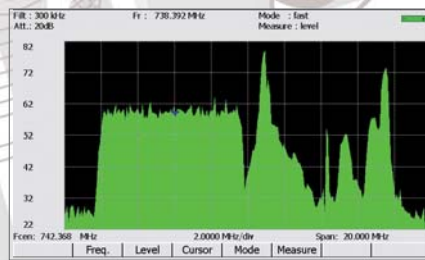
Spectrum analysis in "expert" mode for adjacent channels investigations.

GPS function For 7866HD-T2, to map your measurements.

Constellation pattern : The real time constellation diagram is provided in DVB-T, DVB-T2, DVB-S, DVB-S2 and DVB-C. It includes a zoom and the refresh period is programmable.

Echo guard interval : Display of echoes, pre-echoes, guard interval with zoom capability.

Carrying pouch for accessories **P/N: 978656500** Option for 7861HD-T2 and 7862HD-T2 Supplied with 7865HD-T2 and 7866HD-T2

Sefram 7861HD-T2 and 7862HD-T2 :

- Frequency range : 45MHz to 2150MHz
- Full measurements for all modulations : QPSK, 8PSK, C-OFDM, MPEG-2 and MPEG-4
- Power, BER, MER for digital terrestrial TV, starting at 35dBµV

Sefram 7861HD-T2 Sefram 7862HD-T2

- **MER versus carrier**
- **Echoes and pre-echoes**
- **Display HD TV programs for all standards.**

Recommended accessories for 7860 series

Car cigarette lighter **P/N : 978361000**

Deluxe carrying pouch **P/N : 978360000**

KIT TR7836 : Application software for TV Meters
7861HD-T2, 7862HD-T2, 7865HD-T2 7866HD-T2

P/N : TR7836

Wi-fi networks measurement
With the optional adaptor dedicated to 786X series, you can easily control the Wi-fi networks.

Measurements provided :
- Wi-fi channel
- Frequency
- Maximum symbol rate of the network
- Power measurement (dBm)
  P/N : 978651000

5

SEFRAM 7846, 7847

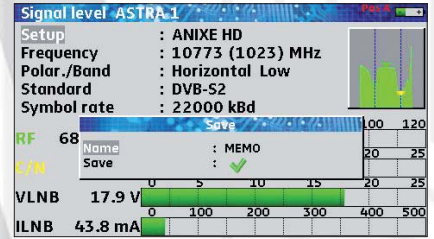## TV Meter for digital terrestrial TV and digital satellite TV

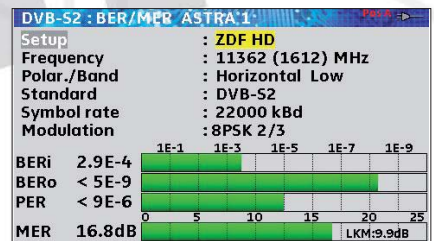**Sefram 7847 :**
DVB-T2

Display free-to-air HD TV programs

Sensitive encoding wheel
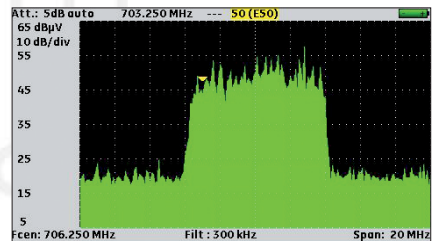
Senstive keypad

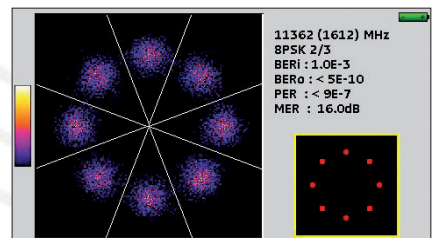**Enforced housing for extensive field use.**

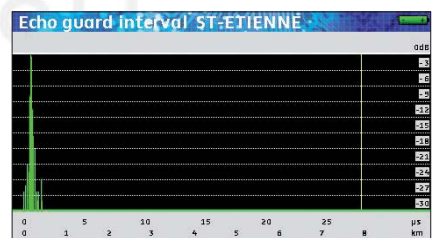**All measurements can be stored on a USB memory stick.**

Complete digital measurements (BER, MER) in DVB-T, DVB-S, DVB-S2 Includes DVB-T2 for Sefram 7847.

Fast spectrum analysis : a powerful tool for adjacent channels and spurious investigations.

