

Exciting TEST Products for the US Power Industry , from.....

"Power Industry Test Specialists"

PROGUSA LLC

MV&HV CIRCUIT BREAKER Testing for Timing & Travel, Micro-ohms for contacts ("Ductor"), & CB Coil testing and CB power for commissioning



Power Supply for CB Coil Testing for low Volt operability and CB commissioning. Measures coil resistance. SAT40A, POB40AD.



LIGHTWEIGHT Portable micro-ohmmeters, TRUE DC, Light-weight cables, 100A to 800A versions. 200A most popular in US. RMO-200G



CAT series of low cost Breaker timing/motion analyzers. 3 or 6 or 12 timing ch. Many models under \$10K. Now with DRM ability and higher channel count. Both Sides Grounded test option.



SF6 gas quality Testing and Leak Detection



RH 973-SF6 for SF6 purity and **ultra-accurate** dewpoint (moisture content) via chilled mirror technology, plus SO2 plus convenient **recovery of test sample.**

SF6 combo tester available for moisture, purity and decomp (SO2, HF) products! Internal sample capture and pump-back, so no emissions. Useful graphic display. Under 55 lbs w case.

GA11 from Wika



Precision SF6 leak Detectors (Only Sf6 gas detected, unaffected by moisture or cloud scatter) Easy to pin-point leaks. GIR-10 models.



Wika also offers precision single parameter SF6 testers for Dew Point, Purity or SO2.



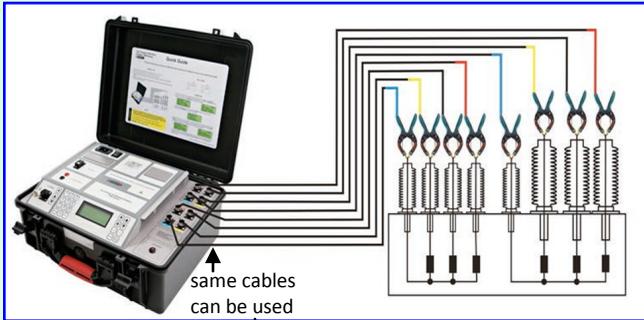
SF6 gas recovery, filling and drying



Enervac's GRU-7 and -8 are SF6 gas carts for recovery rates of 28 kg (62 lb.) 17cu.m. / hr & 40cu.m. / hr and are suitable for vacuum recovery, filling and drying of gas for up to **115KV and above** breakers. Particle removal filters included. Available in wheeled version or shop version.



POWER TRANSFORMER DIAGNOSTIC EQUIPMENT



DV Power's **Newest Diagnostic tester (TWA-40D)** for 3 phase fast winding resistance test, inter-active graphic **dynamic OLTC test (aka DVtest)** and **Auto-DeMag** function. TRUE 3 phase source for convenient and simultaneous H and L side testing, an industry first!!! Same leads can be used for TRT63A for true 3 phase TTR measurements on same transformer. Lower cost model TWA-25K available as best six phase Winding Resistance Tester in US market. One climb for connection to all six phases.



TRANSFORMER TTR for true 3 phase turns ratio testing. Fully automatic, measures turns ratio, phase shift, excitation current and auto-detects vector groups to verify nameplate vs windings. Three phase generate and three phase measure. PC software incl. Displays accurate phase readings, other TTR's cannot. Same cable set as TWA-40D for convenient 3 phase testing. TRT63A has 1, 8, 40, 100, 250 VAC ranges for CT thru to largest power transformers.

(DEM-60C) Stand-alone 3 phase **Auto-Magnetic One –Touch De-Magnetizer** for any size Power Transformers. SAFE. SIMPLE. Auto-step-down method ensures full de-mag.



Transformer Winding Resistance Tester (RMO-60TD) up to 60A and 60V of drive for fast testing of even largest power transformers, in combo Transformer Tester. 60TD includes effective **dynamic graphic timing and resistance of OLTC's** and built-in Tap Changer control. PC software for control, diagnostics and report gen. Includes safe **Auto-DeMag** feature plus std auto-discharge !!

