

KUSAM-MECO®

An ISO 9001:2008 Company

MULTI-PURPOSE DIGITAL HIGH VOLTAGE PHASING METER

Model KM-MPS-50K



FEATURES :

- * AC 50kV and DC 50kV measurement with direct reading.
- * 4000-count LCD.
- * Input impedance : 400 Mohm
- * Auto-ranging :
AC : 4.000kV / 40.00kV / 50.0kV
DC : 4.000kV / 40.00kV / 50.0kV
- * KM 50K must be connected with an approved hot stick (Optional).
- * Check phases are "in-phase" or "out of phase".
- * Polarity indication : Positive / Negative
- * Backlight function.
- * Auto power off.
- * Power source : 1.5V(AA) alkaline battery × 2.
- * Low battery indication(Multi-level).

Preliminary Data



Carrying Case

All Specifications are subject to change without prior notice.

KUSAM-MECO®
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G-17, Bharat Industrial Estate, T. J. Road, Sewree (W), Mumbai - 400 015. INDIA.
Sales Direct.: 022-24156638, Tel. : 022-24124540, 24181649, Fax : 022-24149659
Email : kusam_meco@vsnl.net, sales@kusam-meco.co.in Web: www.kusamelectrical.com

SPECIFICATIONS

AC Voltage

Ranges	Resolution
4.000 kV	0.001 kV
40.00 kV	0.01 kV
50.0 kV	0.1 kV
Accuracy	
0 ~ 4 kV	±2.5%±0.1kV
4 kV ~ 50 kV	±2.5%±2 dgt

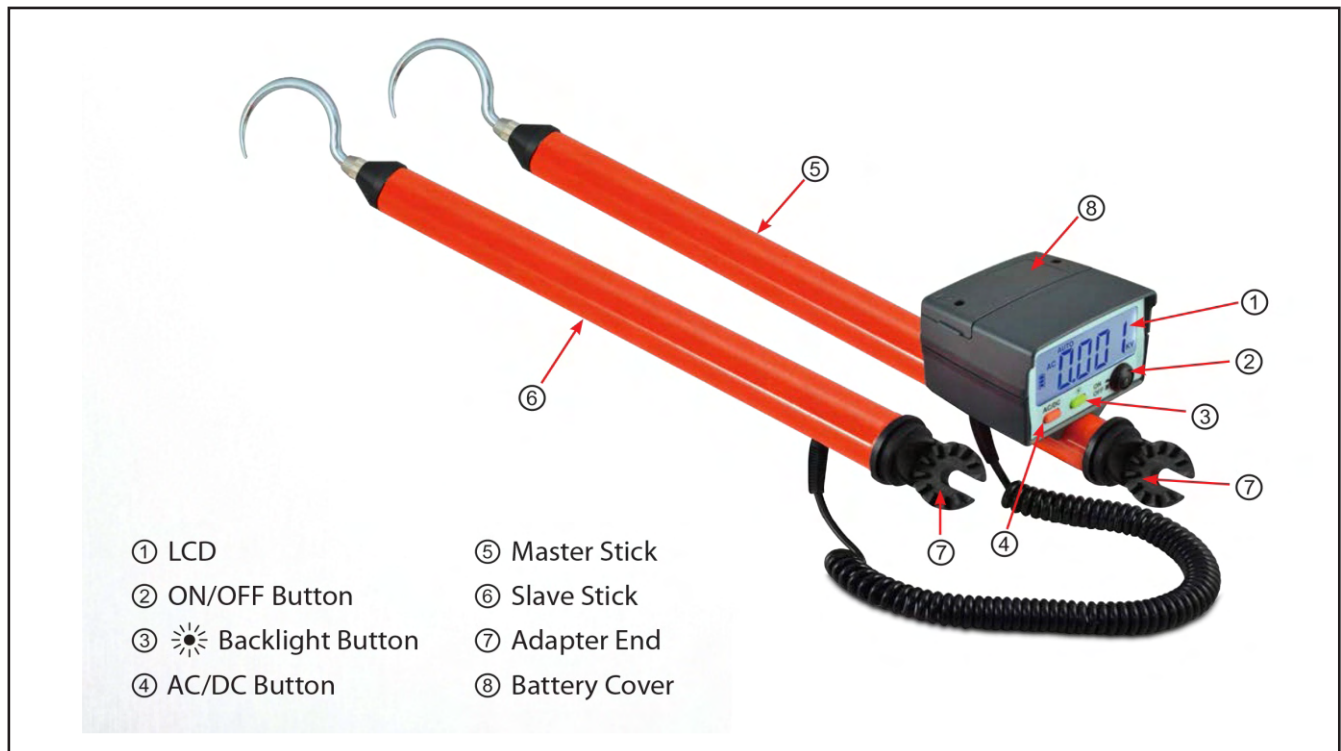
DC Voltage

Ranges	Resolution
4.000 kV	0.001 kV
40.00 kV	0.01 kV
50.0 kV	0.1 kV
Accuracy	
0~20 kV	±2.0%±0.08 kV
20 kV ~ 50 kV	±3.0 %±0.1 kV

General

Low battery indication	✓ (Multi-level)
Operating temperature	0°C~40°C, 80% Max.
Storage temperature & humidity	-10°C~50°C, 80% Max.
Dimensions	Master stick : 490(L) × 101(W) × 118(D)mm Slave stick : 490(L) × 35(W) × 35(D)mm
Weight (battery included)	Approx. 1.35kg
Power source	1.5V (AA) Alkaline battery × 2
Accessories	Instruction manual "Y" contact electrode × 2 Test hook(contact electrode)× 2 Insulated rod × 2 Alkaline batteries Carry case

INSTRUMENT LAYOUT



All Specifications are subject to change without prior notice.

