

Dielectric Response Analyzer

The equipment shall be used for measurement and analysis of water (moisture) content in oil-paper insulations of power transformers by Dielectric response principles and shall have following features:

1. The test equipment shall use Frequency Domain Spectroscopy (FDS) or combination of Frequency Domain Spectroscopy and polarization depolarization Current (PDC) analysis techniques. If the equipment uses combination of FDS & PDC methods, the change-over from FDS to PDC method or vice versa shall be automatically done by the software. It shall also be possible to make measurements, if required, in UST, GST & GSTg modes.
2. The software for operation of the kit and analysis of the results shall be provided. The software shall be user friendly. The software shall have in-built test templates for testing of transformers (Two winding/Three winding /Auto transformers) and shall display the connection diagram accordingly for ease of operation. The analysis software should have model curves with known water content for comparison of curves. The software shall provide an automated procedure for assessing the moisture content of the cellulose (pressboard and paper) of the power transformer insulation in percentage (%).
3. The test results shall not be influenced by interferences in 765kV live switchyard.
4. The test set should be supplied completely with test kit, leads, laptop, necessary software and hard transport case.

Technical Specifications:

Frequency	0.1 mHz - 5 kHz
Voltage/Current Output (peak)	0-200V, 0-50mA
Capacitance Range	10 pF to 100 μ F
Dissipation Factor Range	0-10
