

Sample Holder

Bulk Sample Holder

Test fixture for high voltage measurements on bulk ceramic samples. The sample holder can be filled with silicon oil to prevent flashovers. For temperature dependent measurements the sample holder can be used inside a temperature chamber.

■ Features / Specifications

- Sample diameter 3 - 13 mm
- Use of silicone oil possible to increase the flash-over voltage
- Contacting of samples for current measurements with the virtual ground method
- Maximum voltage up to 4000 Volt

Piezo Sample Holder Unit

Sample holder for piezoelectric bulk ceramic materials offer the simultaneous acquisition of electrical and electro-mechanical data over a wide range of temperature. The heating unit is integrated into the sample holder, so no additional temperature chamber is necessary. These investigations are essential for the development of actuator materials for most of the applications, e.g. fuel injection systems for car engines.

■ Features / Specifications

- Use of silicone oil possible to increase the flash-over voltage
- Maximum voltage up to 5000 Volt (10 kV optional)
- Contacting of samples for current measurements with the virtual ground method
- Reliable and precise displacement measurements with commercial laser interferometer
- Wide displacement working range and large distance to displacement measuring sensor in comparison to intensity based displacement sensors.
- Temperature measurement located at the sample
- Maximum temperature in oil 250°C
- Sample thickness 0.1 - 4 mm
- Sample diameter 5 - 25 mm



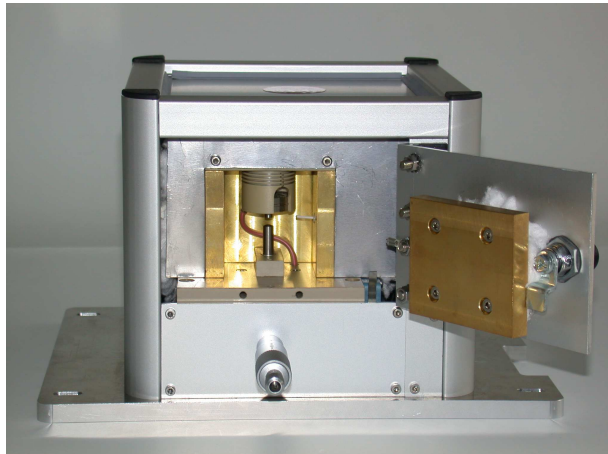
Sample Holder

CMA/Bulk Sample Holder Unit

New sample holder unit for both Ceramic Multilayer Actuators (CMA) and piezoelectric bulk ceramic materials which offers the simultaneous acquisition of electrical and electro-mechanical data over a wide range of temperature. A heating and cooling temperature unit is integrated into the sample holder, so no additional temperature chamber is necessary.

■ Features / Specifications

- Maximum voltage up to +/- 5000 Volt
- Contacting of samples for current measurements with the virtual ground method
- Reliable and precise displacement measurements with commercial laser interferometer
- Wide displacement working range and large distance to displacement measuring sensor in comparison to intensity based displacement sensors.
- Temperature measurement located at the sample



- Temperature range from room temperature up to 200°C
- Sample thickness 0.1 - 20 mm
- Sample diameter 5 - 15 mm