

# Multichannel LCR Meter

## 9332 Series

Frequency Range 10Hz~200k  
64 Channel

PCB Tester



MICROTEST 9332 is designed to meet the requirements of circuit boards that utilize copper foil etching to create coil circuits. It enables electrical characteristic testing of multiple coil circuits on multi-layered boards. It provides 64 testing channels, allowing for simultaneous testing of 32 coil sets. The measured parameters include inductance, impedance, AC resistance, DCR, Q value, and more. The frequency range for measurements is from 10Hz to 200kHz. It supports PC link software for remote programming and storage of test data. Additionally, it can be integrated into dedicated PCB testing equipment to achieve fully automatic or semi-automatic testing.

## Application

Wireless charging coil board, Layout the coil on PCB/FPC, NFC antenna board, Low Frequency RFID FPC



## Features

- 0.1% basic accuracy
- Optional PC Link Software for comprehensive test data storage and traceability.
- Utilizes 4-wire sensing across all channels to eliminate lead resistance and ensure measurement integrity.
- Innovative fixture compensation minimizes frequency induced errors, ensuring accuracy across various test setups.
- Built-in Open Circuit Detection Integrated diagnostic function to verify measurement loop integrity and prevent false passes.
- Supports LAN interface for remote communication and USB ports for local data storage.
- Test 32 sets of inductive impedance (Ls/ Rs/ DCR/ Q), drastically boosting production efficiency.



## Standard Interfaces

RS-232

EXT.I/O

Handler

LAN

USB Host

- Control commands for 9332 can be provided upon request
- Can be integrated with in-house electrical testers for testing

※ Automated testing via robotic arms or press machines

## Specification

Model	9332			
Frequency Range	10Hz~200kHz			
Channel	64 (Measures up to 32 sets)			
Parameters Measurement	Z , $\theta$ , R, L, D, Q, DCR, C			
Ranges and Accuracy	Parameters	Ranges	Basic Accuracy (AC 1KHz)	Test Speed
	L	0.1nH~9999.99H	0.1%	25ms
	C	0.00001pF~999.99mF	0.1%	25ms
	Q	0.00001~99999	0.0005	25ms
	Z, R	0.00001 $\Omega$ ~99.9999M $\Omega$	0.1%	25ms
	DCR	0.1m $\Omega$ ~99.999 M $\Omega$	0.1%	25ms
Frequency Trimming Resolution	5 Digits			
Frequency Output Accuracy	$\pm$ 0.01%			
Output Impedance	100 $\Omega$			
AC Drive Level	10mV~2Vrms			

## General

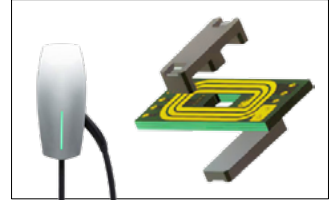
Measurement Circuit	Series/ Parallel
Operation Mode	Absolute value/ Percentage
Correction	Open Circuit/ Short Circuit
Built-in Storage	128 sets
USB Host Storage	Testing screen and data
Trigger Test	Auto/ Manual/ RS-232/ Handler
Interface	RS-232/ Handler/ LAN/ USB Host
PC Link Software	●
Power Supply	Voltage : 98Vac-132Vac or 195Vac-264Vac
	Frequency : 47-63Hz
Power Consumption	200VA
Display	7" TFT, 800*480 Color LCD
Environment	Temperature : 10°C~40°C, Humidity : 20~90%RH
Dimension (W*H*D)	344×145×343 mm
Weight	8.4Kg

# Functions

## Critical Parameters for Planar Transformer PCB Verification

Planar transformers meet the demands of EV DC charging stations for compact size and high power density by replacing traditional wire windings with etched copper foil on PCBs.

Since manufacturing defects in the etching process can alter trace width or cause short circuits, the 9332 Multichannel LCR Meter is essential for verifying electrical integrity. With up to 64 test channels, it supports array panel testing in PCB facilities, measuring critical parameters such as Inductance, DCR, ACR, and Q-factor. The system also supports PC connectivity for remote programming and seamless data collection.



Inductance (Ls) : Verifies turn counts and core material consistency to ensure electromagnetic coupling efficiency.

Capacitance (C) : Measures inter-turn capacitance to prevent spacing irregularities that affect high-frequency performance and EMI immunity.

DCR : Detects insufficient trace cross-sections or poor soldering to prevent excessive conduction loss.

Quality Factor (Q) : Serves as a key indicator of energy loss; abnormal Q values may signify issues with etching quality, core material, winding layout, or insulation processes.

## Multi-Step Programming Mode

The Multi-Step Edit Mode allows users to configure a sequence of tests with different frequency points and parameter combinations. Once configured, multiple results are generated in a single test cycle, drastically improving inspection speed.

