

Description

The 5070 DuctorCal is a portable instrument suitable for calibrating high current ductor testers and micro-ohm meters. It incorporates 5 sets of high current standard resistors that are used to enable precision calibration.

It has full 4 terminal capabilities with extra large terminals for the current connection. Gold plated terminals are used throughout to reduce contact resistance and thermal EMFs. It has a substantial maximum continuous current rating, but can also be used with much higher transient/pulse test currents. The internal resistance standards are all high quality manganin types with good long term stability and temperature coefficients.

Rugged and portable, the 5070 is ideal for site calibration work, housed in a safety yellow field case with carry handle.

Specifications

Range	Resistance values	Accuracy	Max current
$200\mu\Omega$	50, 100, 150, 200 $μΩ$	0.8 %	200 A
$2\text{m}\Omega$	0.5, 1, 1.5, 2 m Ω	0.5 %	100 A
20 m Ω	5, 10, 15, 20 mΩ	0.2 %	30 A
200 mΩ	50, 100, 150, 200 mΩ	0.1 %	10 A
2Ω	0.5, 1, 1.5, 2 Ω	0.1 %	3 A

The currents shown above are the continuous rated for both AC and DC. Higher currents (as generated by pulse driven instruments) can be used with an ON to OFF time ratio of 1:10 or less. The allowed peak currents are 10 times those specified above, with an upper limit of 1000 A and a maximum applied time of 4 seconds. At least 1 minute should be allowed between applications for cooling.

It is important to ensure there are adequate low resistance connections to the 5070 current terminals

Dimensions	W 540 x H 210 x D 410 mm
Weight	11 kg

Features

- Calibrate ductor testers and micro-ohmmeters
- 0.2, 2, 20, 200, 2000 $\text{m}\Omega$ ranges
- 5 point calibration: 0, 25, 50, 75, 100 %
- 0.1 % best accuracy
- Gold plated terminals
- Low thermal emf connection
- Portable and robust carrying case



Ordering Information

5070	Ductor Tester and Micro-Ohmmeter Calibrator
C146	Traceable calibration certificate (Factory)
C107	Accredited calibration certificate (ISO 17025)

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