

# TRANSFORMER RATIO METER



## DTR® MODEL 8511

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



## 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<sub>DC</sub> external supply. Batteries can be recharged through USB-C connector or 12 V<sub>DC</sub> 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](http://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)	5 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 <sub>DC</sub> 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
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Reference Condition: \*(23  $\pm$  5) °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. #5100.00:	Clip - Safety Alligator - Red (1000 V CAT IV, 15 A, UL V2)
CAT. #2133.76:	Bag – Extra Large Carrying Bag w/ Rubber Bottom	CAT. #5100.25:	Adapter - USB Type-C Wall Power Adapter
CAT. #2136.76:	Set of (2) leads, 30 ft for DTR® Models 8500, 8510 & 8511	CAT. #5100.26:	Adapter - Replacement AC Power Adapter w/cord for DTR® 8511
CAT. #2136.77:	Set of (2) leads, 15 ft for DTR® Models 8500, 8510 & 8511 (Replacement)	CAT. #5100.27:	Cable - 10 ft Type-C to Type-A USB 2.0 Full Speed (12 Mbps)
CAT. #5000.99:	Clip - Safety Alligator - Black (1000 V CAT IV, 15 A, UL V2)	CAT. #5100.28:	Cable - 6 ft USB Type-C 3.1 PD to Type-C USB 2.0 Full Speed (12 Mbps)

## CAT. # DESCRIPTION

2136.55 Digital Transformer Ratio Meter DTR® Model 8511