

TRANSFORMER RATIOMETER



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DTR® MODEL 8510

Designed for on-site testing of power, potential and current transformers



FEATURES

- Measures power transformers, VT/PTs and current transformer CT turns ratios
- Displays turn ratio, excitation current, winding polarity and % deviation from the nameplate values
- Universal voltage (90/240) V supply, (50/60) Hz via external smart/fast battery charger; completely charge in less than 4 hours
- Two internal NiMH batteries provide up to 10 hours of continuous operation
- Tests performed by exciting the primary and reading the secondary – provides safer conditions for the operator
- Display warns of incorrect lead connection, reverse polarity, open and short circuits
- Easy connection and test setup; no calibration or balancing required
- Large dual display with adjustable contrast ensures clearer visibility in any lighting environment day or night
- Low battery indicator
- Stores up to 10,000 test results in internal memory
- USB port facilitates configuring the instrument and downloading test results
- Includes DataView® analysis software for programming, downloading, storing and report generation of test data

MODEL	DTR® 8510
VT / PT Ratio Range	Auto-Ranging 0.8000:1 to 8000:1
CT Ratio Range	Auto-Ranging 0.8000 to 1000.0
VT/PT Accuracies*	Ratio 0.8000 to 9.9999 $\pm 0.2\%$ of Reading Ratio 10.000 to 999.99 $\pm 0.1\%$ of Reading Ratio 1000.0 to 4999.9 $\pm 0.2\%$ of Reading Ratio 5000.0 to 8000.0 $\pm 0.25\%$ of Reading
Excitation Signal	VT / PT Mode: 32 Vrms maximum CT Mode: (0 to 1) A, (0.1 to 4.5) Vrms
Excitation Current Display	Range: (0 to 1000) mA; Accuracy: $\pm 2\%$ of Reading ± 2 mA
Excitation Frequency	70 Hz
Measurement Method	In accordance with ANSI / IEEE C57.12.90™
Display	LCD 16 character, 2 line, large format, LED backlight, day / night visible
Languages Supported	English, Spanish, French, Italian, German, Portuguese
Communication	Optically isolated USB 2.0
Data Storage	Stores up to 10,000 complete measurements
Power Supply	(2) rechargeable 12 V NiMH batteries (included)
External Charger	(90 / 240) V, (50 / 60) Hz (smart charger)
Battery Life	Up to 10 h continuous operation; May not be used while recharging; Low battery LED / LCD indication
Charging Time	< 4 h

SAFETY

Safety Rating / IP	EN 61010-1; 50 V CAT IV / IP54 (cover closed)
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Reference Condition: $(23 \pm 5) ^\circ\text{C}$, (50 to 70) % RH, full battery charge, no external fields or noise.

Consult factory for NIST Calibration prices.

PRODUCT INCLUDES

Soft carrying case, set of (2) 15 ft black leads, set of (2) color-coded (red/black) alligator clips, 10 ft USB cable, external battery charger (90-264 V_{AC}, (50/60) Hz), NiMH batteries (installed), 115 V power cord, and USB drive with DataView® software and user manual.



ACCESSORIES/REPLACEMENTS

CAT. #2136.76

Set of (2) leads, 30 ft for DTR®

CAT. #2136.77

Set of (2) leads, 15 ft for DTR® (Replacement)



CAT. # DESCRIPTION

2136.50 Digital Transformer Ratiometer DTR® Model 8510 (110/220) V