

M1501M



- ❑ Measurement range
Teraohmmeter from $4\text{k}\Omega$ to $2.10^{15}\Omega$
Picoammeter from 50 pA to 20 mA
- ❑ Range selection manual or automatic
- ❑ Measurement voltage adjustable
volt by volt from 1V to 1500VDC
- ❑ Measurement speed selectable from
1 to 10 readings/sec
- ❑ Memorization of 10 configurations
- ❑ Humidity and temperature measurement

This automatic teraohmmeter-picoammeter microprocessor designed is suited for quality control or incoming inspection departments. The $\text{M}\Omega \times \text{km}$ option makes the operation on cables easier.

TECHNICAL CHARACTERISTICS

OUTPUT VOLTAGE

- ⚡ Voltage adjustable volt by volt from 1VDC to 1500VDC
- ⚡ Accuracy : $\pm (0.5\% + 0.5\text{V})$ full scale
- ⚡ Short circuit current : 20 mA
- ⚡ Nominal current :
 10 mA from 1V to 1000V
 5 mA from 1000V to 1500V
- ⚡ Polarity :
Positive pole to HV terminal
Negative pole to guard terminal
- ⚡ Possibility to grounding positive or negative high voltage pole
- ⚡ Temperature coefficient : $0.001\%/^{\circ}\text{C}$
- ⚡ Discharge resistance : $2.2\text{ k}\Omega$
- ⚡ Voltage drift : microprocessor controlled, audio signal when out of tolerance

Test time

- ⚡ A temporization circuit allows to adjust the test time from 0 to 999 sec.

Measurement speed

- ⚡ 3 speeds can be programmed with measurement display:

Slow	1 reading/sec
Normal	3 reading/sec
Fast	10 reading/sec

TERAHOHMMETER

- ⚡ Measurement range : 100Ω à $2.10^{15}\Omega$
- ⚡ Accuracy : $\leq (0.2\%$ of reading + 0.1% of range $\pm 50/U$ test %)
- ⚡ Temperature coefficient : $\pm 0.1\%/^{\circ}\text{C}$
- ⚡ Automatic or manual range selection

Ranges	Resolution
2.10^6	$4\text{ k}\Omega$
2.10^7	$10\text{ k}\Omega$
2.10^8	$100\text{ k}\Omega$
2.10^9	$1\text{ M}\Omega$
2.10^{10}	$10\text{ M}\Omega$
2.10^{11}	$100\text{ M}\Omega$
2.10^{12}	$1\text{ G}\Omega$
2.10^{13}	$10\text{ G}\Omega$
2.10^{14}	$100\text{ G}\Omega$
2.10^{15}	$1\text{ T}\Omega$

Measurement on capacitive circuit

- ⚡ An internal filter enables measurement on capacitive circuits
- ⚡ Display indicates that measurement voltage has reached requested values

Program memory

- ⚡ Up to 10 configurations can be memorized (measurement speed, threshold, test voltage ...)

PICOAMMETER

- ⚡ Measurement range : 0.01 pA to 20 mA
- ⚡ Accuracy : $\leq (0.2\%$ of reading + 0.1% of range)

Measurement display

- ⚡ 2000 digits LCD display

Threshold

- ⚡ A measurement value inferior to the predisplayed threshold value brings about an audio signal, a visual signal on the LCD and a contact on the instrument back panel will be available with option 03.

Ranges	Resolution
20 pA	0.01 pA (0.5 pA minimum)
200 pA	0.1 pA
2 nA	1 pA
20 nA	10 pA
200 nA	100 pA
$2\text{ }\mu\text{A}$	1 nA
$20\text{ }\mu\text{A}$	10 nA
$200\text{ }\mu\text{A}$	100 nA
2 mA	$1\text{ }\mu\text{A}$
20 mA	$10\text{ }\mu\text{A}$

PROTECTION

- ⚡ High voltage present only when safety loop is closed
- ⚡ Current can be limited to 3 mA to conform to VDE0104

GENERAL CHARACTERISTICS

Presentation

- Table top metal case fitted with retractable feet

Dimensions

- Height : 131 mm
- Width : 343 mm
- Depth : 332 mm

Weight

- Approx. 10 kg

Operating temperature

- 0°C to +50°C

Storage temperature

- -20°C to + 70°C

Power

- 230V or 115V +/-10%, 47/63 Hz
- Consumption : 40 VA

OPTIONS

M1501U-01

Temperature and humidity measurement

- . Range : 0 to 100°C
- . Accuracy : 1% ± 1°C
- . Range : 0 to 100% HR
- . Accuracy : 2% from 5 to 95% HR

M1501U-02

0-10V Analog output

M1501U-03

Remote control by dry contacts (PLC)

M1501U-04

Measurement output on rear panel

M1501U-06

MΩ x km measurement display : allow on any length of cable, to display the insulation measure brought back on a 1km length

M1501U-07

RS232C Interface

M1501U-08

3 mA hardware current limitation

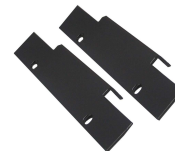
AVAILABLE ACCESSORIES



CO19
HV lead



TE17
Current measurement probe



KRMG3U
Rack mount kit

CALIBRATION



REM
Standard resistors



BEM24
Calibration box

Specifications subject to change without notice

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