

DIGITAL EARTH RESISTANCE TESTER

The **ERT 580** is a "professional instrument". The RUGGED and "O-RING" sealed **digital** earth tester is built with all the protection you need for outdoor use. The instrument is suitable for the testing of single earth electrodes such as lightning conductors and other small earthing systems. The resistance of conductors such as continuity and conduit coupling joints can also be measured. Two-terminal operation measurement, which reduces the accuracy, can also be done by shorting P and C terminals.

Earth resistance can be measured directly from 0.01 ohms up to 1999 ohms. The reading is displayed on a large, easy-to-read digital display.

The **ERT 580** makes measurements by passing a constant current through the device under test (generally a conductor or low resistance) and measuring the voltage across it. The earth resistance is then calculated by Ohm's Law.

It has an advanced circuit design that permits the instrument to operate with the minimum influence from earth voltage and earth resistance of the auxiliary spikes. This superb instrument is powered by 6 x 1.5 volt manganese-alkaline AA batteries. The calibration of the instrument is performed with the included test leads. Therefore, when using the supplied test leads, the accuracy does not suffer of the three-terminal method of measurement for the most common applications.



- Measures down to 0.01Ω.
- 3 Earth ranges: 20Ω, 200Ω, 2000Ω.
- One Test Current of 2mA_{RMS}.
- Indicates if resistance of auxiliary spikes resistance is within range.
- Two or three-terminal measurement.
- Three-terminal measurement for earth electrode testing.
- Large LCD display.
- Data hold function.
- Calibration performed with supplied test leads (3T fully compensated).
- Measures earth voltage up to 200VAC.
- Simple to use and low power.
- Open loop indication with "1"(MSD) on display and LED light off.
- Lightweight, robust & compact.
- Low battery indication.
- "O-Ring" sealed case.
- Standard Accessories for 3T and 2T.



The connectors and test leads are visible from the front of the instrument.



The LCD



LED If the constant current of the instrument has been reached and stable, the resistance between the electrodes is within range and the reading can be valid.

It is supplied complete with an instruction manual and test report/QA/certificate of conformity. This certifies that every product is properly calibrated after production and meets the strictest specification tolerances.

The test frequency of 820Hz has been chosen to avoid stray currents at power frequencies and their harmonics. However, the **ERT 580** has a built-in filter to reject unwanted signals. The batteries are constantly being checked while in use. The case is ideal for outdoor work. With the **ERT 580**, earth electrode testing, which is an important part of electrical installation and maintenance procedure, is made easy. The **ERT580** can be used by the electrical contractor or maintenance engineer to check the effectiveness of their type of earth electrode systems. It may be used to test in accordance with Bs7671, Bs7430, Bs6651, IEC364, NFC15-100, SABS0142, VDE0413, etc.

TECPEL ERT 580 : Real Tool for Real Professional.

TECHNICAL SPECIFICATIONS		ERT580
Earth resistance ranges	Steps of 0.01Ω	0-19.99Ω
	Steps of 0.1Ω	0-199.9Ω
	Steps of 1Ω	0-1999Ω
Accuracy of earth resistance	(of Rdg)	1.5% ± 2dgt
Test current (reversing dc)	(820Hz ± 5Hz)	2mA
AC voltage range	(Sine 40-60Hz)	0-199.9V
Accuracy (% of full scale)		1% ± 1dgt
Maximum output voltage (E-C)		0-80V
Battery (AA pen light)		6

PERFORMANCE SELECTOR	ERT 580
Measures low earth resistance	*
Rejects interferences	*
Measures earth electrodes directly	*
Indicates if resistance of auxiliary spikes is within tolerance	*
Over voltage protection	*
True constant current source	*
Allows 2 or 3-terminal testing (ext. Short)	*
Rugged and "O-Ring" sealed case	*
Three-terminal measurement accuracy	*
Industrial grade case	*
Color-coded test leads	*
Meets CE requirements & IEC 1010	*
LED indicator	*
Crowbars	*
Knob selection of ranges	*
Large digital display	*
6 x AA battery	*

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