

S456 PRO

URNS RATIO TESTER

RATIO, CURRENT, ANGLE & TAP — IN ONE TEST.



EVERY TAP. EVERY WINDING.

Verified before you energise.

The S456 PRO reads turns ratio, excitation current, phase angle and polarity on every tap — automatically. Vector group detection for three-phase, single-phase, Z-type, CT and PT.

Key Diagnostic Highlights



URNS RATIO & RATIO ERROR

Compare measured ratio with nameplate values and identify deviation at $\pm 0.1\%$



EXCITATION CURRENT

Review magnetising behaviour, phase consistency and core or winding faults



PHASE ANGLE & POLARITY

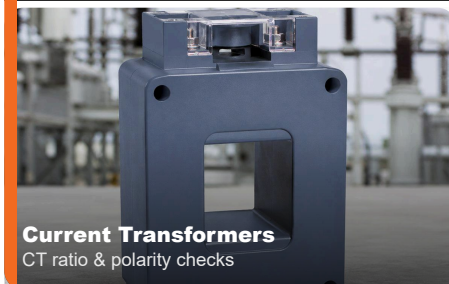
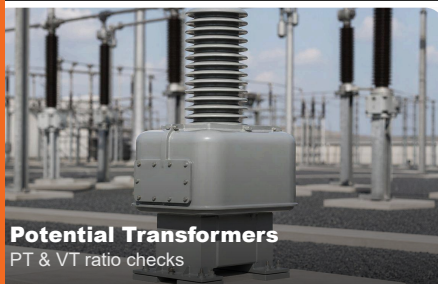
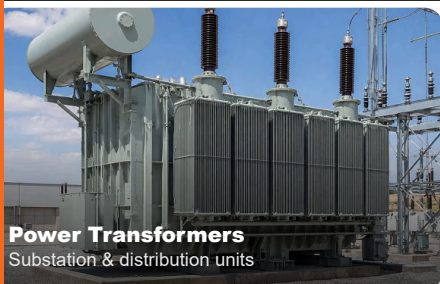
Confirm phase relationship and polarity for transformers, PTs and CTs



VECTOR GROUP & TAP

Recognise vector group and calculate the active tap, up to 197 positions

Where It Works

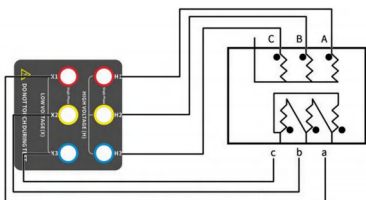


Transformer Test Connections

Choose the test object, then connect the H and X leads according to the terminal mapping below.

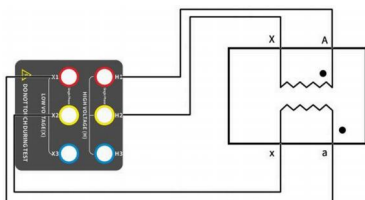
3-Phase Transformer

H → H1·H2·H3 | X → X1·X2·X3



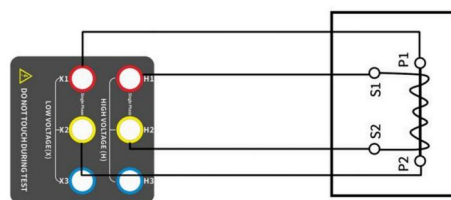
PT / Single-Phase Transformer

H → HV winding | X → LV winding



Current Transformer (CT)

H → Secondary | X → Primary



How To Test — 4 Steps

1

CONNECT

Clip H and X to the windings

2

SET UP

Set vector group and voltages

3

TEST

Press TEST to run the sweep

4

SAVE & PRINT

Store, print or export results

Technical Specifications

MEASUREMENT

Turns Ratio	0.8000 – 10,000
Best Accuracy	±(0.1% rdg + 3 dgt)
Ratio Resolution	Down to 0.0001
Excitation Current	0.01 – 1000 mA
Phase Angle	0.0° – 360.0°
Tap Positions	1 to 197
Vector Group Test	3-ph, 1-ph, Z-type, CT, PT
Display Info	Ratio / Current / Angle / Polarity / Tap
Test Output	90 V AC · 90 mA · 50 Hz

GENERAL

Output Waveform	3-phase sinusoidal inverter
Protection	Reverse & short-circuit
Memory	500 records · auto save
Connectivity	Bluetooth App + PC software
Export	USB drive · Excel report
Printing	Bluetooth printer
Test Leads	10 m
Dimensions	320 × 275 × 145 mm
Weight	3.5 kg (6.7 kg total)

Safety & Compliance



Designed in accordance with IEC 61010-1 · IP54 ingress protection · Calibrated by an ISO/IEC 17025 accredited laboratory

What's in the Box



Turns Ratio
Tester



Test Leads
(10 m)



Bluetooth
Printer



Power
Adapter



USB Cable



Manual &
Documents