

# Component Parameter Test Instruments

## C. TH2819A Precision LCR Meter



### TH2819A



### Features

- 320×240 dot-matrix large-graphic LCD display
- Chinese and English language user interface selectable
- 2 different signal source output resistances: 30 Ω and 100 Ω
- Open/Short/Load correction
- 10 point list sweep function
- Built-in comparator; 10 bins and bin counters
- Test signal level monitor function
- Automatic level adjustment function for V and I
- 20 sets of settings saved and loaded
- RS232C, HANDLER, GPIB interfaces
- 0V, 1.5V and 2V internal DC bias voltage
- Capable to operate with TH1773/TH1775 external DC bias current
- Optional ±10 V(±100mA) and 1A internal DC bias source

### Brief Introduction

■ TH2819A is an updated product of TH2819 LCR meter. With high accuracy, wide measurement range, 6-digit resolution, test frequency up to 200KHz with the step of 0.01Hz, signal level from 5mV to 2V and DC internal bias voltage, the meter can be widely used for quality control on production line, incoming inspection, and high-accuracy measurement in lab. And perfect HANDLER interface, RS232C interface and GPIB interface make it easy to build an automatic component test system, communicate with the computer and record the test results.

### Specifications

Test Parameter	Z ,  Y , C, L, X, B, R, G, D, Q, θ, DCR, Turn-Ratio, Phase
Test Frequency	20Hz to 200KHz, Resolution: 10mHz, Accuracy: 0.01%
Test Level Range	Regulal: 5mV to 2V, Turn-ratio: 5mV to 4V, resolution: 1mV, Accuracy: 5%
Output Impedance	30 Ω and 100Ω selectable
Basic accuracy	0.05%
Measuring time (≥1kHz)	Fast: 32ms, Med: 90ms, Slow: 650ms
Equivalent Circuit	Series and Parallel
Ranging Mode	Auto and Hold
Trigger Mode	Internal, Manual, External and Bus
Averaging Rate	1-255

Display Range	Z , R, X	0.00001 Ω — 99.9999 MΩ
	DCR	1mΩ — 99.9999 Ω
	Y , G, B	0.00001μS — 99.9999 S
	C	0.00001 pF — 9.99999 F
	L	0.00001 μH — 99.9999 kH
	D	0.00001 — 9.99999
	Q	0.01 — 99999.9
	θ (DEG)	-179.999° — 179.999 °
	θ (RAD)	-3.14159 — 3.14159
	Turns-Ratio	1:0.01 — 100:1
Δ%	-999.999% — 999.999%	
Correction Function	Open, Short and Load	
Internal DC bias source	0V, 1.5V, 2V, Accuracy: 1%	
Comparator Function	10 bins and bin counters	
Memory	20 groups of control settings can be saved	
Interface	RS232C, HANDLER(options), GPIB (options)	

### General Specifications

Working Temperature & Humidity		0°C – 40°C, ≤90%RH
Power supply	Voltage	99V–121V, 198V–242V
	Frequency	47.5Hz–63Hz
Power Consumption		≤ 80VA
Dimensions (W×H×D)		400mm×132mm×385mm
Weight		Approx. 10kg

### Ordering Information

TH2819A Precision LCR Meter

### Instrument Accessories

- TH26005B 4 terminal test fixture
- TH26011A 4 terminal Kelvin test clip leads
- TH26010 Gilded shorting plate

### Options

- TH26047 4 terminal test fixture
- TH26048 4 terminal test fixture
- TH26006 Axial component test fixture
- TH26007 Core inductor test fixture
- TH26008A SMD component test fixture
- TH26009B SMD Kelvin test tweezers
- TH10002 GPIB interface board
- TH26033 GPIB interface cable
- TH26034 RS232C interface cable
- TH1902A 100mA/10V DC bias board
- TH1902B 1A DC bias board