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LIST OF PRODUCTS

- * Digital Multimeter
- * AC Clamp Adaptor
- * Thermo Anemometer
- * Distance Meter
- * Network Cable Tester
- * Earth Resistance Tester
- * DC Power Supplies
- * Calibrators
- * Frequency Counter
- * Phasing Sticks
- * Waterproof Pen Testers
- * EMF Detector
- * Wood, Paper & Grain Moisture Meter
- * Transistorised Electronic Analog & Digital Insulation Resistance Testers(upto 10 KV)
- * Digital Sound Level Meter & Sound Level Calibrator
- * Digital contact & Non-contact Type Tachometer
- * Digital Non-contact (infrared) Thermometer
- * Maximum Demand Controller/Digital Power Meter
- * Digital Hand Held Temperature Indicators
- * Digital AC & AC/DC Clampmeter
- * AC/DC Current Adaptor
- * Thermo Hygrometer
- * Digital Lux Meter
- * Power Factor Regulator
- * Digital Panel Meters
- * High Voltage Detector
- * Gas Analysers
- * Function Generator
- * Battery Tester
- * Solar Power Meter



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MULTI-PURPOSE DIGITAL HIGH VOLTAGE PHASING METER

MODEL KM-MPS-50K

OPERATION MANUAL

KUSAM-MECO®

MULTI-PURPOSE DIGITAL HIGH VOLTAGE PHASING METER

MODEL KM-MPS-50K



KUSAM-MECO®

WARRANTY

Each "KUSAM-MECO" product is warranted to be free from defects in material and workmanship under normal use & service. The warranty period is one year (12 months) and begins from the date of despatch of goods. In case any defect occurs in functioning of the instrument, under proper use, within the warranty period, the same will be rectified by us free of charges, provided the to and fro freight charges are borne by you.

This warranty extends only to the original buyer or end-user customer of a "KUSAM-MECO" authorized dealer.

This warranty does not apply for damaged IC's, fuses, burnt PCB's, disposable batteries, carrying case, test leads, or to any product which in "KUSAM-MECO's" opinion, has been misused, altered, neglected, contaminated or damaged by accident or abnormal conditions of operation or handling.

"KUSAM-MECO" authorized dealer shall extend this warranty on new and unused products to end-user customers only but have no authority to extend a greater or different warranty on behalf of "KUSAM-MECO".

"KUSAM-MECO's" warranty obligation is limited, at option, free of charge repair, or replacement of a defective product which is returned to a "KUSAM-MECO" authorized service center within the warranty period.

THIS WARRANTY IS BUYER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. "KUSAM-MECO" SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, ARISING FROM ANY CAUSE WHATSOEVER.

All transaction are subject to Mumbai Jurisdiction.

MUMBAI

TEST CERTIFICATE
**MULTI-PURPOSE DIGITAL HIGH VOLTAGE
PHASING METER**

This Test Certificate warrants that the product has been inspected and tested in accordance with the published specifications.

The instrument has been calibrated by using equipment which has already been calibrated to standards traceable to national standards.

MODEL NO. **KM-MPS-50K**

SERIAL NO. _____

DATE: _____

ISO 9001
REGISTERED



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1. INTRODUCTION

This Multi-purpose digital high voltage phasing meter is designed to measure both of AC high voltage and DC high voltage up to 50kV.

WARNING

This instrument must be connected with an approved hot stick. Failure to do so could lead to injury or death.

READ "SAFETY RULES" (NEXT PAGE) BEFORE USING THE INSTRUMENT.

Cleaning and Storage :

WARNING

To avoid electrical shock or damage to the instrument, do not get water inside the case.

Periodically wipe the case with a damp cloth and detergent. Do not use abrasives or solvents.

If the meter is not used for over 60 days, remove the batteries for storage.

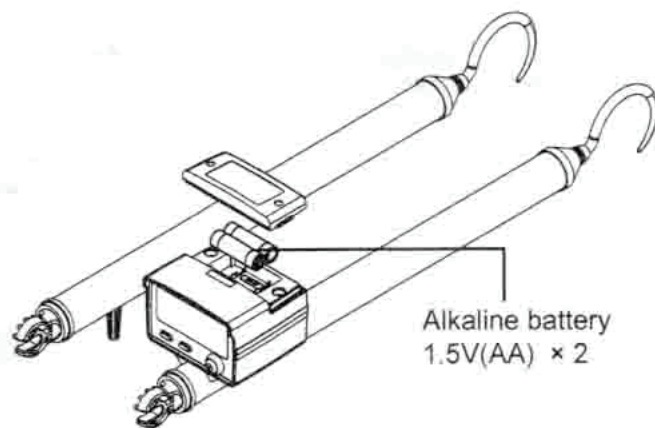
Due to our policy of constant improvement and development, we reserve the right to change specifications without notice.

