

KPM LA Characteristic Tester (KPM LA-100)



KPM LA Characteristic Tester (KPM LA-100) is the special instrument to be used to detect the electrical properties of Lightning Arrestors (LA/MOSA) .

Technical Parameters

Range of reference voltage input (peak): 10V-200V

Range of full leakage current (peak) : 100uA-10mA

Range of resistive current (peak) : 100uA-10mA

Range of capacitive current (peak) : 100uA-10mA

Range of angle : 0°C-90°C

Power consumption: 4W

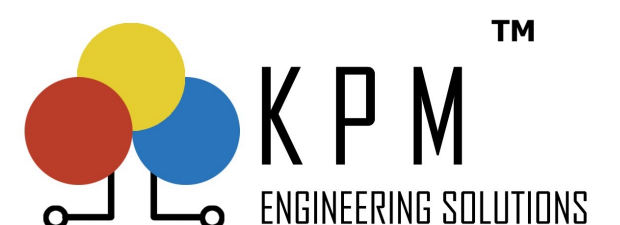
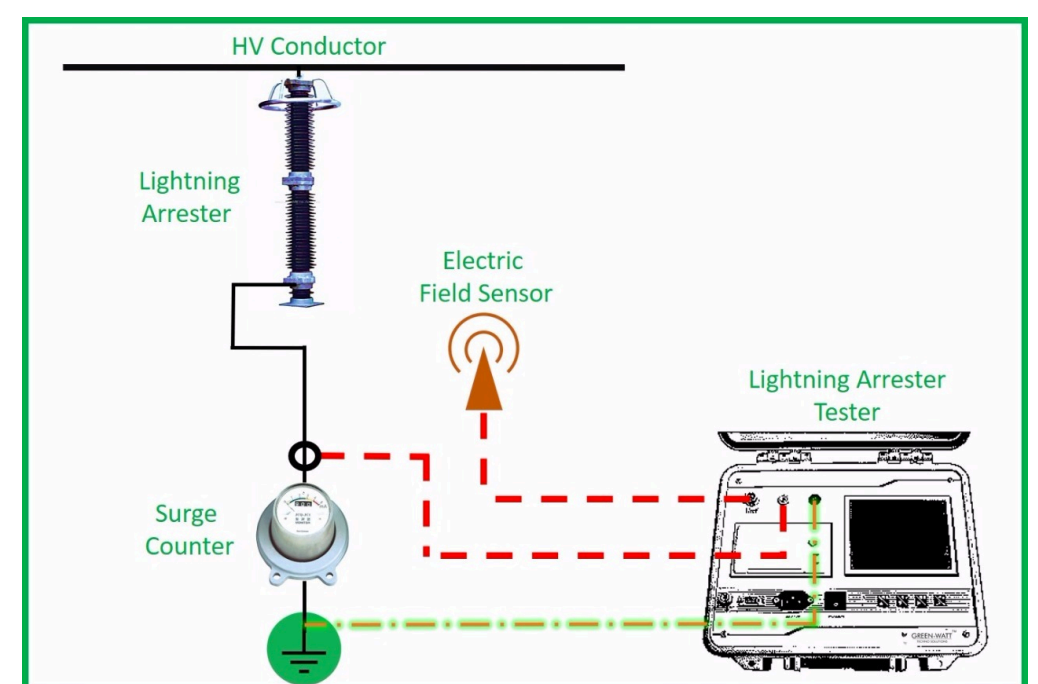
System measurement accuracy : \pm (reading'5% + 5 words) (not more than 2mA for harmonic current)