TRANSFORMER OIL DE-GASSING & DRYING



EHV Vacuum Oil Purifier System

Wide range of std and custom **transformer insulating oil** de-gassing, drying and regeneration systems. Uses high vacuum process to reduce water to less than 10ppm, soluble air to less than 0.25% and particulates to sub-micron levels. Fuller's earth filters are optional for removal of other contaminants.



E575R Regeneration System



Exciting TEST Products for the US Power Industry !

BATTERY BANK Testing

TEST those substation battery banks. Simple voltage and /or resistance scan, to impedance test with load-test competency, to full discharge testing with auto-scanning. BE ready for NERC and ensure that last line of defense, "DC" for control, is still intact.



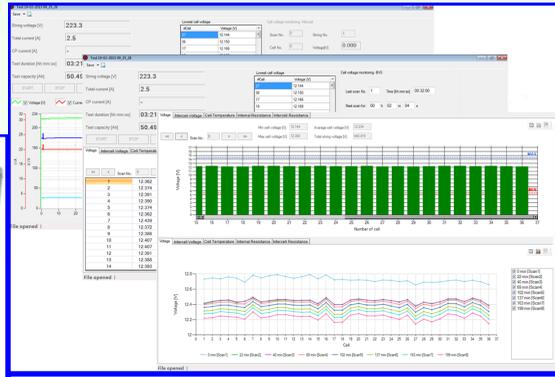
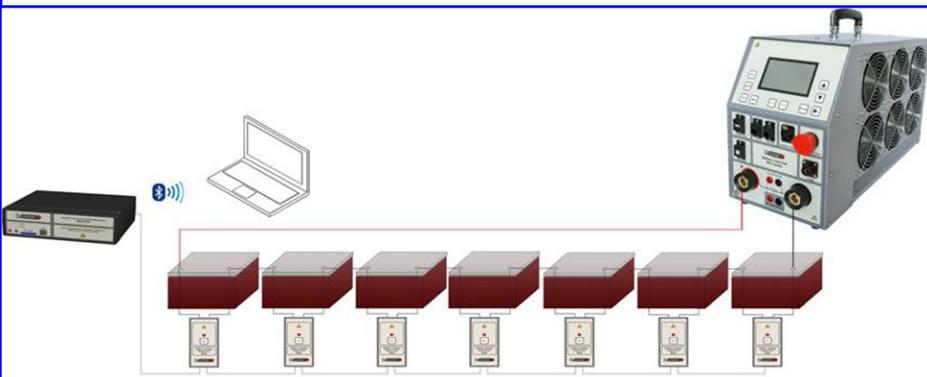
DV Power BLU 200A, DC load with 10-300 VDC, 18KW input. Settable limits for low volt level, A-H accumulated or time expiry. Graph report. <30lbs.



BAC25, DC Battery Charger to augment the permanent battery charger to speed up bank recharge times and reduce wait time to full back-up energy..



DV Power's BVR-20 for manual cell by cell testing, Use as routine bank voltage test or alongside BLU during capacity test to identify the weak cells,



Model BVS, Cell by cell voltage scanner, sample graph for EASY determination of faulty cells. Works well with BLU capacity tester and generates effective battery bank health reports.

TRANSFORMER OIL DE-GASSING & DRYING



Enervac model EHV4000 (1050 GPH) oil purification processor in a dual axle cargo trailer.



Model TFS2 on-line OLTC filter to reduce carbon and metallic particles, and water. Reduces LTC maintenance.

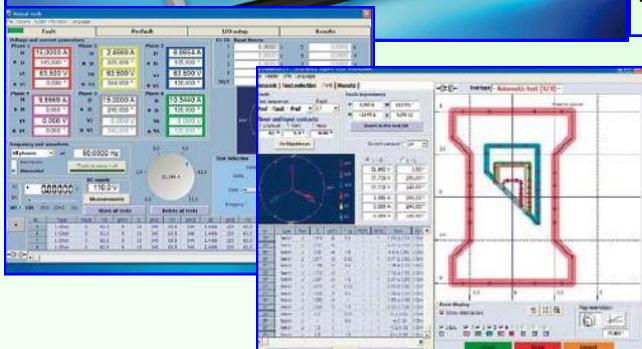
Mini-dehydrator / degas up to 60 GPH. Priced under \$16K.



