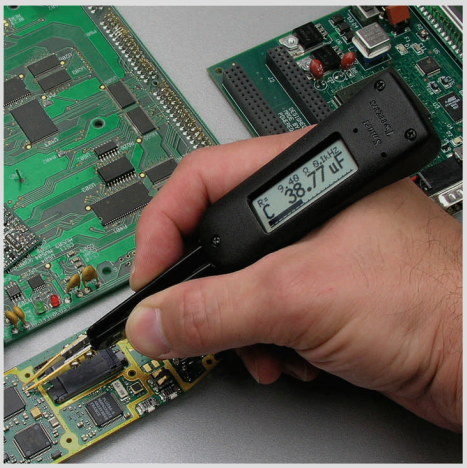
Efficient and Convenient Way to Test SMD Components

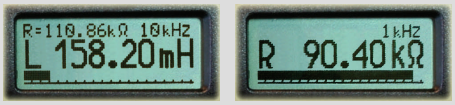
Smart Tweezers™

LCR Meter and Component Identifier in a Pair of Tweezers

- Built-in high-precision LCR probe
- Convenient one-hand operation
- Ideal for Surface Mount Devices
- Automatic component recognition
- Automatic test range selection
- Precise tips for small-size devices
- Manual and voltage test modes
- Portable and ergonomic design



Smart Tweezers™ greatly simplifies testing and troubleshooting process.



Resistance, capacitance and inductance can be measured with automatic selection of the test parameters and range.

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Smart Tweezers™ is a handheld LCR meter of a new concept. It provides a perfect solution for testing and identification of Surface Mount Devices as well as troubleshooting of complex electronic systems.

Its unique mechanical and electronic design combines a pair of precise gold-plated tweezers and a digital LCR meter in compact, lightweight, battery powered instrument. The probe is able to measure resistance, capacitance, inductance and voltage with high accuracy and automatic component recognition.

Testing Surface Mount Devices

Surface mount devices are usually tiny and without wire leads, making it more difficult to test and identify SMD than conventional components.

Smart Tweezers™ gives users an easy way to sort and evaluate loose components and to perform on-board measurements and debugging.

Precise gold-plated tweezers are able pick and reliably contact even the smallest SMD components and take measurements from already mounted devices. The probe can also be used to test conventional components with wire leads too short to insert into the test terminals.

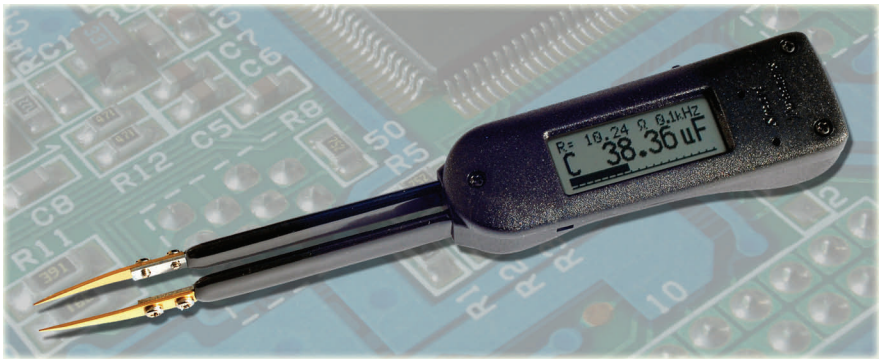
Fully Automatic Measurements

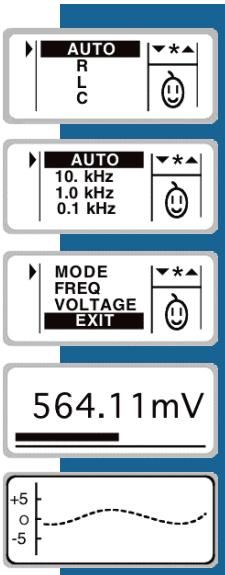
Smart Tweezers™ automatically determines type of the component (resistance/capacitance/inductance) and selects proper range for high accuracy measurements.