Constellation pattern in DVB-T, DVB-S, DVB-S2.
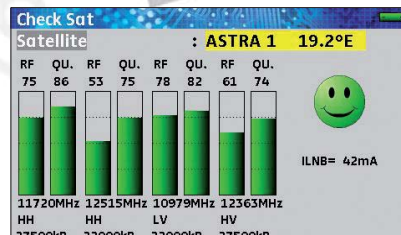Includes DVB-T2 for Sefram 7847.

Selection guide	Sefram 7846	Sefram 7847
DVB-T (C-OFDM). Full measurement	✔	✔
DVB-T2, Full measurement	-	✔
DVB-S / DVB-S2 (QPSK/8PSK). Full measurement	✔	✔
NIT (Network Identification Table)	✔	✔
Cell ID	✔	✔
Checksat Mode with satellite recognition	✔	✔
Display free to air HD and SD TV programs for terrestrial	✔	✔
Display free to air HD and SD TV programs for satellite	✔	✔
Impulse response, echoes in DVB-T	✔	✔
Constellation pattern in DVB-T, DVB-S, DVB-S2	✔	✔
DISEqC 1.2 and SatCR	✔	✔
Remote supply 5V/13V/18V/24V	✔	✔
Link margin / noise margin display	✔	✔
USB interface	✔	✔
Memorize all measurements on USB stick	✔	✔
Free software update	✔	✔

Frequency map with capability to record terrestrial (DVB-T) and satellite (DVB-S or DVB-S2) at the same time.

Checksat mode with NIT. The satellite identification makes the alignment of dishes free of error.

Echoes in DVB-T with zoom and guard interval display.
Includes DVB-T2 for Sefram 7847.

SEFRAM 7806 : *for digital terrestrial TV (DVB-T)*
SEFRAM 7807 : *for digital cable TV (DVB-C) J83.A and J83.B*
SEFRAM 7808 : *for digital satellite TV (DVB-S and DVB-S2)*
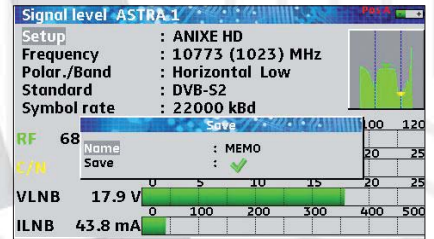# SEFRAM 7809 : *for digital Terrestrial TV (DVB-T and DVB-T2) and digital cable TV (DVB-C) J83.A*

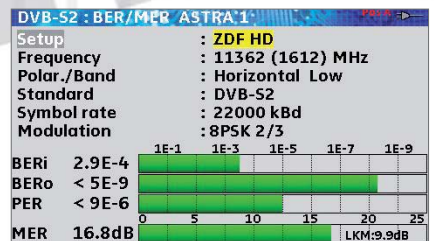**Sefram 7809 :**
DVB-T2

Display free-to-air HD TV programs

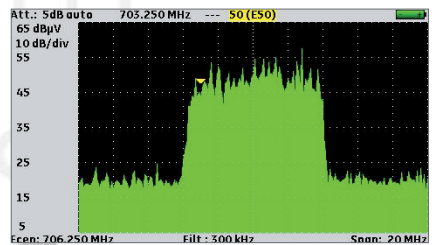*Senstive keypad*

Sensitive encoding wheel

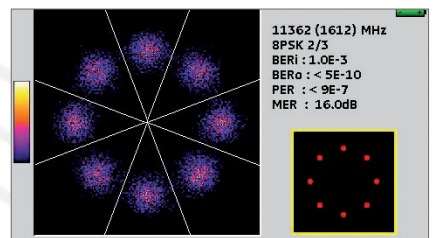*Enforced housing for extensive field use.*

All measurements can be stored on a USB memory stick.

Complete digital measurements (BER, MER) in DVB-T (7806), DVB-S, DVB-S2 (7808), DVB-C (7807, 7809) and DVB-T2 (7809).
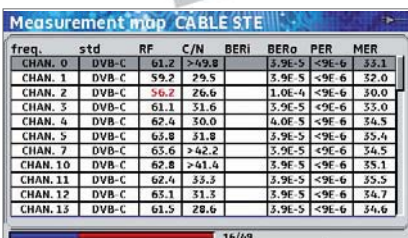
Fast spectrum analysis : a powerful tool for adjacent channels and spurious investigations.
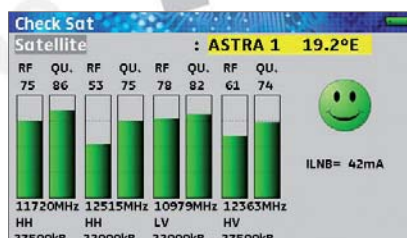
Constellation pattern in DVB-T (7806), DVB-S, DVB-S2 (7808), DVB-C (7807, 7809), DVB-T2 (7809).

