



## Description

A precision instrument suitable for calibrating and testing general purpose insulation testers and megohmmeters with test voltages up to 10 kV.

It is constructed in a high strength co-polymer plastic case and is powered by a rechargeable battery. This ensures full isolation from the mains and prevents stray leakage. The insulation tester being calibrated can be tested for open circuit voltage and short circuit current. These are displayed on the digital meter mounted on the front panel.

The insulation resistance is provided by a precision 4 dial decade resistance bank which can be set to a maximum of 99.99 GΩ with additional resistance values of 100 kΩ, 200 kΩ, 500 kΩ, 1 MΩ, 2 MΩ and 5 MΩ which can be switched in as required. Rugged and portable, the 5069 is ideal for site calibration work. Also available is the 5068 InsCal, 2.5 kV version.

## Specifications

**Resistance**..... 10 GΩ, 1 GΩ, 100 MΩ, 10 MΩ decade ranges.

**Fixed values**..... 5 MΩ, 2 MΩ, 1 MΩ, 500 kΩ, 200 kΩ, 100 kΩ.

**Resistance accuracy**..... 100 kΩ to 5 MΩ = 1 %.  
10 MΩ to 10 GΩ = 1 %.  
10 GΩ to 100 GΩ = 5 %.

**Maximum voltages**..... 100 kΩ, 200 kΩ, 500 kΩ: 500 V  
1 MΩ, 2 MΩ, 5 MΩ: 2 kV / 10 MΩ: 2 kV / 20 MΩ: 4 kV  
30 MΩ to 10 GΩ: 6 kV / 10 GΩ to 100 GΩ: 10 kV

*NOTE: The maximum voltage applied must be limited to the rating of the lowest decade being used.*

**Resistance temperature coefficient**..... Less than 250 ppm/°C

**Open circuit voltage measure**..... 0 to 2 kV range, accuracy 1 % FS.  
0 to 10 kV range, accuracy 2 % FS.

**Voltage display**..... 1.999 kV full scale, and 10 kV full scale.

**Short circuit current measure**..... 0 to 2 mA and 0 to 20 mA ranges, accuracy 1 % FS.

**Current display**..... 1.999 mA FS, and 19.99 mA FS.

**Power**..... Internal battery, 6 V re-chargeable NiCad, >150 hrs between charges.

**Dimensions / Weight**..... W 406 x H 175 x D 330mm / 4.4 kg.

**Unit supplied with:** Safety connection leads with bare ends to allow custom probes (10 kV rated), 4mm 5 kV test lead set, wallet to carry test leads, and mains charger.

## Features

- Insulation resistance from 100 kΩ to 100 GΩ
- Basic accuracy 1 %
- Up to 10 kV operation
- Battery operation (>150 hrs between charges)
- Continuous connection – no arcing
- Fully shrouded safety connectors
- Display of open circuit voltage
- Display of short circuit current



## Ordering Information

- 5069** .....Insulation Tester Calibrator (InsCal)  
**C189**..... Traceable calibration certificate (Factory)  
**C112**.....Accredited calibration certificate (ISO 17025)

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