AC power supply: AC 220V \pm 10%, 50Hz \pm 1%

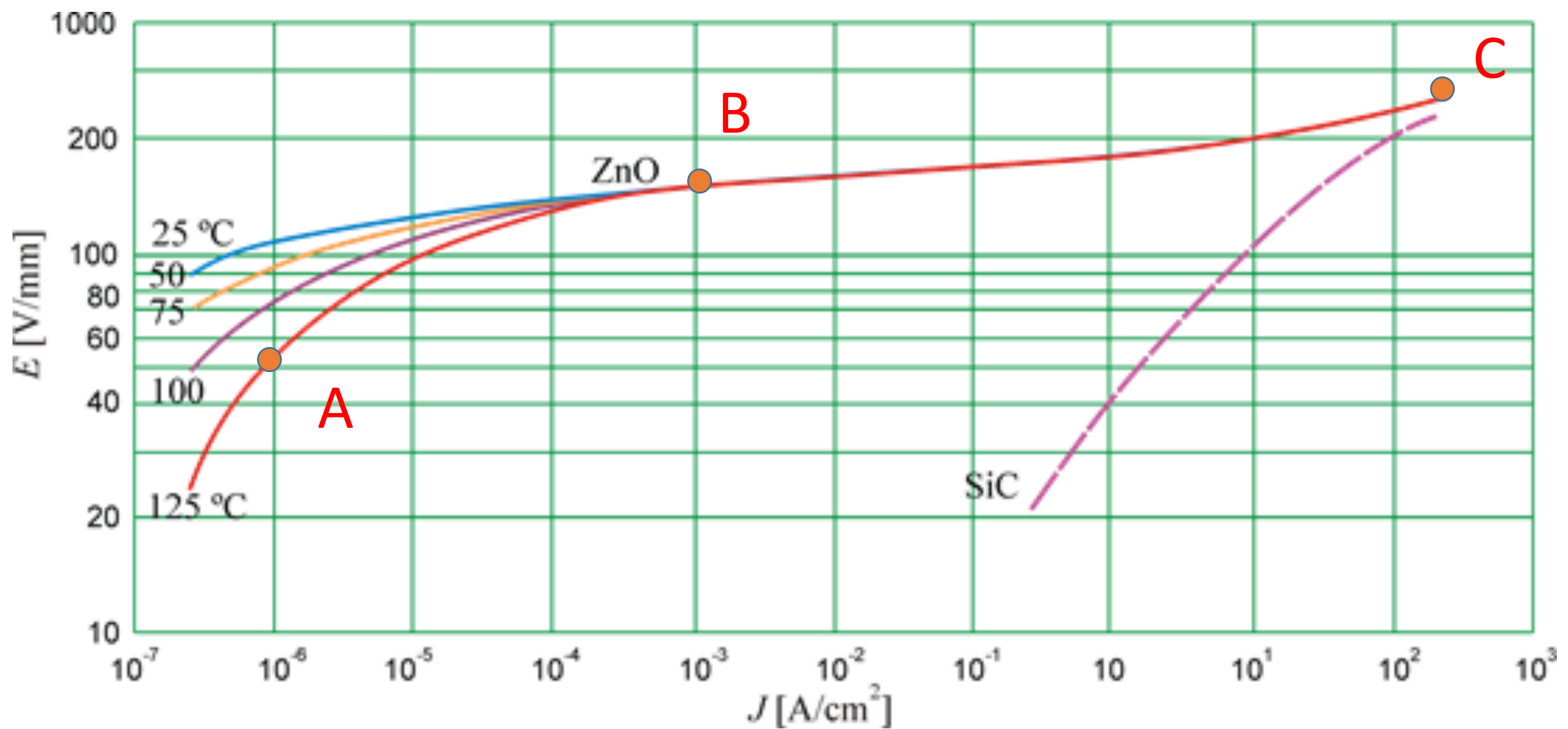
- User friendly
- Direct capture of input voltage and current signals.
- Advance Sampling and Fourier harmonic analysis

Product Features

- ❖ Large-screen LCD Display, Easy to use.
- ❖ Use Precision Sampling and Fourier harmonic analysis techniques to get reliable data.
- ❖ High-speed magnetic isolation digital sensor directly capture the input voltage and current signals ,Guarantee input data reliability and security.
- ❖ With resistive current fundamental peak output, side-phase correction functions.
- ❖ Rechargeable battery, calendar clock, micro printer, can store 120 group measurement data



KPM LA Characteristic Tester (KPM LA-100)



Product Advantages

- Prevent arrester failures by indicating and replacing arresters before breakdown.
- Increase the safety for the utility/maintenance staff.
- Avoid disturbances in the electric power supply.
- Reduce the risk for damages to other equipment due to arrester failures, for instance transformer bushings.