Protective RELAY System Test



DRTS 34/64/66 is the Latest addition to ISA's powerful line of [multi-phase RELAY testers](#). Adding front panel control, and more power. Free software, free and easy updates, free multiple software copies! Now with **ENOSERV** software compatibility. Up to 6V and 6I channels in one box. Up to 32A / ch. and 430va. Unique TRANSCOPE option for multi-channel system signal recording. End to end testing via satellite timing.



Protective **RELAY** Tester for single or dual phase tests, under \$10K. (T1000P)The relay technician's toolbox, multiple outputs and complex timing measurements. Variable phase and variable frequency. Up to 200A of drive.



SFRA5000 Test set

Wide bandwidth (5Hz to 45 MHz) vs others in market and 10X better accuracy (0.02db). Gives graphic 'fingerprint' of mechanical aspect of transformer to detect issues during shipment or other vibration.



CT Testers



CT and PT testers (T2000) for phase, turns ratio, excitation curve. CT test using Current method for improved competency, **AND** popular Voltage method available from ISA test, up to 4000Amp source with boosters. Also typical US 'Voltage method' portable CT error tester from **Red Phase**.

OVERHEAD LINE FAULT LOCATOR

From ISA Test. (TFS2100) The most accurate overhead transmission and distribution **LINE FAULT LOCATOR**. Accuracy: ± 150 yd typical regardless of the line length. Using Travelling Wave technology ! Easy to install. Non-intrusive. Differentiates between lightning and ground faults. Up to 4 x 3ph lines in one 2U rack space on each end of line(s).



New from ISA, Power Factor Test set

Model STS3000lite w TD5000, Affordable power factor (tan delta, capacitance), dissipation and excitation current test. 12KV, fully automatic. 15-500 Hz output. Local control with large graphic display. Test & Data Management Software for database, storage and report. Compact and lightweight.



Exciting TEST Products for the US Power Industry

PARTIAL DISCHARGE Test and Monitoring



PD testing is the action of detecting aging signals before failure of power equipment. This technology is used extensively in the world and ProgUSA brings new tools to the USA market !



IPEC's model SG1 PD locator verifies and pinpoints PD to within 4 inches within switchgear cabinets. Also using TEV and ultrasonic measurement technology, it goes beyond other locators, by seeing power cycle noise (e.g. fluorescent lights, battery chargers) and eliminating it from graphical measurement display. Sync's with supplied HFCT sensor on ground cable. Easy to interpret PD presence and identify repair locations.



IPEC's model SGS Portable PD identifier has the superior ability to screen out noise and **only display PD** signals. Uses TEV and ultrasonic (aka acoustic) measurement technology. Competitively priced at under \$10K. Ideal for quick verification of PD presence in switchgear as a safety tool, as well.

IPEC's product focus is for the **4.16KV to 35KV** switchgear applications.



