

CAPO 12

Capacitance and Dissipation Factor measurement



The CAPO12 is a fully automatic Capacitance, Insulation $\tan \delta$ / Power Factor measuring instrument developed by Raytech Engineers. The self-contained instrument performs measurements of Insulation Power Factor ($\cos \Phi$), Dissipation Factor ($\tan \delta$), Capacitance, Inductance, Excitation current, Quality Factor and Power Loss (watts). Measurements can be made up to 12kVAC at variable frequency (from 10Hz to 400Hz). The portable and rugged instrument is perfect for use in the field, facility or manufacturing plant. It is specially designed for fast and easy measurements with the well-known high precision and quality of all Raytech instruments. Advanced intelligence of design: Like all Raytech products, this system initializes itself with a self-calibrating and circuit check sequence. The operator is immediately notified if any problem is detected.

Temperature

Operating -10°C to 60°C

Storage -20°C to 70°C

Input power 85 to 264 VAC, 47...63 Hz

Output Voltage 0 to 12 000 V

Measured valuesDissipation Factor $\tan \delta$ Power Factor $\cos \varphi$

Capacitance

Inductance

Quality Factor

Power (Watts)

Power @10kV

**Measurement Parameters**

Range	Accuracy	Resolution
Dissipation Factor	$\pm 0.5\% \text{ Rdg} \pm 1 \times 10^{-4}$	1×10^{-5}
$\tan \delta$	$\pm 0.5\% \text{ Rdg} \pm 1 \times 10^{-4}$	1×10^{-4}
	$\pm 0.5\% \text{ Rdg}$	3 Digits
Power Factor	$\pm 0.5\% \text{ Rdg} \pm 1 \times 10^{-4}$	1×10^{-5}
$\cos \Phi$	$\pm 0.5\% \text{ Rdg} \pm 1 \times 10^{-4}$	1×10^{-4}
Capacitance	$\pm 0.3\% \text{ Rdg} \pm 0.3 \text{ pF}$	0.01 pF or 5 Digits
@ 50 Hz	$\pm 0.3\% \text{ Rdg} \pm 0.3 \text{ pF}$	0.01 pF or 5 Digits
	$\pm 0.3\% \text{ Rdg} \pm 0.3 \text{ pF}$	0.01 pF or 5 Digits
@ 60 Hz	$\pm 0.3\% \text{ Rdg} \pm 0.3 \text{ pF}$	0.01 pF or 5 Digits
	$\pm 0.3\% \text{ Rdg} \pm 0.3 \text{ pF}$	0.01 pF or 5 Digits
	$\pm 0.3\% \text{ Rdg} \pm 0.3 \text{ pF}$	0.01 pF or 5 Digits
Test Voltage	$\pm 0.5\% \text{ Rdg} \pm 1 \text{ V}$	1V
Test Current	$\pm 0.3\% \text{ Rdg} \pm 1 \mu\text{A}$	0.1 μA or 4 Digits
Output Power		0 ... 2400 VA
Output Frequency	$\pm 0.01\%$	0.1 Hz

Specifications**Model**

CAPO 12

Size

L: 627 mm (24.7")

W: 475 mm (18.7")

H: 292 mm (11.5")

Weight

36 kg (79 lbs.)

Interface

2 USB 2.0 full speed (1 host, 1 device) and 9 Pin RS232 serial

Panel Display

Color LCD with backlighting and touch screen

Features

- Test Voltage up to 12kV
- Built-in Standard Capacitor
- Test Frequency 10Hz to 400Hz
- Internal thermal printer
- Microprocessor based system with internal storage for over 10 000 test results

Accessories

- Cable bag
- HV Cable 1 x 10m
- Measurement Cables 2 x 10m
- Safety-GND Cable 1 x 10m
- HV-GND Cable 1 x 10m
- Safety-Switch 1 x 2m
- Power Cord depending on Country
- 2 Paper Rolls
- USB Memory Stick
- Instruction Manual

Options

- Safety-Switch 10m
- External temperature probe



CAPO 12

Raytech AG

Oberebenstrasse 11

CH-5620 Bremgarten

www.raytech.ch

Phone +41 56 648 60 10

Fax +41 56 648 60 11

welcome@raytech.ch