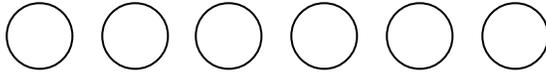


Ultimate PCB Debugging Tool LCR-Reader-MP from Siborg Systems Inc. Receives Traceable Calibration and FCC Certification

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The new digital multimeter offers wide range of features, including LCR, ESR, Diode, LED, Voltage and Current measurements, 0.1% basic accuracy, FCC certification and NIST traceable calibration certificate.



The LCR-Reader-MP offers a large variety of features, 0.1% basic accuracy, and now has NIST Traceable Calibration certificates and FCC compliance.

WATERLOO, ONTARIO, CANADA (PRWEB) SEPTEMBER 26, 2017

Waterloo, Ontario based Siborg Systems Inc. is now offering a new digital multimeter, the LCR-Reader-MP. In contrast to other previously introduced tweezer-like meters, such as [Smart Tweezers](#) and its successors, LCR-Reader MP offers a variety of new features very important for PCB debugging, and a high basic accuracy of 0.1%.

The new device has been recently tested by Navair Technologies,

confirming the claimed high basic accuracy. Besides, two new calibration fixtures have been created and calibrated by Navair Technologies allowing to provide NIST Traceable Calibration Certificates with every LCR-Reader-MP.

In addition FCC compliance test was performed by MPB Technologies Inc from Alberta, Canada and FCC part 15.109 has been granted.

[LCR-Reader-MP](#) is a multipurpose LCR- and ESR-meter with various features including diode/LED testing, AC/DC voltage testing, oscilloscope, frequency measurements, signal generation and more. One of the most important features include the ability to test at 100 kHz test frequency which allows for 1 nH resolution for inductance measurements and 0.01 pF for capacitance.

This device has been proven especially helpful for measuring large capacitances up to 680 mF. While using the 'Large Capacitance' test mode, LCR-Reader-MP automatically reduces the test frequency to 25 Hertz, allowing for measurements with reasonable accuracy. Electrolytic capacitors are measured at 120 Hertz with the ESR values measured at 100 kHz according to regular electrolytic capacitor test conditions. Along with these other features, the LCR-Reader-MP offers a wide range of test frequencies: 25, 100, 120 Hz, 1, 10, 20, 30, 40, 50, 60, 75, and 100 kHz.

The oscilloscope mode is able to analyze waveforms with frequencies up to 100 kHz on active circuit boards. This mode is especially useful when used with the [LCR-Reader Kelvin Probe Connector](#) as a full probe station, able to check waveforms at various nodes on the PCB.

The LCR-Reader family of multimeters has become easy to recognize with the combination of a set of gold-plated tweezers and a lightweight multimeter. Unlike other models, LCR-Reader MP is twice as heavy at 2 oz. The larger size allowed for a larger, back-lit screen to be implemented in the device which has larger text and icons that are easier to read. The device is controlled using a jog-wheel; basic functions can be changed from the measurement

screen and more extensive menus can be accessed by pressing the jog-wheel down and turning it clockwise and counter clockwise.

Some downsides include a high test signal source resistance of 1 kOhm and a moderate test signal level of 0.65 Vrms which is higher than that of the original LCR-Reader but lower than 1 Vrms offered in [Smart Tweezers](#). This test signal level may read lower than actual capacitance values and may not be reliable enough while testing some ceramic capacitors.

Features on LCR-Reader-MP:

- Automatic and manual LCR, ESR, LED/Diode measurements
- 0.1% basic accuracy
- AC/DC Voltage measurement up to 15 V
- Current measurement
- Oscilloscope Transient Voltage display for up to 100 kHz
- Measurements of Frequency, Pulse Period, Duty Cycle up to 400 kHz
- Diode/LED and Continuity testing
- Signal Generator: Sine, Rectangle, Triangle pulse shapes up to 100 kHz
- Easy Short/Open calibration and offset removal
- Two Test Signal levels; Automatic test signal reduction to 0.1V for in-circuit measurements
- Displays active and reactive impedance components
- Measures components to a 0201 size (0.3mm)
- 2 oz. weight
- Li-Ion battery with micro-USB charging
- Backlit LCD display
- Jog-wheel navigation

Siborg has sent the LCR-Reader-MP to Navair Technologies in Toronto, Ontario for testing. Upon receiving their results, Siborg is able to issue NIST Traceable Calibration Certificates for each device. This is a deciding factor for companies that require annual calibration of their test equipment. The LCR-Reader-MP was granted FCC Certification in Airdrie, Alberta, Canada by MPB Technologies Inc.

The LCR-Reader-MP is now available and can be ordered for the introductory price of US\$388.99 in the LCR-Reader Store.

Other devices are available from the online store, such as [Smart Tweezers with Bluetooth](#) connectivity, LCR-Reader, [Smart LED Test Tweezers](#) and Smart Tweezers Kelvin Multi-function Probe connector as well as a variety of accessories for either LCR-Reader or [Smart Tweezers LCR-meters](#).

Most products from Siborg Systems Inc are available worldwide in the company's Amazon stores in the USA, Canada and Europe.
