

TRANSFORMER RATIO METER



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DTR® MODEL 8511

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



DataView®



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FEATURES

- **Wide Ratio Range** – Accurately measures transformer ratios up to 8000:1 for VT/PT mode and 1000:1 for CT mode
- **Advanced Low-Voltage Step-Down Measurement** – Applies test current to the primary side windings, enhancing operator safety and enabling testing across a wider range of transformer types and sizes
- **Automatic Test Cycles** – Quickly checks for lead reversal and open circuits with no manual balancing required
- **Built-in Continuity Testing** – Detects open transformer windings quickly
- **Deviation Calculations** – Compare measured values to stored nameplate data for instant pass/fail results
- **Large Storage Capacity** – Save up to 9801 test results for easy recall and reporting
- **PC Connectivity** – Transfer data, set nameplate values and control the instrument remotely with included DataView® software
- **Rugged and Portable** – Lightweight, field-ready design with an IP53-rated protective case (*with lid closed*)
- **Flexible Power Options** – Operates on NiMH batteries or 12 V_{DC} external supply. Batteries can be recharged through USB-C connector or 12 V_{DC} external supply.
- **User-Friendly Interface** – Bright backlit 4-line display, intuitive navigation keys, and audible test alerts

WARNING: This product can expose you to chemicals, including Bisphenol A, Styrene, Acrylonitrile, 1,3-Butadiene, Ethylbenzene, Nickel, Carbon, and Lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov.

MODEL	DTR® 8511
VT / PT Ratio Range	Auto-Ranging 0.8000:1 to 8000.0:1
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 Current	Up to 2 A
CT Ratio Range	Auto-Ranging 0.8000 to 1000.0
CT Accuracy*	$\pm 0.5\%$ of Reading
Output Voltage (VT / PT)	30 V @ 64 Hz
Output Voltage (CT)	2 V @ 64 Hz
Display	LCD 20 characters x 4 line display
Languages Supported	English, Spanish, French, Italian, German, Portuguese
Communication	USB Type-A to Type-C USB 2.1
Data Storage	9801 measurements
Power Supply	USB Type-C and 12 V _{DC} charger
Measurement Method	In accordance with IEEE Std. C57.12.90™
Buttons	6 total buttons (One to start testing and five for navigation)
Battery Life	500 VT / PT tests
Battery Charge Time	10 h (See user manual for full details)
Weight	7.1 lbs (3.2 kg)

SAFETY

Safety Compliance IEC 61010-2-030, IEC 61326-1, IEC 60529, IEC 60068-2-6, IEC 60068-2-27, IEC 60068-2-31, Pollution 2

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

Includes (6) internal rechargeable AA NiMH batteries, extra large carrying bag, set of (2) 15 ft test leads (*primary and secondary*) with (4) alligator clips (*red/black*), 6 ft USB Type-C to Type-C cable, USB Type-C wall power adapter, 10 ft USB Type-A to Type-C cable, AC power adapter w/cord and USB drive with DataView® software and user manual.



ACCESSORIES/REPLACEMENTS

CAT. #2133.73: Bag – Extra Large Classic Tool Bag

CAT. #2133.76: Bag – Extra Large Carrying Bag w/ Rubber Bottom

CAT. #2136.76: Set of (2) leads, 30 ft for DTR® Models 8500, 8510 & 8511

CAT. #2136.77: Set of (2) leads, 15 ft for DTR® Models 8500, 8510 & 8511 (*Replacement*)

CAT. #5000.99: Clip - Safety Alligator - Black (1000 V CAT IV, 15 A, UL V2)

CAT. #5100.00: Clip - Safety Alligator - Red (1000 V CAT IV, 15 A, UL V2)

CAT. #5100.25: Adapter - USB Type-C Wall Power Adapter

CAT. #5100.26: Adapter - Replacement AC Power Adapter w/cord for DTR® 8511

CAT. #5100.27: Cable - 10 ft Type-C to Type-A USB 2.0 Full Speed (12 Mbps)

CAT. #5100.28: Cable - 6 ft USB Type C 3.2 PD to Type C

CAT. # DESCRIPTION

2136.55 Digital Transformer Ratio Meter DTR® Model 8511