



## Description

The 7033 is a precision LCR meter for CalBench systems. It has a basic measurement accuracy of 0.05 %, making it suitable for use in applications that need both high stability and high accuracy test criteria. Frequency coverage from 10 Hz to 200 kHz provides versatile parameter-to-frequency measurements to the device under test. This meter is capable of showing four different values at once due to the quadruple display. Furthermore, it is able to perform 16 major and secondary parameter measurement combinations, and also has two additional monitoring parameters.

## Specifications

<b>Test frequency</b> .....	10 Hz ~ 200 kHz.
<b>Output impedance</b> .....	30Ω / 50Ω / 100Ω selectable.
<b>Basic accuracy</b> .....	Slow/Med: 0.05%, Fast: 0.1%.
<b>Test speed</b> .....	Fast: 25 ms / Med: 100 ms / Slow: 333 ms .
<b>Internal DC bias</b> .....	±2.5V (0.5% + 0.005V).
<b>Test signal levels</b> .....	AC V: 10.00mV- 2.00V (±10%) CV :10.00mV- 2.00V(±6%). AC I: 100.0μA - 20.00mA (±10%) CC :100.0μA - 20.00mA (±6%) (@2V Max). DCR: +2V, 0.066A (Max.), Output impedance fixed 30Ω.
<b>Test Modes</b> .....	16 combinations: Cs-Rs, Cs-D, Cp-Rp, Cp-D, Lp-Rp, Lp-Q, Ls-Rs, Ls-Q, Rs-Q, Rp-Q, R-X, Z-θr, Z-θd, Z-D, Z-Q, DCR. Monitor parameter (2 selectable): Z, D, Q, Vac, Iac, Δ, Δ%, θr, θd, R, X, G, B, Y.
<b>Listed Mode</b> .....	10 steps.
<b>BIN Function</b> .....	Comparator (9BIN,AUX:1BIN).
<b>Memory</b> .....	INT – panel setting: 10 file name. INT – measured data: 0000 Data (.csv). USB storage: 10 file name for setting, 9999 file name for data, 999 Log file for LCD.
<b>Additional Functions</b> .....	Auto Level Control (ALC): ON/OFF. Average: 1 ~ 256 times. Trigger: INT / MAN / EXT / BUS. Delay: 0 ms ~ 60 s. Judgment: PASS / FAIL. Auto LCZ: ON / OFF. Screen Capture: Saving in to USB (Bmp file).
<b>Display</b> .....	3.5 " LCD, RGB color (320x240).
<b>Interface Options</b> .....	RS-232, USB Host/Device.
<b>Module width</b> .....	295 mm (primary console fitting only).

## Features

- Test Frequency: 10 Hz to 200 kHz
- 3.5 " colour LCD display
- Consecutive Test Frequency
- Basic accuracy 0.05 %
- Measuring speed up to maximum 25 ms
- Full frequency range or spot OPEN/SHORT
- 16 parameter measurement combinations
- DCR measurement and internal DC bias voltage
- Auto Level Control (ALC) function

## Display range

<b>R, X,  Z </b> .....	0.00001Ω ~ 99.9999MΩ
<b>G, B,  Y </b> .....	0.01nS ~ 999.999S
<b>L</b> .....	0.00001μH ~ 9999.99H
<b>C</b> .....	0.00001pF ~ 9999.99mF
<b>D</b> .....	0.00001 ~ 9.99999
<b>Q</b> .....	0.00001 ~ 99999.9
<b>θd</b> .....	-179.999° ~ 179.999°
<b>θr</b> .....	-3.14159 ~ 3.14159
<b>DCR</b> .....	0.00001Ω ~ 99.9999MΩ
<b>Δ%</b> .....	-99999% ~ 99999%

## Ordering Information

**7033** ..... Precision LCR Meter Module  
Options.....Test fixtures & leads - contact us for details

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