Selection guide	Sefram 7806	Sefram 7807	Sefram 7808	Sefram 7809
DVB-T (C-OFDM). Full measurement	✔	-	-	✔
DVB-T2, Full measurement	-	-	-	✔
DVB-S / DVB-S2 (QPSK/8PSK). Full measurement	-	-	✔	-
DVB-C. Full measurement including return path	-	✔	-	-
DVB-C (45-865MHz / J83.A)	-	-	-	✔
NIT (Network Identification Table)	-	-	✔	✔
Cell ID	✔	-	-	✔
Checksat Mode with satellite recognition	-	-	✔	-
Display free to air HD and SD TV programs for terrestrial	✔	-	-	✔
Display free to air HD and SD TV programs for satellite	-	-	✔	✔
Display free to air HD and SD TV programs for cable	-	✔	-	✔
Impulse response, echoes in DVB-T	✔	-	-	✔
Constellation pattern	✔	✔	✔	✔
DISEqC 1.2 and SatCR	-	-	✔	✔
Remote supply 5V/13V/18V/24V	✔	✔	✔	✔
Link margin / noise margin display	✔	✔	✔	✔
USB interface	✔	✔	✔	✔
Memorize all measurements on USB stick	✔	✔	✔	✔
Free software update	✔	✔	✔	✔

Frequency map with capability to record terrestrial (DVB-T) and satellite (DVB-S or DVB-S2) at the same time.

7808: Checksat mode with NIT. The satellite identification makes the alignment of dishes free of error.
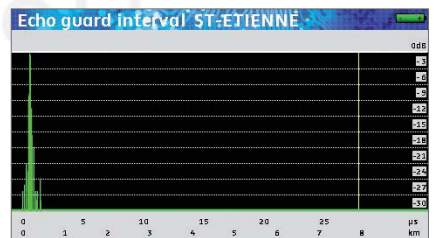
Echoes/ Impulse response in DVB-T (7806) with zoom and guard interval display. Includes DVB-T2 for 7809.

Solutions for fiber networks

SEFRAM 7940
Optical power meter

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

Specifications	SEFRAM 7940
Display	graphical LCD with backlight
Wavelength	850, 980, 1300, 1550 nm
Dynamic	-50 to +26dBm
Accuracy	linear: 0.1% - non linear: 0.01dBm

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

SEFRAM 7951
Optical light source

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

Specifications	SEFRAM 7951
Display	graphical LCD with backlight
Wavelength	1310, 1550 nm
Output power	-7dBm

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

SEFRAM 7951M
Optical light source for Multi-Mode.

- Provides 2 wavelenghts (850 and 1300 nm) for multi-mode fiber
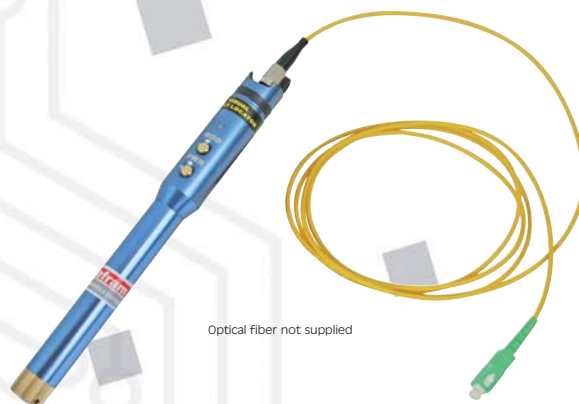
SEFRAM 7950
Visual fault finder

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

Specifications	SEFRAM 7950
Output wavelength	650 ± 10nm
Output power	3mW
Pulse mode	2-3 Hz

Supplied with : batteries, manual, carrying pouch

Optical fiber not supplied

FTMESCH2013A - Specifications can be updated without notice

For assistance and ordering

Sefram
INSTRUMENTS & SYSTEMES

AFAQ
ISO 9001
AFAQ N°1997/7001

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Pictures are indicative- Sefram 2013