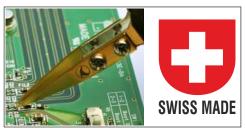
## Handy LCZ Chips Smart Tweezer latest/improved Model ST5S

roliable 8 caring since 1976

Siborg is also a re-seller like Inde, they are not manufacturer of Smart Tweezers

#### Additional Features in latest ST5S

- Smart Tweezers<sup>™</sup> LCR meter allows you to test various component types, including secondary components of Dissipation Factor (D), Quality Factor (Q). This handheld model also includes other functions that result in a more detailed component analysis.
- The in-built ESR mode (Equivalent Series Resistance) helps you better understand the inherent resistance - behavior typically found in capacitors across selected frequencies.
- in its DIODE mode Smart Tweezers ™ tests diode polarity and indicates if it is short.
- This Smart Tweezers<sup>™</sup> has a continuity detector. Variable beeper sounds for resistance reading below set thresholds. Additionally, this function helps to locate shorted conductors (e.g. on a PCB)
- In manual mode, the Smart Tweezers™
  measures a specific circuit parameter
  like L, C, R, Z or ESR. Manual modes
  also improves overall component type
  identification for in-circuit tests.
- Variable test signal output from 0.5 to 1.0
   Vrms, allows to improve test precision in
   different situation e.g. for in-circuit
   measurement and loose leaded ceramic
   capacitors.
- Visible and audible tolerance mode allows to perform component sorting.
- Math null function allows to store a premeasured offset and improve measurement precision.



Swiss precision non-magnetic steel with gold-plated tips

Advance Devices, Inc. Canada is the ORIGINAL & ONLY manufacturer of Smart Tweezers. Inde Enterprises is their stocking distributor as well the only after-sales-service partner in India. We keep all spares in stock to lower the down time of the Smart Tweezers.



### **Technical Specifications**

AC Test Mode frequency : 1kHz, 10kHz, 120Hz, 100Hz Test Signal Level : 0.5/1.0 +/- 5% V<sub>ms</sub> Sine wave

#### **Measurement Ranges**

 $\begin{array}{lll} \text{Resistance R} & : 0.05\Omega \text{ to } 9.9 \text{ M}\Omega \\ \text{Capacitance C} & : 0.5 \text{ pF to } 4999 \text{ uF} \\ \text{Inductance L} & : 0.5 \text{ uH to } 999 \text{ mH} \\ \text{Quality factor Q} & : 0.001 \text{ to } 1000 \\ \text{Dissipation factor D} & : 0.001 \text{ to } 1000 \end{array}$ 

#### Other Specifications

Size : 15.0 x 1.8 x 1.5 cm approx.

Weight : 29 grams approx.

Battery Type : 3.7V LiPO rechargeable



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Warranty is 12 months from the date of invoice. It excludes batteries and any mechanically damaged part.

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# An Efficient and Convenient Way to Test SMD Chip Components

- Built-in high-precision LCR probe
- Convenient one-hand operation
- Ideal for Surface Mount Devices
- Automated component identification
- Automated test range selection
- Manual C, R, L, Z and ESR Modes
- Adjustable test signal levels
- Swiss-made precise test leads
- Diode Polarity/Short Testing
- Secondary D, Q and ESR parameters
- · Portable and ergonomic design
- Built-in Li-lon battery



Rp 14.29 MΩ AM AF 10kHZ

C 61.12 pF % H

Rs 5.590 Ω AM AF 10kHZ

I 101.6 μH % H

Smart Tweezers<sup>™</sup> 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 with high accuracy and automatic component identification.

## **Testing Surface Mount Devices**

Surface mount devices are usually tiny and without wire leads, making them more difficult to test and identify than conventional leaded components. Smart Tweezers™ gives users an easy way to sort and evaluate loose components and to perform on-board measurements and debugging.

Precise Tips reliably contact even the smallest SMD components and take measurements from already soldered devices. The Probe can also be used to test conventional components with wire leads too short to insert into the test terminals.

### **Automated Measurements**

The Smart Tweezers™ measures quickly and accurately using the automatic component identification feature, thus eliminating unnecessary trial and error time. Smart Tweezers™ automatically specifies L, C, or R with parallel and series mode and selects a proper measurement range and test frequency for high accuracy measurements. The unit displays component type and more detailed component analysis such as Z and ESR.

## **Lightweight and Ergonomic**

The integrated measurement head allows 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. 4-wire shielded Smart Tweezers™ assures low capacitance measurement and resistance offset

# **High Precision Gold Plated Steel Tips**



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