7. MAINTENANCE

Battery replacement :

When low battery warning symbol " Lobt "appears, change new batteries as follows :

- (1) Disconnect the test hooks from the Multi-purpose digital high voltage phasing meter and turn off the power.
- (2) Unscrew the battery cover and replace with new alkaline batteries(1.5V AA alkaline battery × 2).
- (3) Re-install the battery cover.



2. SAFETY RULES

High voltage electrical circuits are dangerous and lethal through lack of caution or poor safety practice. The following rules should reduce the danger:

- Read the user manual carefully and completely before using the Multi-purpose digital high voltage phasing meter. Fully understand the instructions before using this product. Take all the necessary precautions. Do not exceed the limits of this Multi-purpose digital high voltage phasing meter.
- Always use fiber glass rods or authorized hot sticks for connection.
- A high voltage test is carried out with the Multi-purpose digital high voltage phasing meter attached to a hot stick.
- Do not touch any exposed wiring, connections, or other "live" parts of an electrical circuit.

This instrument must only be used by a competent, suitably trained person who understands this test procedure fully. Personnel working with high voltage Should be trained regularly.

3. FEATURES

- AC 50kV and DC 50kV measurement with direct reading.
- 4000-count LCD.
- Input impedance : 400 Mohm
- Auto-ranging :
AC : 4.000kV / 40.00kV / 50.0kV
DC : 4.000kV / 40.00kV / 50.0kV
- The Multi-purpose digital high voltage phasing meter must be connected with an approved hot stick.
- Check phases are "in-phase" or "out of phase".
- Polarity indication : Positive / Negative
- Backlight function.
- Auto power off.
- Power source : 1.5V(AA) alkaline battery × 2.
- Low battery indication(Multi-level).

6. MEASUREMENT

Before proceeding with measurement , read the safety rules.

- (1) Connect approved hot sticks to the Multi-purpose digital high voltage phasing meter.



- (2) **AC Voltage measurement**

Turn on the Multi-purpose digital high voltage phasing meter. Connect the test hooks to the high voltage circuit or high voltage device for measuring and get the reading on the LCD directly.

- (3) **DC Voltage measurement**

Turn on the Multi-purpose digital high voltage phasing meter. Select the DC voltage function. Connect the test hooks to the high voltage circuit or high voltage device for measuring and get the reading on the LCD directly.

(1) LCD

4000-count LCD with low battery indication(Multi-level).

(2) ON/OFF Button

This is the ON/OFF button. Press the ON/OFF button to turn on the instrument, the green LED on the ON/OFF button will glow. Press the ON/OFF button again to turn off the instrument.

(3) ☀ Backlight Button

Press the ☀ button to enable the backlight function. Pressing the ☀ button again can disable this function.

(4) AC/DC Button

Press the AC/DC button to select AC voltage measurement mode or DC voltage measurement mode.

(5) Master Stick**(6) Slave Stick****(7) Adapter End**

The adapter ends have to be connected to the approved hot sticks for high voltage measurement.

(8) Battery Cover

Battery cover for 1.5V(AA) alkaline batteries.

4. SPECIFICATIONS**AC Voltage :**

Range	Resolution
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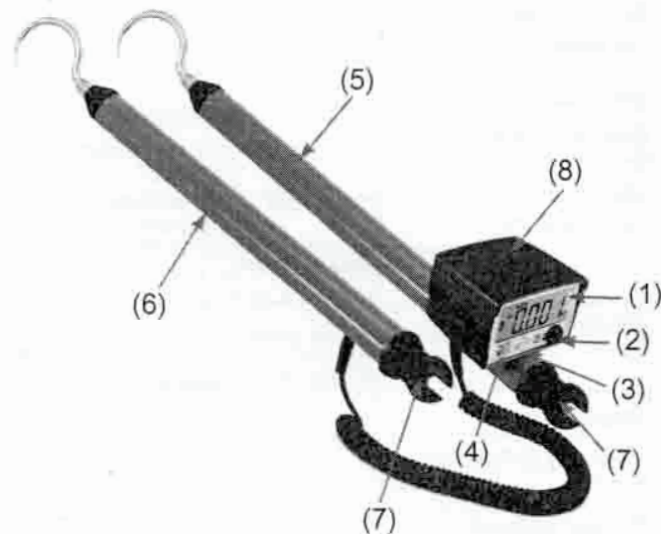
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5. INSTRUMENT LAYOUT



- (1) LCD
- (2) ON/OFF Button
- (3) ☀ Backlight Button
- (4) AC/DC Button
- (5) Master Stick
- (6) Slave Stick
- (7) Adapter End
- (8) Battery Cover