

— MPT30KVPOS —

Intelligent High Voltage Polarizer



Intelligent &
Fully Automated



High Safety
Performance



Simple & Efficient



Integrated Design



Overseas website: www.matmeas.com
Chinese website: www.balab.com.cn

Product Presentation:

The MPT30KVPOS Intelligent High-Voltage Polarizer is developed based on the widely recognized MPDSeries High-voltage poling instrument for piezoelectric ceramics. With its powerful functionality, the MPT30KVPOS stands out among similar products. Its practical, user-oriented design ensure operation that is safer, simpler and faster operation.

The MPT Series features high automation, excellent poling efficiency and superior safety performance, helping users quickly determine optimal poling conditions and achieve high-yield, consistent poling results - making it an ideal choice for advanced research and production applications!



Functional characteristics

01

The MPT system performs intelligent, fully automated high-voltage polling - no manual supervision required.

02

Simultaneously polarize 100 samples channels, and they are independent without interfere.

03

Each channel delivers up to 30KV high voltage and 1mA poling current, ensuring strong field strength and stable polarization performance.

04

Enables real-time monitoring and recording of voltage, time, temperature, and poling status on each individual channel for precise process control.

05

Built-in safety interlock, breakdown protection and automatic alarm functions ensure maximum safety and reliability during high-voltage operation.

06

The system includes an intelligent self-diagnostic safety check that automatically verifies all internal circuits before each poling polarization.

07

Automatically records and save all polarization processes, status, and data for traceability and analysis.

08

Fast heating with high temperature control accuracy, minimizing pre-poling time.

09

Compatible with P4, P5, P8, and PT series piezoelectric ceramic materials.

10

Piezoelectric ceramics with diameters of less than 10mm and thicknesses of less than 3mm can be polarized.

Poling Method: Oil-bath poling

Voltage Output Accuracy: 5%

Sample capacity: 0~100 samples

Minimum Detectable current: up to 100nA

Poling Voltage: 10~30KV

Sample Material: bulk or thin piezoelectric ceramics

Poling current: Max. 1mA per channel

Sample size: Diameter < 10mm, Thickness < 3mm

Temperature Range: RT-180°C

Equipment size: 1350×550×2041mm(L*W*H)

Temperature control Accuracy: ±3°C

Power supply: 220V/50Hz~60Hz, 3800W

Heating rate: 0~10°C/min

Weight: 447kg

(typical 3°C/min)

*For other power supply options, please contact MatMeas Coco Zhang

Major Customers/References:

China Institute of Atomic Energy (CIAE), Suzhou Changfeng Avionics, Huawei Technologies Co., Ltd. Shanghai Institute of Ceramics, Chinese Academy of Sciences (SICCAS) and many other prestigious institutions and high-tech enterprises.