

High Voltage Engineering Lab

The High Voltage Lab in Electrical Engineering Department is a unique facility that has been created with a view to not only provide real time experience to learners about working on High Voltage Phenomena including Corona loss, Dielectric Puncture, HV Measurement techniques, Protection aspects but also serve as a Powerful platform for Academic- Industry linkages through Field Tests and Academic Programs for mutual benefit. Successful launch & Operation of World Class facility in the form of TIFAC-Centre of Relevance & Excellence (CORE) on Power Transformer Diagnosis is one such achievement of High Lab at EED in NIT Hamirpur. This lab is successfully serving as a hub of practical exposure for UG/PG and Ph D students and has all requisite infrastructure to carry out experimentation related HV Impulse, HVDC & HVAC tests on Electrical Systems, Dielectrics, assessing electrical health of Test samples of Solid, liquid and Gas insulations, Testing earth mat conditions.



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Equipment Details

<i>Hardware</i>	<i>Qty</i>
1. 280 KV Marx Impulse Voltage Generator Test Set with control Panel	01
2. 280 KV HV DC Voltage Generator Test Set	01

3. 200 KV Power Frequency High Voltage AC Generator Test Set	01
4. 60 KV Solid Insulation AC Voltage Test Set	01
5. 25mm, 15mm, 10mm Sphere gap Assembly for Uniform Air Gap Dielectric Test Set	01
6. Non Uniform Rod-Rod, Rod- Plane Plane-Plane Assembly for Air Gap Dielectric Test Set	01
7. C & Tan Delta Test Set for High Voltage Apparatus with 10 KV Power Supply and measurements	01
8. Oil BDV Test Set for oil filled High Voltage Apparatus with 60 KV Power Supply and measurements	01
9. Digital Earth Test set with three probe and terminal test leads for earth pit resistance measurements	01
10. Digital Earth Test set with four probe and terminal test leads for earth soil resistivity measurements	01
11. TTR meter with kit assembly	01
12. 5KV Insulation Test set with kit assembly	01
13. Micro – Ohm Meter with kit assembly	01
14. Field Screened, Dust free HV Lab (25mx12mx8m)having Faraday Cage and properly maintained Earth Mat Assembly	01
15. 100MHz DSO with Probes	01
16. 1GHz DSO with Probes	01
17. Electrolytic Field Assembly	01