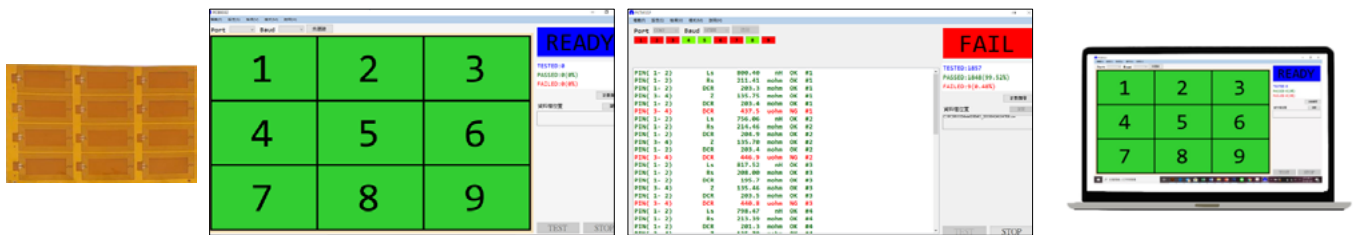


測試項目設定			PCB# 1/9	選擇
檔案: DEMO			1/6	量換
Pin+	1	1	1	參數切換 Ls Lp C Q
Pin-	2	2	2	
參數		Rs	DCR	
頻率	100.00 k	100.00 k	100.00 k	
電壓	1.00 V	1.00 V	1.00 V	
標準	799.67mH	211.46mH	203.50mH	
上限	879.63mH	232.60mH	223.85mH	
下限	719.70mH	190.31mH	183.15mH	
地度	Max	Max	Max	返回

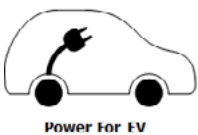
## PC-Link Panel Array Testing

When connected to the dedicated PC software, the screen automatically generates a visual map based on your PCB panel layout.

Test results are displayed intuitively: Green for PASS and Red for FAIL, allowing operators to quickly identify defective units within a large array.



## Application

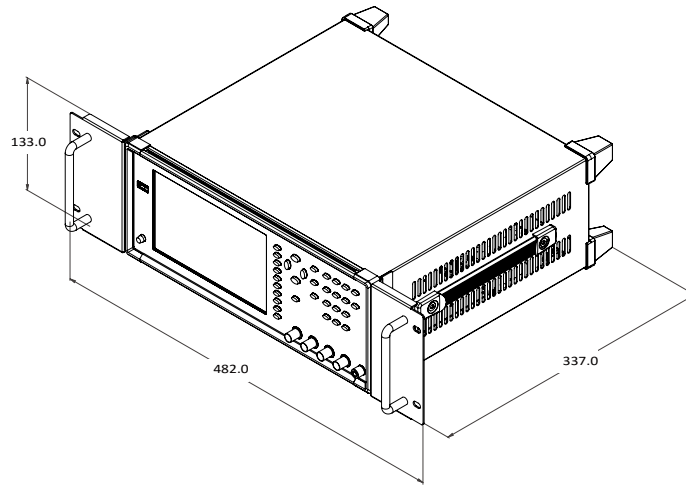


9332+FX-0000C9

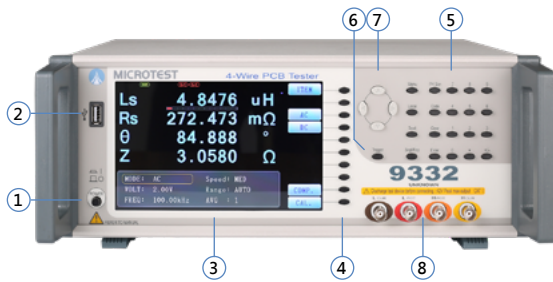
※The FX-0000C9 test fixture can be purchased to measure single-unit coil boards.

## Automatic Chassis Dimension

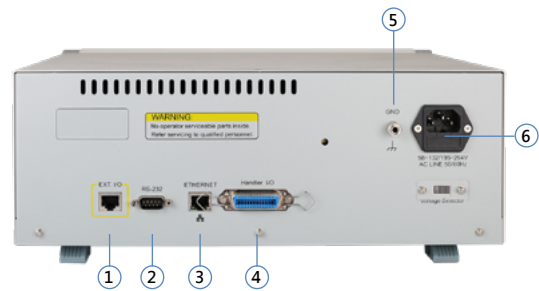
• Dimension (mm)



## Appearance



- 1. Power switch
- 2. USB
- 3. LCD Screen
- 4. Function
- 5. Setup/ Number key
- 6. Trigger
- 7. Direction
- 8. BNC terminal



- 1. EXT. I/O
- 2. RS232
- 3. LAN
- 4. Handler
- 5. GND
- 6. Power jack/ Fuse block

## Ordering Information

Multichannel LCR Meter	Standard	Optional
<ul style="list-style-type: none"> <li>• 9332 Multichannel LCR Meter (Frequency Range 10Hz~200kHz)</li> </ul>	<ul style="list-style-type: none"> <li>• F9332 Auto Scanning Box (64 Channel)</li> <li>• F423906A Kelvin Clip Leads (100cm)</li> <li>• Power Cord</li> </ul>	<ul style="list-style-type: none"> <li>• TL-000003 RS-232 Cable (180cm)</li> <li>• FX-000C26 Multiple DUT Testing Expand Box</li> <li>• HI-0001 Handler Box</li> <li>• Handler Cable</li> <li>• PC Link Software</li> </ul>

# Fixture & Accessories

**F423906A**  
Kelvin Clip Leads (100cm)



**F9332**  
Auto Scanning Box



**HI-0001**  
Handler Box



Applicable Models	9332 Series	9332 Series	9332 Series
Accessory Description	DC~3MHz	64 Channel	Handler Box

**TL-000003**  
RS-232 Cable



**Handler Cable**



**FX-000C26**  
Multiple DUT Testing Expand Box



Applicable Models	9332 Series	9332 Series	9332 Series
Accessory Description	180cm	Handler Cable	Remote Signal