

Discover the new SEFRAM

COMPACT and
RELIABLE

handheld
DMMs.

**SEFRAM
7310**



Large 2000 counts LCD display makes monitoring fast and accurate.

**SEFRAM
7311**



Multimeter SEFRAM 7311 features voltage, current and resistance measurements. Additionally, it integrates a diode and continuity test.

**SEFRAM
7312**



Sefram 7312 multimeter is an economical, safe and reliable choice. It offers most needed functions with an easy-way of use. Its design makes it the ideal tool for applications in the field service industry.

For technicians that make measurements in the field

If you are looking for a performant multimeter that fits easily in a carrying case and can be controlled with one hand, the SEFRAM Multimeters meet your needs. Supplied with a protective holster and conformed to the european IEC 1010 standards, the multimeters resist to the shocks and conditions, that confront the technicians in the field.

Commonly needed functions

The SEFRAM 7310, 7311 and 7312 feature the commonly needed functions: voltage, current (except SEFRAM 7310), resistance, continuity test, diode test. The SEFRAM 7312 model provides capacitance measurements from 3 μ F to 3000 μ F. The multimeters have an HOLD function, to maintain the displayed reading.



SEFRAM 7310

- **3200 counts and Bargraph**
- **Current measurements μ ADC**
- **Basic accuracy : 0,5 %**
- **IEC 1010, CAT.III, 600 V**

Digital Multimeters - SEFRAM 7310, 7311, 7312

The Sefram Multimeters are designed to your daily measuring needs in the field. Please find in the following selection guide their specifications and choose the model that meets your requirements.

	SEFRAM 7310	SEFRAM 7311	SEFRAM 7312
Display	2000 counts	3200 counts	3200 counts
Bargraph	-	yes	yes
Basic Accuracy	0.8% + 2d	0.7% + 2d	0.5% + 2d
Bandwidth	400 Hz	400 Hz	500 Hz
AC/DC Current Meas.	-	yes	yes
Capacitance	-	-	yes
Continuity with beeper	yes	yes	yes
Diode Test	yes	yes	yes
HOLD function	yes	yes	yes
Safety	IEC 1010	IEC 1010	IEC 1010

TECHNICAL SPECIFICATION		SEFRAM 7310	SEFRAM 7311	SEFRAM 7312
DC VOLTAGE	Range	200 mV-2, 20, 200, 600 V	300 mV-3, 30, 600 V	300 mV-3, 30,300, 600 V
	Resolution	0.1 mV	0.1 mV	0.1 mV
	Accuracy	0.8%+2d ⁽¹⁾	0.7% + 2d	0.5% + 2d
	Protection	600 VDC or AC _{RMS}	600 VDC or AC _{RMS}	600 VDC or AC _{RMS}
	Input impedance	10 M	10 M	10 M
AC VOLTAGE	Range	2, 20, 200, 600 V	3, 30, 300, 600 V	3, 30, 300, 600 V
	Resolution	1 mV	1 mV	1 mV
	Bandwidth	50 Hz - 400 Hz	40 Hz - 400 Hz	40 Hz - 500 Hz ⁽²⁾
	Accuracy	1.9% + 6d	1.7% + 5d	1.5% + 5d
	Protection	600 V _{RMS}	600 V _{RMS}	600 V _{RMS}
	Input impedance	10 M // < 100 pF	10 M // < 100 pF	10 M // < 100 pF
DC CURRENT	Range	-	300 µA-3, 30, 300mA- 20 A ⁽³⁾	300 µA-3, 30,300 mA- 20 A ⁽³⁾
	Resolution (in range 300 µA)	-	0.1 µA	0.1 µA
	Accuracy	-	1.2% + 2d ⁽⁴⁾	0.9% +2d ⁽⁵⁾
	Protection (HBC fuses)	-	1 A/240 V and 13 A/240 V	1 A/240 V and 13 A/240 V
AC CURRENT	Range	-	300 µA-3, 30, 300mA- 20 A ⁽³⁾	300 µA-3, 30,300 mA - 20 A ⁽³⁾
	Resolution (in range 300 µA)	-	0.1 µA	0.1 µA
	Bandwidth	-	40 Hz - 500 Hz	40 Hz - 500 Hz
	Accuracy	-	1.7% + 4d ⁽⁶⁾	1.5% + 4d ⁽⁷⁾
RESISTANCE	Range	6 (200 to 20 M)	6 (300 to 30 M)	6 (300 to 30 M)
	Resolution (in range 200)	0.1	0.1	0.1
	Basic accuracy	1.0% + 2d	0.9% + 2d	0.8% +2d
	Max. open circuit voltage	0.4 V	1.3 V	1.3 V
CONTINUITY	Threshold	380	50	50
DIODE TEST		max. 1.5 V; 0.5 mA	max. 3.3 V; 1.5 mA	max. 3.3 V; 1.5 mA
CAPACITANCE	Range	-	-	4 (3 µF to 3000 µF)
	Resolution	-	-	1 nF
	Basic accuracy	-	-	1.9% + 5d

(1) Accuracy in the 200 mV range : 1.2% + 3d

(2) Except in 3V : 40 Hz - 300 Hz

(3) 30s max. for 20A range

(4) Accuracy in the 10 A range : 2.5% + 5d

(5) Accuracy in the 10 A range : 2.5% + 3d

(6) Accuracy in the 10 A range : 2.9% + 7d

(7) Accuracy in the 10 A range : 2.9% + 5d

GENERAL SPECIFICATION		SEFRAM 7310	SEFRAM 7311	SEFRAM 7312
Display		2000 counts	3200 counts	3200 counts
Bargraph		-	65 segments	65 segments
Measuring rate	• display	2 / sec.	2 / sec.	2 / sec.
	• bargraph	-	12 / sec.	12 / sec.
Auto. power off		-	yes (10 min.)	yes (10 min.)
Operating temperature		0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage temperature		-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Safety		IEC 1010, Cat. II, 600V	IEC 1010, Cat. II, 600V	IEC 1010, Cat. II, 600V
Power requirements		2 x 1,5V batteries LR03	2 x 1,5V batteries LR03	2 x 1,5V batteries LR03
Battery life		1000 h.	900 h	600 h
Dimensions & weight (with holster)		80 x 165 x 36 mm; 300 g	85 x 165 x 40 mm; 360 g	85 x 165 x 40 mm; 370 g
Warranty		3 years	3 years	3 years

SUPPLIED WITH

All SEFRAM Multimeters are supplied with a test lead set, a protective holster, batteries and a user's manual.

OPTIONAL ACCESSORIES

- SA 100- Test leads Set (test leads with straight fixed plug 4 mm, 1 m, PVC 0.75 m², red and black)
- SA 101- Test leads Set (test leads with right angle sheath plug 4 mm, 1 m, PVC 0.75 m², red and black)
- SA 106- Patchcords Set (4 mm right angle safety sheath, 1 m, PVC 0.75 m², red and black)
- SA 110- Alligator clips set (4 mm)
- SA 115- Safety test tips Set (4 mm)
- SA 120- Maxigrabber Set (4 mm)
- SC 500 - Carrying case
- SEFRAM 7305 - Thermocouple Module for DMM

To discover the complete range of accessories, contact us and ask for the ELDITEST catalog.

Specifications subject to change without notice - FT731000A/97

For assistance and ordering



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