



CE

RLC-TH2829 Series - Features and Benefits

- 800×RGB×480 7-inch TFT LCD display
- 0.05% Basic accuracy, 1MHz frequency and 1mHz resolution
- Strongest signal source selection:
 10V/100mA programmable AC test level
 10V/100mA programmable DC bias supply
 10V/50mA standalone DC voltage source
 1A interior DC bias current source (optional)
 120A external bias source (optional)
- Simultaneous display of 4 kinds of test parameters
- 10 pages/150-point list sweep function
- Continuous curve scanning/graphical analysis function
- Internal storage 100 sets LCRZ setting files and 10 sets GIF image
- GIF image and CSV data files can be saved to USB storage directly
- HANDLER, USB, LAN, RS232C, GPIB (option), DCI interface

Frequency of test signal	
TH2829A	20Hz ~ 300kHz
TH2829B	20Hz ~ 500kHz
TH2829C	20Hz ~ 1MHz
Minimum resolution	1mHz, 5-digit frequency input
Accuracy	0.01%
AC Level	
Voltage range of test signal	5mV~10Vrms
Minimum resolution of voltage	100µV, 3-digit input
Accuracy	ALC ON:10% x set voltage + 2mV; ALC OFF:6% x set voltage + 2mV
Current range of test signal	50µA~100mA
Minimum resolution of current	1µA, 3-digit input
Accuracy	ALC ON:10% x set current + 20µA; ALC OFF:6% x set voltage + 20µA
DC bias voltage source	
Voltage/Current range	0V~ ±10V / 0mA ~ ±100mA
Resolution	0.5mV / 5µA
Voltage accuracy	1% x set voltage + 5mV
ISO ON	Be used for the bias test of inductance and transformer
AC Source impedance	ISO ON:100Ω; ISO OFF:30Ω,50Ω,100Ω selectable
DCR source impedance	30Ω,50Ω,100Ω selectable
Test parameters of LCR	Z , Y , C, L, X, B, R, G, D, Q, θ, DCR, Vdc-Idc
Parameter display of test page	
Basic accuracy	
Calibration	0.10%
	Warm-up time ≥ 30 seconds; Environment temperature: 23±5°C; Signal voltage: 0.3Vrms-1Vrms; Zeroing: After OPEN or SHORT; Length of test cable: 0 m
Measurement time (≥10 kHz)	
Fast: 13 ms / time; Medium: 67 ms / time; Slow: 187 ms / time; Plus the refresh time of display character	

Specifications	Display range of LCR parameter	Z , R,X,DCR Y ,G,B C L D Q θ (DEG) θ (RAD) $\Delta\%$	0.00001Ω ~ 99.9999MΩ 0.00001μs ~ 99.9999s 0.00001pF ~ 9.99999F 0.00001μH ~ 99.9999kH 0.00001 ~ 9.99999 0.00001 ~ 99999.9 -179.999° ~ 179.999° -3.14159 ~ 3.14159 -999.999% ~ 999.999%
	Equivalent circuit	Serial, Parallel	
	Range mode	Auto, Hold	
	Trigger mode	Internal, Manual, External, Bus	
	Average times	1~ 256	
	Calibration function	Open,short calibration with full frequency or dot frequency,Load	
	Math operation	Direct reading, ΔABS, Δ%	
	Delay time setup	0-999, minimum resolution: 100us	
	Comparator	10-bin sorting, BIN1-BIN9, NG,AUX;Bin counter;PASS/FAIL on front panel,LED indication	
	List sweep	There can be 10 pages of list sweep and 15 points per page at most; List sweep of frequency, AC voltage/current, internal/external DC bias voltage/current and independent DC source voltage can be performed on each page; Each sweep point can be sorted separately.	
Graphical analysis		Graph scanning and analysis of frequency, AC level and DC bias can be performed; Set the sweep start point, end point and each sweep point; Display the maximum value, minimum value and read any of the chosen sweep point; Scanning graphs can be stored into internal or external USB memory	
	Internal nonvolatile memory	100 sets of LCRZ setting files;201 times test results 10 sets of GIF image, CSV data files	
Interface	External USB memory	GIF image, CSV data files;LCRZ setting files memory Test data can be stored via USB memory directly	
	I/O interface	HANDLER on rear panel	
	SCI	USB, RS232C	
	PCI	GPIB (optional)	
	NI	LAN	
	Memory interface	USB HOST (front panel)	
	Bias current source	External DC bias current source can be controlled by using DCI interface.	
	control interface DCI	The maximum bias current can reach 120A. Option. Only choose either DCI or GPIB	
General Spec.	Display	800×RGB×480 7-inch TFT LCD display	
	Dimension(W*H*D)	400mm * 132mm * 385mm	
	Weight	Approx.13 kg	