



## Description

A precision 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. It is a practical and simple operation instrument that can be utilised in the lab as a calibration standard or as a mobile testing unit for site calibration work.

Housed in a robust safety case the 5080 is easily portable, rugged and ideal for field use. It is battery powered, which ensures isolation and prevents inaccuracies due to stray leakage. Features include safety interlock that prevents contact with earth bond studs during insulation and leakage tests, and an LCD display for voltage and current.

## Specifications

### Earth Bond – Calibrated low value resistive loads

20 mΩ, accuracy 5 %. 190 mΩ, 210 mΩ, 950 mΩ, 1.050 mΩ, 1.08 Ω, 2 Ω, 10 Ω, 18 Ω, accuracy 1 %.

**Open circuit voltage measurement** .....Range: 0 to 20 V. Accuracy: 0.25 % of full scale.

**High current AC measurement** .....Range: 0 to 50 A AC. Accuracy: 0.5 % of reading ± 0.2 A.

**Low current AC measurement** .....Range: 0 to 2 A AC. Accuracy: 0.5 % of reading ± 2 mA.

**Low current DC measurement** .....Range: 0 to 2 A DC. Accuracy: 1 % of reading ± 2 mA.

### Insulation – Calibrated high value resistive loads

95 kΩ, 105 kΩ, 500 kΩ, 950 kΩ, 1.05 MΩ, 5 MΩ, 10 MΩ, accuracy 0.1 %.

20 MΩ, 50 MΩ, 100 MΩ, accuracy 1.0 %.

**Open circuit voltage measurement** .....Range: 0 to 1 kV DC. Accuracy: 0.25 % of full scale.

**Current measurement** .....Range: 0 to 20 mA DC. Accuracy: 0.25 % of full scale.

### Leakage – Resistive loads for leakage current

Nominal leakage currents at 230 V AC of 0.5, 1, 2, 5, 10, 15 mA.

**Mains voltage measurement** .....Range: 0 to 500 V AC. Accuracy: 0.25 % of full scale.

**Leakage current measurement** .....Range: 0 to 20 mA AC. Accuracy: 0.25 % of full scale.

### Touch Leakage – Constant current source for touch leakage meters

**Current** ..... 1.9 mA AC 50 ± 5 Hz, into 2 K2 maximum load resistance.

**Current measurement** ..... Range: 0 to 2 mA AC. Accuracy: 0.25 % of full scale.

### Load Test – Connection of external load via a IEC connector

**Mains voltage measurement** .....Range: 0 to 500 V AC. Accuracy: 0.25 % of full scale.

**Load current measurement** .....Range: 0 to 13 A AC. Accuracy: 0.5 % of full scale.

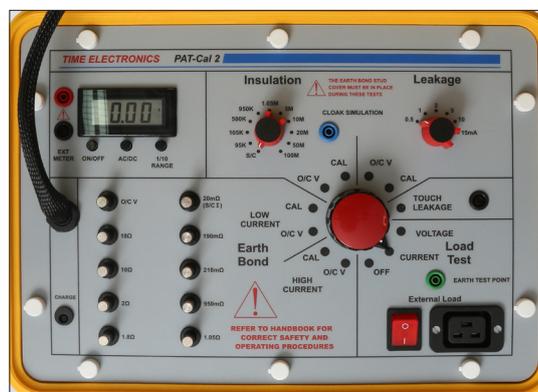
**Dimensions / Weight** .....W 406 x H 175 x D 330 mm, weight 5.5 kg.

**Power** ..... Internal battery 6 V re-chargeable NiCad, >200 hrs between charges.

*Due to continuous development Time Electronics reserves the right to change specifications without prior notice.*

## Features

- For calibration of PATs and VDE 0701 testers
- Earth bond range 18 Ω to 20 mΩ
- Earth bond currents up to 50 A AC
- Load test currents up to 13 A AC
- V & I displayed on integral LCD digital meter
- Safety interlock feature
- Battery operation (>200 hrs between charges)
- Portable and robust carrying case



## Ordering information

- 5080 .....Portable Appliance Tester Calibrator (PATCAL)  
C188..... Traceable calibration certificate (Factory)  
C135.....Accredited calibration certificate (ISO 17025)