Unit's display clearly indicates the type of the component, measurement result and test conditions.

Lightweight and Ergonomic

The integrated measurement head allow the operator to use one hand and focus attention on the tested component and on the job at hand. Sorting, testing and troubleshooting become more efficient and cost effective.





Wide Spectrum of Functions

Smart Tweezers™ has dual mode voltmeter function. In AUTO mode, the DC voltage is measured. In TRACE mode waveform of the AC signal is shown.

Every test function have a manual mode when where is a need to measure a specific circuit parameter—L, C, R or voltage.

Navigation and mode selection are performed using a Jog Dial button.

The unit has a continuity detector with the beeper sound for resistance reading below threshold.

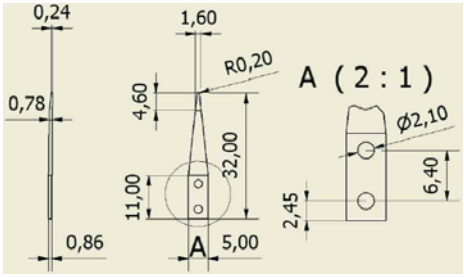
Physical Specifications		*Operating Temperature:*	0 °C to +55 °C
		Battery Type:	3 x 1.5V LR44 Alkaline or Air Zinc
		Battery Life (continuous):	80 Hours Alkaline, 240 hours Zinc Air (typical)
		Size:	14.0 x 2.5 x 3.0 cm (3.94 x 0.9 x 1.5 in)
		Weight:	53 grams (0.11lb)
Basic Specifications		*Measured Parameters:*	C+R (ESR), L+R, R
		Measuring Frequencies:	100Hz, 1 kHz, 10kHz
		Measurement rate:	4, 2, 1, 0.5 times per second (default 1)
		DC Voltage:	0 to 800 mV (up to 8V with manual setting)
		Resistance:	0.1 to 5 MOhm
		Capacitance:	1 pF to 4999 µF (1pF - 5pF in manual mode)
		Inductance:	1µH to 499mH (1µH -4µH in manual mode)
Accuracy Specifications	***Resistance:***	*Range:*	10 Ohm - 5 MOhm
		Accuracy:	1% + 0.02 in the range 10 Ohm - 5 MOhm
		Test Frequency:	1kHz
	Capacitance:	*Range:*	20pF - 4999µF
		Accuracy:	3% + 1.7pF* **Typical offset 1.6pF for 0402 size component*
		Resolution:	0.1pF in the range 1pF- 100pF
		Test Frequency:	1kHz C >1000pF, 10kHz C <1000pF, 100Hz C >1µF
	Inductance:	*Range:*	10µH - 499mH
		Accuracy:	3% + 0.4µH** ***Typical offset 1.4µH for 0402 size component*
		Resolution:	0.1µH in the range 1µH - 100µH
		Test Frequency:	10kHz L <1mH, 1kHz L >1mH, 100Hz L <10mH

ideal-tek s.a.
switzerland

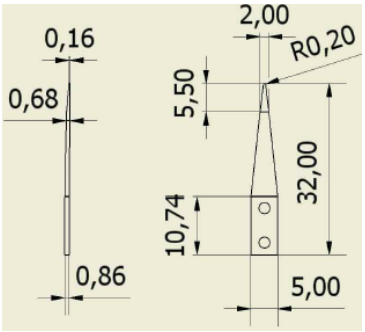
Smart Tweezers's tips

Precise gold-plated tips made of non-magnetic steel are able to pick and **reliably contact even smallest SMD components** or take measurements from the devices already mounted on a board. The probe can also be used to test conventional components with wire leads too short to insert into the test terminals.

Part number	Description
ST-IT-T	Replaceable tips



Part number	Description
ST-IT-THP	High precision Replaceable tips



Part number	Description
ST-IT-TSHP	High precision sharp Replaceable tips