

D33 TEST SYSTEM



ABOUT THE SYSTEM

The **D33PZO meter** is an instrument which measures piezoelectric constant **d31, d32, d33** values of piezoelectric **ceramics, polymers, and single crystals**. This meter is capable of measuring values over a very large range at high resolution. Test Specimens of different sizes and shapes can easily be measured. D33 value is displayed on a digital panel meter and also on **PC software provided along**. **D33PZO Meter** is designed by our company & its most advanced in its specifications and can undertake various tests **simultaneously**. The amplitude of the system is **precise 0.25N**.

- Measure d33 values in lower scale of resolution from **1- 2000 pC/N**.
- **Fast, accurate and direct readout.**
- In-built **auto load** calibration with load sensor.
- High repeatability.
- No technical expertise needed **easy training** / easy to operate, accommodates varied size / **shape ceramic elements, single crystals**.
- Complete and ready to use for measuring **d33 values, determining polarity**.

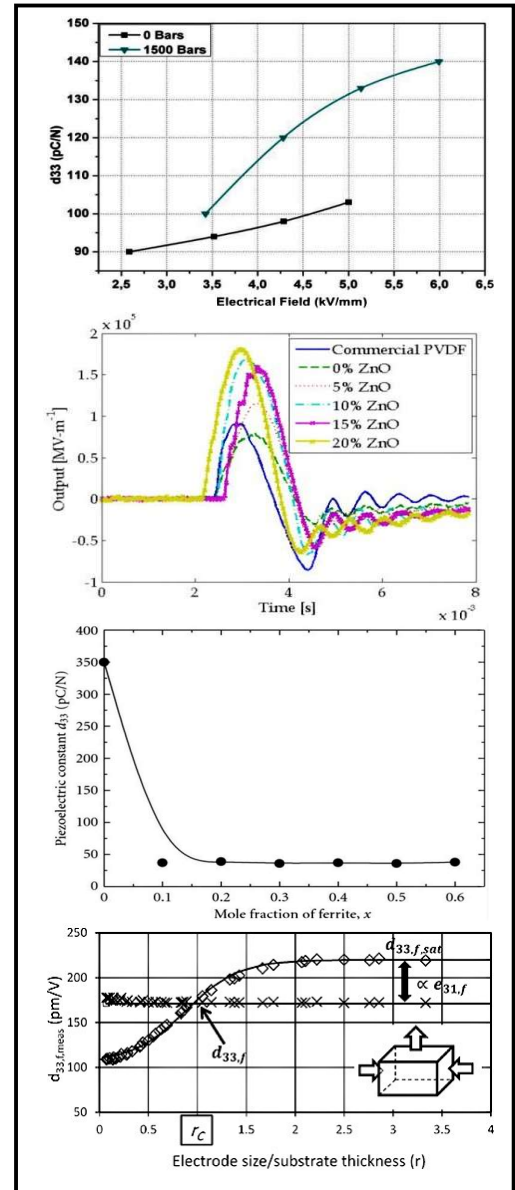
MODEL: D33PZO1

Various tests performed by this model:

- Piezoelectric constants.
- Resonance Method. – (Piezo Test Set-up)
- D31, D32, D33, without any special attachment.

Optional tests performed:

- D31, D32, D33 at different temperature and room temp.
- C, d15, ϵ_{33}^T , $\tan \delta$, g15, g31 and g33.



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TECHNICAL SPECIFICATIONS

The Highly advance d33 takes care of important functions of the measurement automatically with proper force application with human intervention.

MODEL	D33PZO1
D33 Range x 1 range	10 to 2000 PC/N
D33 Range x 0.1 range	1 to 200 PC/N
Frequency	110Hz Fixed Frequency
With External Function Generator	30Hz – 300Hz (Adjustable)
Force	0 - 0.25N
Accuracy x 1 range	1% of Range
Accuracy x 0.1 range	2% of Range
Resolution x 1 range	0.1 PC/N
Resolution x 0.1 range	0.01 PC/N
Shunt Capacitance: x 1 range	0.1 pF
Shunt Capacitance x 0.1 range	0.01 pF
Dimensions	Force Head: 120x160mm / Chassis: 300x220x100mm
Construction	Aluminium chassis
Force Head	Non-Magnetic Cylindrical
PC Interface	RS232
Data Format	ASCII
Software	Executable Installation
Data Cables	Isolated non ohmic
Sample Type	Ceramics, Polymers, and Single Crystals
Calibration	Factory calibration at 293°K
Weight	Force Head: 5 kgs, Chassis: 4 kgs
Input	110/220 Volt AC 60/50 Hz
Temperature Option	Specification
Temperature range	RT – 473°K
Ramp Rate	4°C
Resolution	0.1°K
Accuracy	1°K
Temperature Stage	DC

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