



TH2827 Series - Features and Benefits

- 4.3-inch TFT LCD display
- Maximum test frequency of 1MHz, resolution of 10mHz
- Integrated transformer test function and balance test function
- Maximum test speed: 13ms/time
- Automatic level control (ALC) function for V and I
- Test signal level monitor function for V and I
- Included interior DC bias source
- External DC bias source of large current
- 10-point list sweep function
- Selectable internal resistance of 30Ω, 50Ω and 100Ω
- Internal file storage and external USB-disk for file storage directly
- RS232C, USB, LAN, HANDLER, GPIB, DCI interface

CE

Frequency of test signal	
TH2827A	20Hz ~ 300kHz
TH2827B	20Hz ~ 500kHz
TH2827C	20Hz ~ 1MHz
Minimum resolution	10mHz, 4-digit frequency input
Accuracy	0.01%
AC Level	
Voltage range of test signal	10mV ~ 2Vrms
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	100µA ~ 20mA
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 ~ ±5V / 0mA~ ±50mA
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	One set of main/sub parameter, 10-point list sweep
Test parameters of transformer	DCR1(primary, 2-terminal),DCR2(secondary, 2-terminal),M (mutual inductance), N, 1/N, Phase, Lk(leakage inductance),C(primary, secondary capacitance), balance test

Specifications	Basic accuracy	LCR test parameter	0.05%
		N	0.10%
	Calibration	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	
	Z , R ,X,DCR	0.00001Ω ~ 99.9999MΩ	
	Y ,G,B	0.00001μs ~ 99.9999s	
	C	0.00001pF ~ 9.99999F	
	L	0.00001μH ~ 99.9999kH	
	D	0.00001 ~ 9.99999	
	Q	0.00001 ~ 99999.9	
	θ(DEG)	-179.999° ~ 179.999°	
	θ(RAD)	-3.14159 ~ 3.14159	
	Δ%	-999.999% ~ 999.999%	
	Equivalent circuit	Serial, Parallel	
	Range mode	Auto, Hold	
	Trigger mode	Internal, Manual, External, Bus	
	Average times	1-255	
	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	10 points list sweep;Each sweep point can be sorted separately; Frequency, AC voltage/current,internal/external bias voltage/current can be swept;	
	Internal nonvolatile memory	100 sets of LCRZ setting files;201 times test results	
	External USB memory	GIF files;LCRZ setting files;Test data can be stored via USB memory directly	
Interface	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	480*RGB*272 4.3-inch TFT LCD display	
	Dimension(W*H*D)	280 mm * 88 mm * 370 mm(with no sheath);369 mm * 108 mm * 408 mm(with sheath)	
	Weight	Approx. 5 kg	