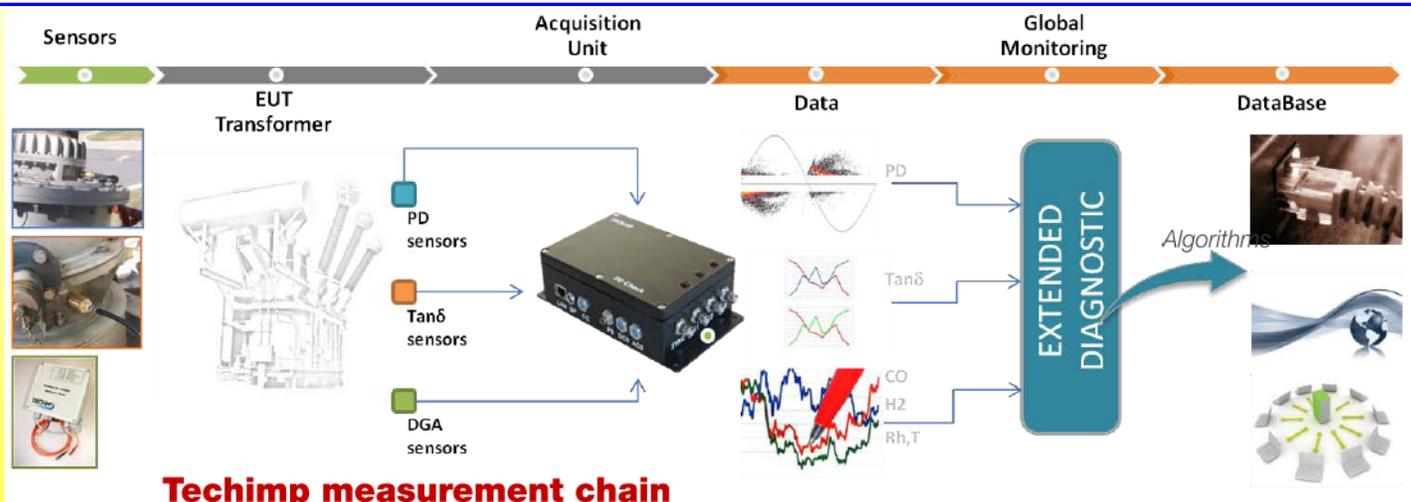
Techimp's PD Check Portable PD uses multiple sensor types and statistical analysis and 'TF map' to assist in eliminating interference and locating PD, even for unskilled operators.



Techimp's PD Scope is for short term monitoring of power transformers or other switchgear capturing intermittent PD. Uses combination of UHF sensors via bushing tap or window, and Acoustic sensors. For power transformers of all sizes.



Techimp offers a complete measurement chain for **on-line condition assessment** of power transformers in substations including sensors and subsystems and high level reporting to management, for Partial Discharge, Tan Delta (Capacitive current) and Dissolved Gas Analysis (Hydrogen, Carbon Monoxide and moisture). Newest generation of DGA with unique sensing membrane. Patented Tan Delta allows trigger threshold for problem.





Exciting TEST Products for the US Power Industry



"Power Industry Test Specialists" ProgUSA LLC

OUR STORY: ProgUSA is a unique American company providing premium diagnostic Test equipment for many application areas within the US electric power industry. ProgUSA provides a sales, support and service network across the entire USA for select high quality manufacturers originating outside USA. We focus on tools that are more advanced on diagnostic technology and have excellent value, and continuously offer education on such diagnostics.

Application Areas:

Front Page. **Circuit Breaker** testing, **Sf6 gas** test, leak detection, recovery, filling and drying

Page 2. Power **Transformer** and **OLTC** Diagnostics. Oil de-gassing / drying/ regeneration

Page 3. **Battery Bank** Testing and monitoring , Transformer Oil Purification

Page 4. Protection System & **Relay** testing, **Power Factor** and **SFRA** testers, Overhead **Line Fault** Monitors

Page 5. **Partial Discharge** Test and Transformer **Condition Monitoring**

Shopping List from this informative flyer:

HOLD THE PRESS: Last minute addition...DV Power's new RMO200H low cost (<\$6K) handheld **micro-ohmmeter**. Up to 220 AMPS TRUE DC, ripple free current. Battery powered. Uses super capacitor technology and weighs only 2 lbs..



SERVICE: ProgUSA realizes that US customers want to be sure that there is USA based service available for their instruments. ProgUSA has a basic service shop in our Orlando office and a nearby full service repair and NIST calibration shop. In the rare case that the test set needs to be returned to the factory, ProgUSA handles all export & import papers to simplify ownership for the test set owner.

TRAINING: Certain test sets use can be optimized if the end-user gets proper training. ProgUSA has specialists on hand to offer such training for the more complicated diagnostic equipment. In some cases it is an on-customer-site session and in other cases it is a regional seminar style.

www.progusa.net with offices in Orlando (HQ and Service Center), Los Angeles, Chicago, Dallas and New Jersey

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