

ET1090, ET1091 series LCR digital bridge is a component parameter analyzer based on the principle of automatic balancing bridge. Its 10Hz-100kHz test bandwidth, frequency continuous adjustable, 0.2% basic measurement accuracy and the file classification function provided by the instrument provide accurate and complete measurement and analysis for most components and materials, which are widely suitable. Used in product development, component inspection, product on-line inspection and other applications.

### Product characteristics

- ▣ The highest measuring frequency is 100kHz, and the stepping; frequency is continuously adjustable at 1Hz;
- ▣ Test level 10~2000 mV, 1 mV step continuously adjustable;
- ▣ Supporting DC Resistance (DCR) and Electrolytic Capacitance Measurement;
- ▣ Internal bias voltage output 10mV~1500mV;
- ▣ 3.5-inch TFT display, 5-bit display;
- ▣ Communication:USB Device, RS232 (or 485), Handle, GPIB (optional), USB Host (optional);
- ▣ Data recording function (maximum, minimum, average);
- ▣ Supporting SCPI Communication Protocol;
- ▣ Provide system settings to configure Chinese or English, buzzer, screen brightness, etc;
- ▣ The basic measurement accuracy is 0.2%;
- ▣ Manual and automatic range;
- ▣ With open circuit and short circuit calibration function;
- ▣ Comparator sorting (5 gears), alarm function.



### Main technical indicators

Model	ET1090A	ET1090B	ET1090C	ET1091A	ET1091B	ET1091C
Testing frequency	10 points (100, 120, 200, 400, 800, 1K, 2K, 4K, 8K, 10K)	12 points (100, 120, 200, 400, 800, 1K, 2K, 4K, 8K, 10K, 15K, 20K)	16 points (100, 120, 200, 400, 800, 1K, 2K, 4K, 8K, 10K, 15K, 20K, 40K, 50K, 80K, 100K)	10-10KHz continuous adjustable, 1Hz step-by-step	10-10KHz continuous adjustable, 1Hz step-by-step	10-100KHz continuous adjustable, 1Hz step-by-step
Display screen	Display screen 3.5 inch TFT LCD					
Number of display digits	Principal parameter: 5 digit , Secondary parameter: 5 digit					
Measured parameter	Principal parameter: L/C/R/Z , Secondary parameter: X/D/Q/θ/ESR					
Measurement range	L : 0.001μH ~ 9999H , C : 0.001pF ~ 99.999mF , R : 0.0001Ω ~ 99.99MΩ					
Basic accuracy	0.20%					
Measuring display speed	2 time/s (slow), 4 times/s (medium), 8 time/s (fast)					
Internal bias	0-1500mV adjustable, at a step of 1mV.					
Testing level	Six fixed level(0.1V, 0.3V, 0.6V, 1V, 1.5V, 2V)			0.1~2V adjustable, at a step of 1mV.		
Signal source output impedance	30Ω, 100Ω					
Calibration function	Open circuit calibration, short circuit calibration					
Screening function	The limit range of screening can be set to -50% ~ +50%, and the fixed points are 1%, 5%, 10% and 20%.					
Comparator	5 groups sorting,3 groups of qualified setting, one group of unqualified setting, one group of auxiliary setting					
Interfaces	standard: RS232 ( or 485 ) , USB Device, Handler ;optional: GPIB,USB Host					
Others	Support dc resistance (DCR), electrolytic capacitor measurement model,Adjustment of backlight brightness, Chinese and English are optional					

### General technical specifications

- ▣ Power supply voltage: 220V.AC±10%, or 110V.AC±10%, 45~65Hz;
- ▣ Power consumption: <10W;
- ▣ Display: 3.5 inch TFT LCD screen, resolution 480 \*320, color 16M;
- ▣ Temperature range: Operating state 10°C~+40°C, non-operating state -10°C ~+60°C;
- ▣ Humidity range: 0 ~ 40 C, < 90% relative humidity;
- ▣ Interface: RS232 (or 485), USB Device, Handle, GPIB, USB Host.

### Standard accessories

- ▣ Three core power cord(30A51)
- ▣ 4-terminals of kelvin testing cable(35A51)

# Datasheet

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