



Time Electronics
Calibration, Test and Measurement

Electrical Test Calibrators

For Rapid Calibration of Electrical Test Equipment

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Electrical Test Calibrators

Instruments for rapid calibration of electrical test equipment



5068 Insulation Tester/Megohmmeter Calibrator

A precision instrument for calibrating general purpose insulation testers and megohmmeters with test voltages up to 2.5kV. Rugged, compact, and portable it is ideal for site calibration.

- Insulation resistance from 100k Ω to 10G Ω
- Low ohm verification at 1 Ω , 10 Ω , 100 Ω , 1k Ω
- Accuracy: Resistance 1% of setting. Voltage and Current to 1% of reading
- Up to 2.5kV operation
- Battery operation (over 150 hours between charges)
- Continuous connection – no arcing
- Fully shrouded safety connectors
- Display of open circuit voltage (0 to 1.999kV or 0 to 2.50kV)
- Display of short circuit current (0 to 2mA or 0 to 20mA)
- w270 x h175 x d250mm, weight 2.1kg



5069 Insulation Tester/Megohmmeter Calibrator

A high accuracy calibrator for insulation testers and megohmmeters with test voltages up to 10kV. Sturdy and transportable it is suitable for both lab and site calibration.

- Insulation resistance from 100k Ω to 100G Ω
- Accuracy: Resistance 1% of setting. Voltage and Current to 1% of reading
- Up to 10kV operation
- Battery operation (over 150 hours between charges)
- Continuous connection – no arcing
- Fully shrouded safety connectors
- Display of open circuit voltage (0 to 2kV or 0 to 9kV)
- Display of short circuit current (0 to 2mA or 0 to 20mA)
- w406 x h175 x d330mm, weight 4.4kg



5070 Ductor Tester/Micro-Ohmmeter Calibrator

The DuctorCal is a portable instrument suitable for calibrating high current ductor testers and micro-ohmmeters. It contains 5 sets of high current rating standard resistors that simulate the resistance being measured.

- Calibrate ductor testers and micro-ohmmeters
- 0.2, 2, 20, 200, 2000m Ω ranges
- Accuracy/rng: 0.2m Ω (0.8%), 2m Ω (0.5%), 20m Ω (0.2%), 200 & 2000m Ω (0.1%)
- 5 point calibration: 0, 25, 50, 75, 100%
- Gold plated terminals
- Low thermal EMF connection
- Portable robust carrying case
- w540 x h210 x d410mm, weight 11kg



5080 Portable Appliance Tester Calibrator

Designed to provide rapid high accuracy calibration of portable appliance testers and insulation/continuity testers. The 5080 has calibration functions for earth bond, insulation, leakage, touch leakage, and load test.

- Earth bond range 18 Ω to 20m Ω
- Earth bond currents up to 50A AC
- Load test currents up to 13A AC
- Accuracy: Resistance 1% of setting. Voltage and Current to 0.25% of reading
- Voltage and current displayed on integral LCD display
- Safety interlock feature
- Portable robust carrying case
- Battery powered (over 200 hours between charges)
- w406 x h175 x d330mm, weight 5.5kg

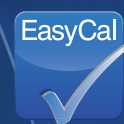


5030 Electrical Tester Calibrator

- RCD 3mA to 2500mA, 10ms to 2000ms
- Loop 50mΩ to 1.8kΩ
- Insulation up to 2GΩ / 1kV
- Continuity 0.1Ω to 10kΩ
- RS-232 / USB Control
- Fast and intuitive user interface
- PC/laptop control via EasyCal software
- W430 x H155 x D255mm, weight 8kg



A precision instrument designed to calibrate RCD, loop, insulation, earth testers and multifunction installation testers. The 5030 accurately simulates RCD trip times and measures currents produced by RCD testers. It replicates loop impedance and auto adjusts for local line impedance. It also provides insulation resistances and measures test voltages and currents.



Function	Range / Values	Resolution	Accuracy
Loop			
Loop Impedance Resistor Values	1800, 330.0, 180.0, 33.00, 18.00, 3.300, 1.800, 0.330, 0.150 & 0.050Ω	4 digit	±0.5% of displayed value ± 30mΩ Test Current 30A max (200ms) / 50W max
Local Loop Compensation	0 to 9.999Ω	0.001Ω	±0.5% of value ± 30mΩ
RCD			
Trip Time	10 to 2000ms	1ms	±0.5ms
Current	6.000, 10.00, 30.00, 100.0, 300.0, 500.0, 1000mA	4 digit	±0.5% of rdg, ±1% of rdg with x5 multiplier
Current Multipliers	x0.5, x1, x2, x5	–	–
Maximum Current	2500mA	–	–
Waveforms	AC, DC & half wave rectified	–	–
Phase Detection	0° or 180°	–	–
Pre Trigger Delay	0 to 2000ms	10ms	–
Pre Trigger Threshold	0 to 100% of nominal current	1%	–
Insulation			
Resistance	1MΩ to 2000MΩ	1MΩ	1% of value
	50kΩ to 1990kΩ	50kΩ	1% of value
Test Voltage Measurement @ 0.5mA or 1.0mA Load	50.0 to 99.9V DC	0.1V	1% of reading
	1000 to 1200V DC	1V	1% of reading
Continuity			
Resistance	0.1Ω to 100.0Ω	0.1Ω	1% of value + 20mΩ
	250Ω, 500Ω, 1.00kΩ, 2.50kΩ, 5.00kΩ & 10.0kΩ	3 digit	1% of value
Test Voltage Measurement (input resistance 10MΩ)	0.0 to 50.0V DC	0.01V	0.5% of range
Test Current Measurement (between 1Ω and 2Ω)	0 to 400mA DC	0.1mA	0.5% of range
Power Dissipation	1 watt maximum	–	–
Voltage			
Line Voltage Measurement	200.0 to 260.0V RMS	0.1V	0.5% of reading
Line Frequency Measurement	45.00 to 65.00Hz	0.01Hz	0.1% of reading



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Electrical Test Calibrators Ordering Information

5030..... ELECTRICAL TESTER CALIBRATOR

ECFLA EasyCal Calibration Software
C201 Factory Calibration Certificate (NPL traceable)
C137 UKAS Calibration Certificate (ISO 17025)

5068..... INSULATION TESTER CALIBRATOR (100k Ω to 10G Ω)

C189 Factory Calibration Certificate (NPL traceable)
C112 UKAS Calibration Certificate (ISO 17025)

5069..... INSULATION TESTER CALIBRATOR (100k Ω to 100G Ω)

C189 Factory Calibration Certificate (NPL traceable)
C112 UKAS Calibration Certificate (ISO 17025)

5070..... CALIBRATOR FOR DUCTOR TESTERS & MICRO-OHM METERS (DUCTORCAL)

C146 Factory Calibration Certificate (NPL traceable)
C107 UKAS Calibration Certificate (ISO 17025)

5080..... CALIBRATOR FOR PAT'S AND INSULATION TESTERS (PATCAL 2)

C188 Factory Calibration Certificate (NPL traceable)
C135 UKAS Calibration Certificate (ISO 17025)

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