

# Transformer Test Pro (TTP) Software for Transformer Testing

A Graphical User Interface, Data Acquisition (DAQ) & Report Generation Software, to increase the Productivity, Consistency, Reliability of Testing of Transformers of all ratings up to 900 MVA

### **Features of TTP Software**

- Inbuilt drivers for automatic measurements acquisition from any type of communicable Test Instrument. Allows editing & entering measurements manually
- Gives alarms for invalid or incorrect measurements
- Easy storage & retrieval of all the test reports
- Prints Test Report complying with IS, IEC, ANSI & SABS
- Auto indexing & page numbering of test reports as selected test sequence
- Analysis Report facility
- Prints detailed test report, short test report & extra short report with single page.
- Facility of printing formulae sheet when required
- Suggests Capacitor Bank Connection
- Instant data back-up facility
- ERP Integration
- Remote On-line test witness

#### **Benefits of TTP Software**

- Reduction in testing process time
- Instant error-free calculations, report generation & printing
- Increases the testing productivity

#### TTP Software suitable for testing of

Generator Transformer	Power Transformer	Furnace Transformer	Distribution Transformer
Station Transformer	Auto Transformer	Rectifier Transformer	Locomotive Transformer
Dry Type Transformer Neutral Ground Transformer		Unit Auxiliary	
		Transformers	

#### TTP software suitable for testing of Transformers with

Parameters	TTP suitability for	
Conductor	Aluminum / Copper	
Phases 1/3		
	2/3/4/Auto/Unloaded Tertiary	
Windings	Single / Dual / Split / Zigzag / Fork connection Auto	
	Transformer	
Vector Group All, Single / Dual		
Casting	ONAN / ODAF / ODWF / OFAF / ONAF / ANAF /	
Cooling	ANAN / AN	
Testing Options	Final / Internal / Stage / After short circuit / Before	
Testing Options	short circuit / Customer witness inspection	





### **Tests Covered By TTP Software**

SR. NO.	TESTS
1	Measurement Of Voltage Ratio And Check Of Phase Displacement
2	Measurement Of Winding Resistance
3	Measurement Of Insulation Resistance
4	Measurement Of No Load Loss And No Load Current
5	Test To Prove Over fluxing Capability / Oil Soaking Test
6	Measurement Of Load Loss And Impedance Voltage
7	Three Winding Losses Of Three Phase Transformer
8	Measurement Of Impedance Voltage
9	Measurement Of Single Phase Impedance
10	Calculation Of Efficiency And Regulation
11	Separate Source Voltage Withstand Test
12	Induced Over Voltage Withstand Test (Uniform / Non Uniform Insulaion Method)
13	Induced Over Voltage Withstand Test With Partial Discharge
14	Magnetic Balance And Magnetizing Current Test
15	MEASUREMENT OF NO LOAD LOSS & NO LOAD CURRENT AT LOW VOLTAGE
16	Measurement Of Load Loss And Imped. Voltage With Spill Current
17	Measurement Of Load Loss And Impedance Voltage At Low Voltage
18	Measurement Of Single Phase / Three Phase Short Circuit Impedance
19	Magnetic Circuit Test
20	Check Of CT Ratio And Polarity
21	Excitation Current Measurement
22	OLTC Motor Current Measurement
23	Check Of CT Knee Point Voltage
24	Check Of CT DC Resistance
25	Tests On On – Load Tap Changer (OLTC)

SR. NO.	TESTS
27	Measurement Of Capacitance And Dissipation Factor
28	Measurement Of Harmonics
29	Measurement Of Acoustic Noise Level
30	Measurement Of Power Taken By Cooler Circuit
31	Measurement Of Zero Phase Sequence Impedance
32	RSO Test
33	Lightening Impulse Voltage Withstand Test
34	Lightening Impulse Voltage Withstand Test For Neutral Winding
35	Measurement Of Transferred Surge Voltage
36	Temperature Rise Test For Overloading Cycle
37	DGA Test On Oil Before And After Temperature Rise Test
38	Oil BDV Test
39	Water Content Test
40	Measurement Of Vibration Of Transformer At Rated Excitation
41	Functional Checks Of Control Panels
42	Switching Impulse Voltage Withstand Test
43	Oil Leakage Test
44	Pressure Deflection Test
45	Vacuum Deflection Test
46	Test On Pressure Relief Device
47	Jacking Test
48	Measurement Of Oil Quantity For First Oil Filling
49	Visual Inspection And Dimensional Test On Assembled Transformer
50	Calibration Of WTI & OTI
51	Frequency Response Analyser
52	Thermal Imaging
53	Dew Point Measurement

Order Code:

**TTP-R** – Transformer Test Pro Software for Routine Tests.

TTP-RH - Transformer Test Pro Software for Routine & Heat Run Tests

 $\boldsymbol{TTP}\text{-}\boldsymbol{F}$  – Transformer Test Pro Software for Routine, Type and Special Tests

Suffix:

-E- Transformer Test Pro Software with ERP integration

-W- Transformer Test Pro Software with Website integration



## List of Test Instruments supported by TTP Software for Automatic Data Acquisition

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Insulation Tester		
SN	Manufacturer	
1	AVO	
2	MEGGER-MIT1020	
3	MEGABRAS-MD5060e	
4	MOTWANE 5KPIV4	
5	MEGGER-MIT525	
6	SIVANDA IR5K4	
7	MEGABRAS-MD5060e	
8	GW-INSTEK	

Power Analyser		
SN	SN Manufacturer	
1	LMS	
2	YOKOGAWA - WT3000	
3	YOKOGAWA - WT230	
4	YOKOGAWA - WT330	
5	YOKOGAWA - WT333	
6	Veer	
7	YOKOGAWA - WT500	
8	HIOKI- 3337	

	Oil BDV Tester		
SN	SN Manufacturer		
1	SIVANANDA-OIL/BDV		
2	MEGGER-OTS100AF/2		
3	SIVANANDA-OIL/BDV		
4	MEGGER-OTS100AF/2		

Resistance Meter		
SN	Manufacturer	
1	RAYTECH WR-50	
2	TINSLEY 5896C	
3	MOTWANE XWRM-10	
4	PRESTIGE	
5	RAYTECH WR-14	
6	RTF	
7	TWRM-10A	
8	TRM25	
9	TWRM-10A	
10	GW-INSTEK	

Ratio Meter		
SN	Manufacturer	
1	SIVANANDA ATRM-1(UP)	
2	RRAYTECH TR-MARK IIIR	
3	UDEY RATIO METER	
4	Tinsley 4167F	
5	SIVANANDA	
6	TINSLEY 4167D	
7	RAYTECH-TR SPY	

	Temperature Scanner		
SN	Manufacturer		
1	NIPPON		
2	RADIX		
3	YOKOGAWA		
4	SCHNEIDER		