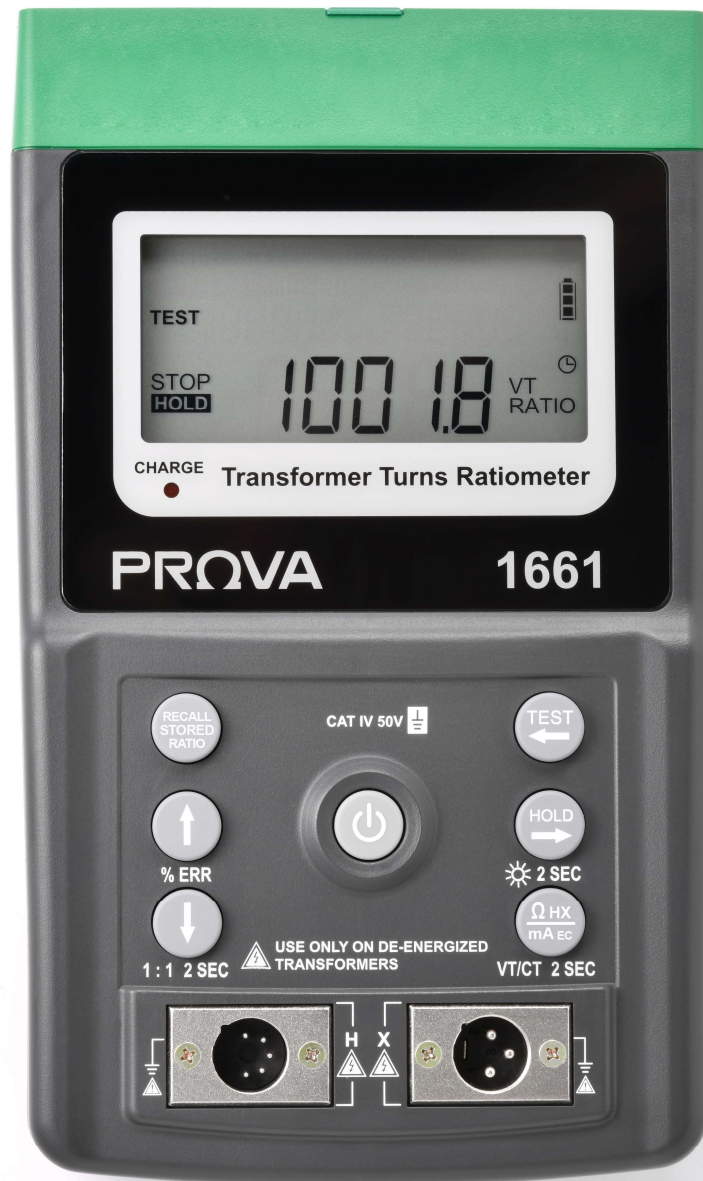


PROVA 1661 Transformer Turns Ratio Meter

CE

CAT IV
50V



INTRODUCTION: PROVA 1661 is a precision instrument designed for testing transformer turns ratios across VT, PT, and CT. With wide measurement ranges and fast execution, it is ideal for power system maintenance, manufacturing, and quality control applications. PROVA 1661 completes all safety checks and displays the turns ratio within 30 seconds, along with excitation voltage, excitation current, and winding resistance of both primary and secondary coils.

Features:

Measurement Capabilities

1. Supports transformers (VTs), potential transformers (PTs), and current transformers (CTs).
2. Voltage ratio measurement range: 0.8 to 10,000.
3. Current ratio measurement range: 0.8 to 1,000.
4. Best accuracy: $\pm 0.1\%$.

Display

1. Large 5-digit backlight LCD for clear visibility.
2. Toggle display between: Actual turns ratio or Percentage error against reference ratio.

Pre-Test Safety Checks

1. Detects live voltage on primary or secondary windings.
2. Verifies correct wiring on both primary and secondary sides.
3. Measures winding resistance to detect open or short circuits.
4. Confirms correct polarity on the secondary side connection.

Test Execution & Results

1. Displays turns ratio within 30 seconds including passing all checks.
2. Post-test display includes:
Excitation voltage and Excitation current;
Resistance of primary side coils and secondary coils.

Smart Functions & Diagnostics

1. 10 pre-stored reference ratios for quick comparison.
2. Users can customize reference ratios as needed.
3. Built-in 1:1 self-test function to verify the basic instrument functionality.

Power & Energy Management

1. Equipped with a 3400mAh high-capacity lithium battery.
2. Integrated charging circuit.
3. Auto power-off after 15 minutes (user-configurable).

Electrical Specifications:

Reference Conditions : 23°C ± 5°C (30% ~ 50% RH) range. Add 25ppm/°C for 0°~18°C and 28°~50°C to all accuracy specifications. No external electrical or magnetic fields. Output current ≤150mA for VT/PT and ≤50mA for CT.

Calibration cycle is 1 year.

Ratio Range (VT/PT)	Autoranging : 0.8000 to 10000 : 1	
Accuracy (70Hz)	Ratio Range	Accuracy (% of Reading)
	0.8000 ~ 10.000	± 0.2%
	10.000 ~ 1000.0	± 0.1%
	1000.0 ~ 5000.0	± 0.2%
	5000.0 ~ 10000	± 0.25%
Ratio Range (CT)	Autoranging : 0.8000 to 1000.0 : 1	
Accuracy (70Hz)	Ratio Range	Accuracy (% of Reading) Rated Load ≥ 10VA
	0.8000 ~ 1000.0	± 0.3%
Excitation Signal	VT/PT Mode : 19Vrms max CT Mode : Auto Level 0 to 60mA, 0.1 to 19Vrms	
Excitation Current Display	Range : 0 to 1000mA Accuracy : ± (2% of Reading + 2mA)	
Excitation Frequency	70 Hz	
Display	Large LCD display with backlight	
Power Source	Rechargeable Lithium Battery, 3400mAh	
Battery Life	Over 10 hrs of continuous operation. Battery life (%) indication	
Battery Charger	Universal input (100V~230V), DC 15V output	
Charging Time	< 8 hrs	
Measurement Method	ANSI / IEEE C57.12.90 and IEC 600076.1	
Operation Environment	5°C ~ 50°C, < 85% RH	
Storage Environment	-20°C ~ 60°C, < 75% RH	
Dimensions	257 x 155 x 57mm (10.1 x 6.1 x 2.2")	
Weight	1.28kg (2.8 lbs)	

ACCESSORY

1. Test leads (set of 2)
2. Alligator clips (4pcs.)
3. Rechargeable lithium battery
4. User manual
5. AC adaptor
6. Power cord
7. Carrying bag



PROVA

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