



- *Multi-Function...measures voltage, phase angle, phase rotation, frequency and tap capacitance*
- *Audible phase rotation determination*
- *Operates over wide range of tap capacitance values*
- *Dual voltage range...up to 30KV via tap capacitor and 1KV direct*
- *Battery powered*
- *Sealed membrane keypad*

PMT3000 DIGITAL CABLE PHASING METER

DESCRIPTION

The PMT3000 Digital Cable Phasing Meter facilitates the testing, maintenance and installation of electrical distribution systems. Voltage magnitude, phase angle, phase rotation, frequency and tap capacitance measurements are provided in one convenient battery powered hand-held instrument.

The instrument measures cable voltage magnitude and phase utilizing the capacitive test points found in high voltage cable terminations. Keypad entry of tap capacitance allows for direct and accurate measurement of voltage over a wide range of capacitive test point values. Direct low voltage measurements of up to 600VAC line-to-ground can also be performed.

The battery powered instrument is supplied with two measuring cables, two measuring probes, one ground lead, one instrument-to-probe connector and a user manual.

APPLICATION

Typical high voltage cable elbow connectors incorporate a capacitively coupled potential test point to facilitate connection to measuring instruments.

This test point or tap provides a safe low voltage signal source which is used by the instrument to measure the cable voltage, cable phase displacement and phase rotation.

FEATURES

- **Multi-function instrument** providing measurements of voltage, phase angle, phase rotation, frequency and tap capacitance.
- **Dual voltage range** provides both high voltage capacitively coupled measurements to 30KV and direct coupled low voltage measurements to 1 KV.
- **True phase angle meter** accurately established the line phase

relationships on polyphase installations.

- **Audible determination of phase rotation** quickly determines forward or reverse phase rotation.
- **Wide range of tap capacitance values** accommodates installations from 0.5pF to 7.0pF in 0.1pF steps.
- **Non-volatile memory** stores the tap capacitor values to repeat testing of similar installations.
- **Determination of tap capacitance** provides calibration and tagging of unknown tap capacitors.
- **Portable battery powered operation** promotes isolation for safe operation.
- **Durable and rugged design** with LCD solid-state digital display and sealed membrane keypad to withstand field testing.



SPECIFICATIONS

HV Tap Voltage Range

- : 30 KV Line-to-Line
- : 17 KV Line-to-Ground
- : Requires measurement via tap capacitor
- : Accuracy $\pm 5\%$ (exclusive of tap capacitor tolerance)
- : Display Resolution 0.1 Kilovolt

LV Direct Voltage Range

- : 1 KV Line-to-Line
- : 600 V Line-to-Ground
- : Accuracy $\pm 5\%$
- : Display Resolution 1 volt

Tap Capacitance Range

- : 0.5 - 7.0 pF in steps of 0.1 pF

Power Supply

- : One 9 volt transistor battery

Phase Angle

- : Accuracy ± 5 degrees

Frequency

- : Range 45-65 Hz
- : Accuracy ± 0.2 Hz
- : Display Resolution ± 0.1 Hz

Test Leads

- : All leads are 2m in length
- : One red test probe with colour coded coaxial cable lead
- : One black test probe with colour coded coaxial cable lead
- : One ground lead with large alligator clip
- : One Test Probe-to-Instrument BNC-to-BNC Adapter

Instrument Size

- : 7.8L x 3.3W x 1.2H inches
- : 200L x 85W x 30H mm

Weight

- : Instrument : 1 lb : 0.5 kg
- : Shipping : 1.5 lbs : 0.7 kg

ORDERING INFORMATION

Item	Catalog No.
Digital Cable Phasing Meter	PMT3000-000-00
Included Accessories	
Lead Set comprised of two measuring probes, one ground lead and instrument-to-probe adapter.....	PMT3000-003-00
Carrying Case	PMT3000-004-00
Battery (qty 1, 9 volt).....	000675
Operating Manual	PMT3000-002-00

CONTACT INFORMATION



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