

Our comprehensive Solution Packages offer many benefits. Each Total solution package offers a set of products carefully selected by our experienced team. We have a range of total solutions packages to suit diverse needs. Please feel free to click through to the respective product pages for detailed information on the product and to download PDF product guide:

### **1▯ General Purpose Electrical Test Equipment for Transformers**

[1.1- Multifunction power tester type PMM-1 with data logging facility and software](#)

[1.2- True RMS Digital Multimeter type AVO410, complete with test lead set.](#)

[1.3- AC/DC Digital clamp meter type DCM340](#)

[1.4- Earth clamp tester type DET24C with memory/ download](#)

[1.5- Insulation Tester up to 1KV type MIT420 with Standard Accessories](#)

[1.6- Insulation Testers from 5KV up to 10KV type MIT515, MIT525 & MIT1025 with all standard accessories.](#)

### **2▯ Winding Resistance Testing**

[2.1- Transformer Ohmmeter/Winding Resistance and Tap Changer Test Set type MTO210 complete with test lead set](#)

[2.2- Three phase automatic transformer winding resistance test set with integrated computer type MTO330](#)

[2.3- High Power Micro-ohmmeter type MR8050 with built-in printer](#)

[2.4- Digital Low Resistance Ohmmeter type DLRO10X \(10A / rechargeable\) including memory / download functions, with standard accessories](#)

[2.5- Leakage Reactance Tester type MLR10, with capacitance test probe](#)

### **3 Transformer Turn Ratio Testing**

[3.1- Fully Automatic Single and 3 Phase Transformer Turns Ratio Test Set type TTR300 Series complete with all standard accessories.](#)

[3.2- Single Phase Hand Held Transformer Turns Ratio test set type TTR100 with standard accessories](#)

[3.3- Hand Held Transformer Turns Ratio test set type TTR25 with standard accessories](#)

[3.4- Single-phase Hand-cranked Transformer Turns Ratio Test Set type 550005 complete with standard accessories](#)

### **4 Capacitance + Dissipation Factor (Tan Delta) Test Sets**

[4.1- High Voltage Automatic Power Factor Test Set \(Tan Delta\) with "PowerDB software" type Delta 4310 complete with all standard accessories \(version without integrated computer: DELTA4000\)](#)

[4.2- High-precision capacitance and dissipation factor measurement instrument type CDAX605](#)

### **5▯ Current Transformer CT Testing**

[5.1- CT test set \(automatically or manually perform saturation, ratio, polarity, winding resistance, demagnetizing tests and insulation tests on current transformers\) type MRCT + STVI \(smart touch view interface\).](#)

[5.2- Step-up transformer test set type MAGNUS](#)

[5.3- Multifunction Primary Test Set up to 5KA type INGVAR](#)

### **6▯ Instrument Transformer Testing (CT/PT Meter Testing)**

[6.1- CURRENT AND POTENTIAL INSTRUMENT TRANSFORMER TEST SET \(W series\).](#)

[6.2- Portable standard meter and instrument transformer type PWS2.3 genX](#)

### **7▯ Transformer diagnostic instruments (Mechanical/ electrical faults in Transformers)**

[7.1- Transformer Frequency Response Analyzer type FRAX101 or FRAX150 \(with built-in PC\) complete with all standard accessories](#)

[7.2- Transformer Life Expectancy / Insulation Diagnostic Analyzer \(Automated analyzes of Tan Delta & moisture content\) for Power Transformers type IDAX300 or IDAX350 with built-in computer & DB software on board.](#)

### **8▯ PD Measurement for MV and HV. (Applicable to latest measurement on Switchgear & Transformer)**

[8.1- PD Level Indicator type PDS Air complete with accessories](#)

### [8.2- Online & Offline PD Test Equipment for Testing of Medium Voltage Transformer consisting of:](#)

- Partial Discharge Test Hardware type OSM  
Longshot – WR Xi (4-ch PD Analyzer) with HFCT Sensor, TEV Probes, Mini Pulse Generator, 36kV, 850pF High Voltage Coupling Capacitor, Variable Gain Amplifier, Test Cables
  
- Hardware Package Includes Carry Case, Mini Keyboard, Optical Mouse & Mouse mat and 80GB USB Portable Hard Disk (for storage and transfer of PD Gold data files).
  
- Partial Discharge Test Software type PD Gold + PD Reader (Data Analysis Software) + PD Waveform Capture & Analysis Software  
Option - AC High Voltage Low Discharge System for Offline Testing can be provided on request.

## **9 TRANSFORMER OIL TESTING**

### [9.1- Transformer Oil Dielectric Test Set](#)

Fully Automatic Oil Test Set type OTS series with all standard accessories (Lab and rechargeable versions for the field)

### [9.2- Transformer Oil Moisture Test Set](#)

Portable Moisture in Oil Test Set type KF-UNI / KF-875 complete with all standard accessories

### [9.3- Interfacial tensioner for transformer oil](#)

### [9.4- Acidity/ neutralization number for transformer oil](#)

### [9.5- Automatic transformer oil TAN DELTA test set with oil sampler kit](#)

### [9.6- Transformer Oil Treatment Plants](#)

Transformer Oil Treatment Plant (300 to 12000 L/H)

Please specify the requested capacity.

### [9.7- Oil regeneration and re-adsorption plants](#)

## **10 Gases in transformers**

### [10.1- Gases in Transformer Oil \(Portable GC for detection of 11 Gases\)](#)

Dissolved Gas Analyzer for transformers according to DIN/IEC567 type Mobil GC version2, consisting of :

- GC with TCD, one channel column, automatic injector valve, Software for detection of 11 fault gases in 19" portable case
- 2 Detector FID (Flame Ionisation detector) for more accurate detection of hydro carbons
- Methanizer (filled with catalytic powder)
- 2. column (Molesiev column 30m x 0,53mm inner diam.) for detection of O, N, H<sub>2</sub>

- column switch for autom. Measurement. Procedure
- Autom. sample loop with dosing valve, fixed dosing volume
- Internal carrier gas supply for approx. 80 h of operation
- Internal burning gas supply for approx. 80 h of operation H2
- Partial vacuum degassing according to DIN/IEC 567 consists of:
  - Oil syringe incl. access.
  - 3 port valve
  - gas volume syringe
  - gas injection syringe
  - rubber caps
- Software and Expert system for autom. measurement procedure
- Operating manual
- Transport case

[10.2- Dissolved Gas Analysis with Automatic Degassing unit According to IEC567 /ASTM 3612 type Top Toga GC.](#)

## **11 Transformer Oil Moisture (fault gases)**

[11.1- Transformer Composite Gas in Oil Monitoring type Hydrocal 1001+](#)

[11.2- Transformer Composite Gas in Oil Monitoring type Hydrocal 1003](#)

[11.3- Transformer monitoring unit type Hydrocal1005 for 4 gases and moisture](#)

[11.4- Transformer monitoring unit type Hydrocal1008 for 7 gases and moisture](#)

### **12 Transformer loss measuring systems**

[12.1- Transformer loss measuring system 7000 series](#)

[12.2- Transformer loss measuring system TLMS/ TTS series](#)

### **13 TRANSFORMER TEST VAN**

[13.1- TRANSFORMER TEST VAN \(Economy\)](#)

[13.2- TRANSFORMER TEST VAN \(Advanced\)](#)

**14 High Voltage Lab for AC, DC and Impulse Testing can be provided upon request**

### **15 Transformer Electrical Workshop**

*A complete Transformer Repair Workshop including Winding / Rewinding, Coil Winding Machines, Ovens, Essential Tools and other Accessories can be provided upon request.*