

# M1501U



- ❑ Measurement range
 

Megohmmeter	from 4kΩ to 2.10 <sup>13</sup> Ω
Picoammeter	from 50 pA to 3 mA
- ❑ Range selection manual or automatic
- ❑ Measurement voltage adjustable by 10Volts steps from 10V to 1500VDC
- ❑ Accuracy ≤ 0,2%
- ❑ Measurement speed selectable from 1 to 10 readings/sec
- ❑ Memorization of 10 configurations
- ❑ Humidity and temperature measurement

This automatic megohmmeter-picoammeter microprocessor designed is suited for quality control or incoming inspection departments. The MΩ x km option makes the operation on cables easier.

## OUTPUT VOLTAGE

- ⚡ Voltage adjustable from 10VDC to 1500VDC by 10 V steps
- ⚡ Accuracy : ± (0.5% + 0.5V) full scale
- ⚡ Short circuit current : 3 mA
- ⚡ Nominal current : 3 mA from 10V 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%/°C
- ⚡ Discharge resistance : 2.2 kΩ
- ⚡ 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

## MEGOHMMETER

- ⚡ Measurement range : 4kΩ à 2.10<sup>13</sup>Ω
- ⚡ Accuracy ≤ (0.2% of reading + 0.1% of range ± 50/U test %)
- ⚡ Temperature coefficient: ± 0.1%/°C
- ⚡ Automatic or manual range selection

Ranges	Resolution
2.10 <sup>6</sup>	4 kΩ
2.10 <sup>7</sup>	10 kΩ
2.10 <sup>8</sup>	100 kΩ
2.10 <sup>9</sup>	1 MΩ
2.10 <sup>10</sup>	10 MΩ
2.10 <sup>11</sup>	100 MΩ
2.10 <sup>12</sup>	1 GΩ
2.10 <sup>13</sup>	10 GΩ

## 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 (test voltage, measurement threshold, measurement speed ...)

## PICOAMMETER

- ⚡ Measurement range : 50 pA to 3 mA
- ⚡ Accuracy: ≤ (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
2 nA	1 pA (50 pA minimum)
20 nA	10 pA
200 nA	100 pA
2 μA	1 nA
20 μA	10 nA
200 μA	100 nA
2 mA	1 μA
3 mA	10 μA

## PROTECTION

- ⚡ High voltage present only when safety loop is closed
- ⚡ Current is 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

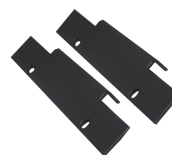
## AVAILABLE ACCESSORIES



**CO19**  
HV lead



**TE17**  
Current measurement probe



**KRMG3U**  
Rack mount kit

## CALIBRATION



**REM**  
Standard resistors



**BEM28**  
Calibration box

Specifications subject to change without notice

[www.sefelec.com](http://www.sefelec.com)

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