

Capacitance and Dissipation Factor Measuring Bridge

Type TG-1MOD



- For high voltage insulations diagnostics
- Allows precise measurements of capacitance and dissipation factor
- Measures impedances in all four quadrants
- Features classical balancing using analogue zero indicator and
- Fully automatic balancing
- Remote control and data transfer via RS232 interface
- Options: higher C_x – current range

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Technical Specifications**Capacitance and Dissipation Factor Measuring Bridge****Type TG-1MOD**

Maximal current through test object	5 A (with range extension up to 20 A)
Maximal current through standard capacitor	30 mA
Capacitance measuring range	$0.1 \times C_N \dots 1'000 \times C_N$ (with range extension up to $10'000 \times C_N$)
Dissipation factor range	$1 \times 10^{-5} \dots 1$
Resolution dissipation factor	10^{-5} (through software 10^{-7})
Voltage measurement	10 V ... 1 MV
Uncertainty of capacitance measurement	$\pm 0.01 \%$
Uncertainty of phase measurement	± 0.02 mrad $\pm 1 \%$ of the displayed value
Uncertainty of voltage measurement	$\pm 1 \%$ of reading
Measurement frequency	45 ... 65 Hz
Interface	RS232

Display

capacitance display	6 decimals LED
dissipation factor display	5 decimals LED
voltage display	4 decimals LED
C_N - setting	0.10 pF - 9999.99 pF

Reference conditions

Minimal current through standard capacitor	35 μ A
Temperature	23°C \pm 2°C
Humidity	45 ... 75 %
Air pressure	101.3 kPa

Rated range of use

according to IEC 359	
Temperature	5°C ... 40°C
Humidity, not condensing	20 ... 95 %
Air pressure	70 ... 106 kPa
Dimension	500 \times 470 \times 192 (w \times d \times h in mm)
Weight	15kg
Power mains	230V / 50Hz / 25VA

automatic balancing by built-in computer

initial balancing	3 ... 5 seconds
subsequent balancing	0.6 seconds

Every 2 minutes the initial balancing is restarted to compensate for possible instabilities in the convergence procedure caused for example by changes in frequency.

Option**Software for displaying and data processing****Type TG-0MOD-CP01****this software is compatible with Windows**

functions:

processing the measurements
displaying the measurements
printing
saving
transfer to Excel
data transfer by RS232 interface