

Power and Energy Measurement Specialists

Tx Auditor

Portable Transformer Analyzer

Ratio

Burden

Admittance



R A D I A N

Test With or Without Load

Portable Transformer Analyzer

Transformer Testing to a New Level!

The Tx Auditor™ is designed with Radian's years of leadership and experience in electricity measurement. The result is a technologically advanced and industry-leading solution for testing current and potential transformers while they remain in service.

The Tx Auditor incorporates technologies from our state of the art burden testing module, ultra performance watt-hour standards and the long-established model 505 transformer analyzer. The Auditor provides functionality and testing capability on-site that, until now, required several pieces of equipment.

Designed with metering professionals in mind the Tx Auditor is light weight, extremely durable and provides unprecedented performance.

CT Admittance Testing

The Tx Auditor can perform admittance testing by injecting a known frequency into the secondary of an in-service transformer and detecting the circuit admittance. Admittance testing can be performed with or without load on the primary. Circuit admittance of any particular current transformer installation is nearly constant throughout the operating range, unless a fault is present. Therefore, if the admittance measurement shows a deviation from normal, it is likely that the transformer or installation is defective. When performing an admittance test, failure is easy to detect, testing time is reduced and increased user safety is accomplished.

Portable Safe Operation

Tx Auditor is packaged in a durable, light weight, high-impact polypropylene case. Locking connectors prevent disconnect during testing eliminating any chance of an open CT which can cause injury to the operator. The Auditor performs a self-analysis procedure at start-up to ensure proper operation and user safety. The unit monitors voltage and current and prevents any scenario that may cause an open CT. From the Transformer Auditor's design concept, engineering and production, our staff works to ensure that your safety is a priority.



Tx Auditor Features

- CT Burden and Ratio Testing
- Single Cycle Burden Insertion
- PT Ratio Testing
- Convenient Clamp to Clamp CT Ratio
- CT Admittance Testing
- CT Demagnetization
- Choice of Accuracy Class
TX-20 ± 0.04%, TX-21 ± 0.02%
- 6.5" LCD Touch Screen
- Modern Windows* Operation

Choice of Accuracy Class

The accuracy of the Tx Auditor is provided by the choice of an embedded Radian RD-20 (0.04%) or RD-21 (0.02%) Reference Standard. Select the standard that meets your budget and provides the accuracy necessary to confidently test your transformer installations.

Convenient Clamp to Clamp Ratio Testing

The Tx Auditor has the ability to use a calibrated current clamp for scenarios that do not provide convenient access to directly measure the CT's secondary signal. Multiple clamp inputs for various primary current sensors allow for the user to choose the best sensor for each unique testing application. Testing can be performed without a test switch installed increasing safety and reducing time on-site. In many cases, the need for re-wiring for test or replacing the CT is eliminated further enhancing operator efficiency.

*Windows is a registered trade mark of Microsoft corporation

Specifications

Operation	Range	Specification
Secondary Voltage Measurement	VS1 - 30 to 600 volts (Autoranging)	TX-21 $\pm$ 0.02% TX-20 $\pm$ 0.04%
Primary Voltage Measurement	VP1- 1 kV to 40 kV (0 to 3 V RMS) (using mV probes)	$\pm$ 2% Sensor Link - Volt LiteWire LW-8014, LW-8013, LW-8012
Secondary Current Measurement	IS1 - 0.02 to 25 Amps	TX-21 $\pm$ 0.02% TX-20 $\pm$ 0.04%
	IS2 - 0.2 to 800 Amps (0 to 800 mA) (using Radian Probes)	See Clamp Specification RC-SR704 RC-MN106
Primary Current Measurement	IP1 - 5 to 3000 Amps (0 to 3 V RMS) (using mV probes)	See Clamp Specification 3000-48, 3000-36, 3000-24 MR411, MR521, LW2000
	IP2 - 0.02 to 800 Amps (0 to 800 mA) (using Radian Probes)	See Clamps Specification RC-JM830A RC-SR704 RC-MN106
CT Ratio Range	Up to 3000:5	See Clamps Specification
Admittance	1.0 mS to 125 mS (Autoranging)	$\pm$ 5% F.S. 0.14 Ohms Insertion Burden 1575Hz
Burden Resistance	0.1 - 8.0 Ohms	TX-20 $\pm$ 0.04% TX-21 $\pm$ 0.02%

Environmental

Operating Range	-20 to 50°C, -4 to 122°F
Storage Range	-20 to +70°C, -4 to 158°F
Humidity	10 to 95% non-condensing

Battery

Continuous Run Time	5 hrs
Standby Time	43 hrs
Charge Time	3 hrs

Input Power

Battery Charger Input	100 - 240 VAC
Aux Power Charger Input	24 V DC

Physical Attributes

Size (LxWxH)	15.14in x 12.13in x 6.81in 384mm x 308mm x 172mm
Weight	24 lbs / 10.8 Kg

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