The arrester is designed in such a way that the applied operating voltage gets located around point “A”. This results in a continuous resistive current of few micro amps flowing through the resistor elements.

Understanding LA (MOSA)

The primary function of a zinc oxide surge arrester is to protect the power equipment from over voltages and to absorb electrical energy resulting from lightning or switching surges and from temporary over voltages.

Under overvoltage condition, the voltage increases and shifts operating point momentarily for overvoltage duration to point near “B” . This results in a resistive current of few milliamperes flowing through the resistor elements.

As soon as the overvoltage disappears, the operating point will shift back to “A”. In the event of transient switching or lightning over voltages, the operating point will shift to portion “C” .

KPM LA Characteristic Tester (KPM LA-100)

LA testing & Leakage Current :

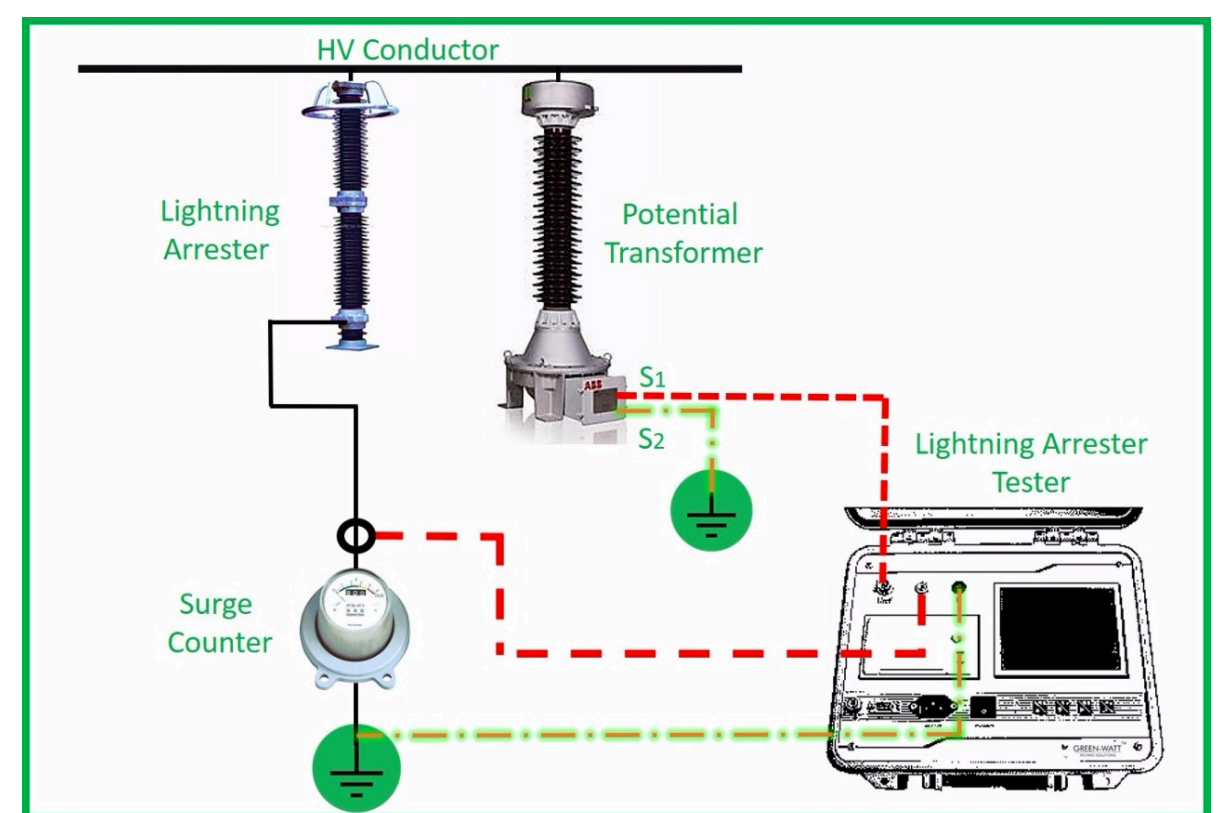
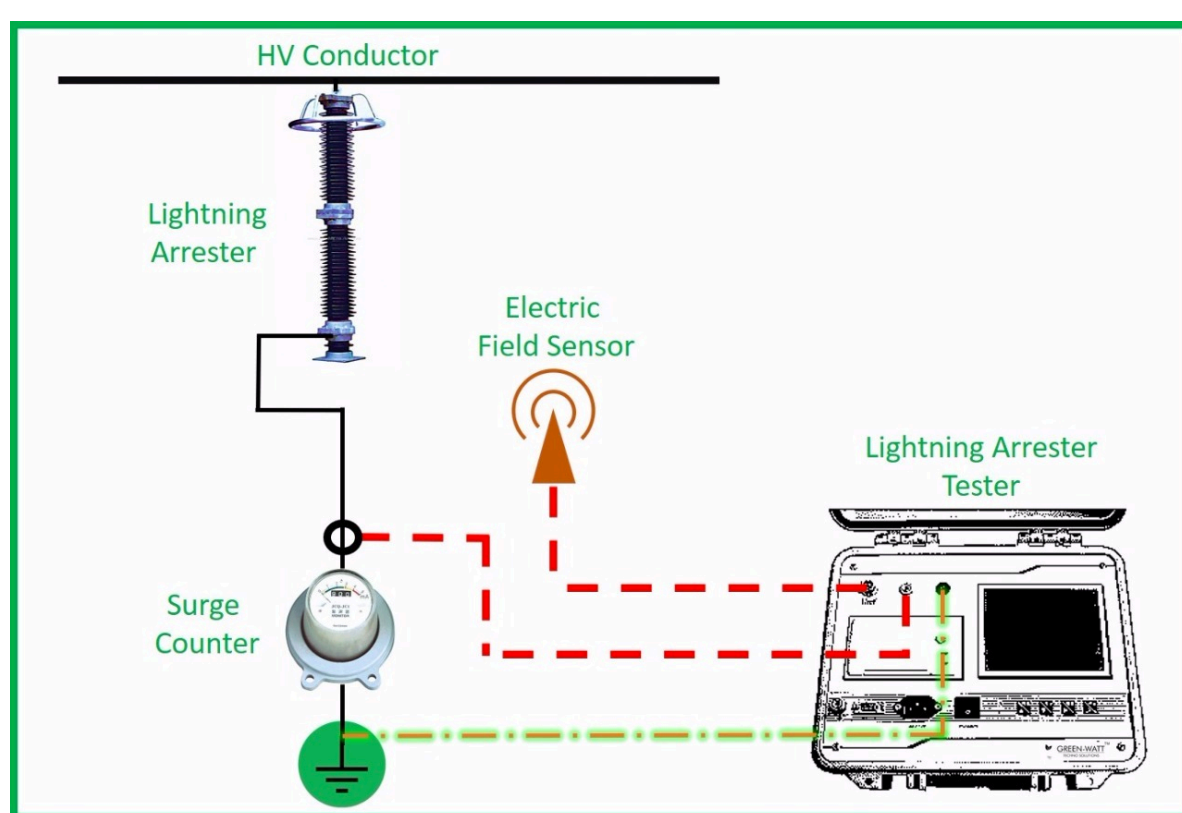
The measurement of total leakage current flowing through an LA under normal conditions is also used as one of the health monitoring techniques. However, the total leakage current measurement does not indicate the severity of degradation of Zinc Oxide elements as the resistive current (I_r) is only 15-25% of the total leakage current. Hence, a sharp increase in resistive current due to degradation/ageing of Zinc Oxide blocks does not affect the total leakage current considerably.

The higher resistive leakage current may ultimately bring the LA to thermal instability and may result in complete failure/breakdown of the Arrester. Hence, the resistive leakage current is the true indicator of health of an LA in service.

Package List :

1. KPM LA-100	1
2. Current, voltage input line	3
3. Power Line	1
4. Grounding line	1
5. Manual	1

Connection Diagram



Contact Us

KPM ENGINEERING SOLUTIONS PVT. LTD.
815 A, 8th Floor, Unitech Arcadia, Sec 49,
Gurugram – 122018 ,Haryana
Website : www.kpmttek.com
Email : info@kpmttek.com
Phone No : +91 124 4001088

