



Compact LCR Meter TH283X Series

Features

- Low cost, high performance, small size
- 4.3 inch TFT LCD Display
- Soft power switch
- Selectable Chinese-English operation language
- Max. 200kHz test frequency
- Max. 6 digit reading resolution
- 10mVrms-2.0Vrms programmable signal level,
built-in $0 - \pm 5V/50mA$ bias source
- DCR, 50mV-2V programmable test level, resolution $10\mu\Omega$
- Ls-Rd / Lp-Rd Function (L, Rd display simultaneously) *
- Highest test speed 13ms/time
- Selectable $30\Omega/100\Omega$ signal source impedance
- V/I monitor and auto level adjustment function
- Built-in comparator, 10 bins sorting and count function
- File storage and firmware update through U disk
- RS232, RS485, USB, HANDLER, GPIB interface

* Rd means DCR.

Applications

- Passive components:
Evaluation of Impedance Parameters for Capacitors, Inductors, Cores, Resistors, piezoelectric devices, Transformers, Chip Components, and Network Components



RS232	USB HOST	USB DEVICE	HANDLER
standard	standard	standard	standard
GPIB	RS485	SCANNER	
option	option	option	

TH283X Series

Rack mount (mm): 215(W) x 88(H) x 335(D)
Dimension (mm): 235(W) x 105(H) x 360(D)
Net weight: 3.6 kg

- Other components:
Impedance evaluation of printed circuit boards, relays, switches, cables, batteries, etc.

Specifications

Model		TH2830	TH2832
Basic measurement accuracy (See details in technical specification)	LCRZ	0.05%	0.05%
	DCR	0.1%	
	Calibration condition	Warm up time: ≥ 30 minutes ; Environment temperature: 23±5°C Signal level: 1Vrms ; Corretion: after OPEN, SHORT Testing cable length: 0 m	
Test signal frequency		50Hz-100kHz , Continuous	20Hz-200kHz, Continuous
Signal source output impedance		Selectable 30Ω, 100Ω, ±1% @1kHz	
AC test signal level	Normal	10mV—2Vrms	
		Resolution: 10mV, Accuracy: 10% x setting voltage+2mV	
		100μA—20mArms	
		Resolution: 0.1mA	
	Constant level (ALC ON)		20mV—1Vrms
			Resolution: 10mV , Accuracy: 10%
			200μA—10mArms
			Resolution: 0.1mA
DCR test signal level		1V DC	50mV—2V DC
			Resolution: 0.5mV



Compact LCR Meter

TH283X Series

DC bias voltage source	-----	0V— ± 5V
	-----	Resolution: 0.5mV, Accuracy: 1%
	-----	0mA—± 50mA
	-----	Resolution: 0.5μA
Test parameters	Z , Y , C, L, X, B, R, G, D, Q, θ, DCR	
DCR display range	0.00001 Ω – 99.9999 MΩ	
LCR parameters display range	Z , R, X 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%	
Display digits	6	6
Measurement time (≥10 kHz)	Fast: 75 meas/sec(13ms), Medium:11 meas/sec(90 ms), Slow: 2.7meas/sec(370 ms)	
Equivalent circuit	Serial, Parallel	
Range mode	Auto, Hold	
Trigger mode	Internal, Manual, External, Bus	
Average time	1–255	
Correction	Open, Short, Load	
Math operation	Direct reading, ΔABS, Δ%	
Trigger delay time setting	0 - 60.000s, 1ms steps	
Step delay time setting	0 - 60.000s, 1ms steps	
List Sweep	·10 points list sweep ·Frequency, AC voltage/current, internal/ external bias voltage/ current can be swept. ·Each sweep point can be sorted separately.	
Comparator function	10 bins, BIN1–BIN9, NG, AUX	
	Bin count function	
	PASS, FAIL LED display on front panel	
Built-in Storage	Internal 100 LCRZ instrument setting files, 201 times test results	
USB Storage	Instrument setting files , measurement result CSV files, printed screen (GIF format)	
Interface	Control interface	HANDLER
	Communication interface	USB HOST, RS232C, RS485(option), GPIB(option)
	Storage interface	USB DEVICE (U-disk storage)

Standard Accessories

Three core power cord
TH26010 Gold-plated short circuit board
TH26011CS 4 terminal pair Kelvin test clip leads
TH26048A Four-terminal test fixture

Marketed & Supported by-

Nvis Technologies Pvt. Ltd.

141-A, Electronic Complex, Pardesipura, Indore-452010, India.

© +91-731-4211500, ✉ info@nvisotech.com, 🌐 www.NvisTech.com

Subject to change - Version 2.0