



# Data Sheet

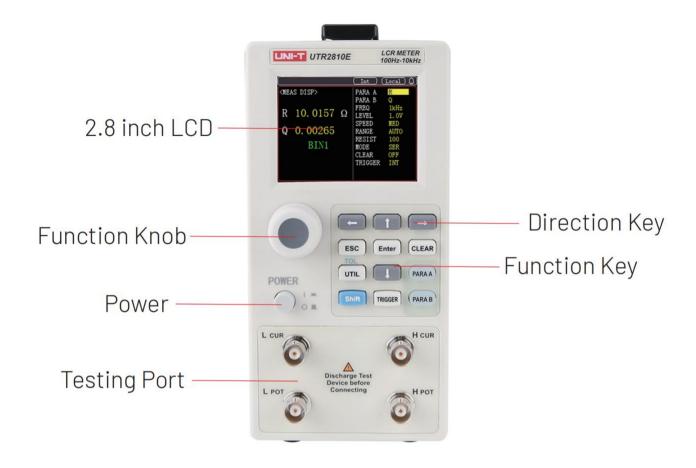
UTR2810 Series LCR Tester



## Main Features

- 2.8" TFT true color LCD
- Multiple measurement frequency: 100Hz, 120Hz, 1kHz, 10kHz, accuracy: 0.02%
- Highest measurement accuracy: 0.1%
- The main and auxiliary parameters can be matched freely, with 42 combinations in total
- Test speed: slow / medium / fast
- The fastest test speed is 33 times / s
- Automatic LCR measurement function
- Comparator function (4th gear sorting)
- UTR2810E can send sorting signal through Handler interface
- UTR2810E can be connected to the upper computer for statistical analysis
- UTR2810E has bus trigger and external trigger functions

## LCR Tester Panel





### **Product Introduction**

UTR2810 series LCR digital bridge is a new generation of low frequency component measuring instrument. Small size, light weight, beautiful appearance, simple operation, ultra-high cost performance and good test stability. It can meet the needs of production line quality assurance, incoming material inspection and automatic production.

#### Four stage screening

The full series of UTR2810 is equipped with four gear screening comparators, BIN1, BIN2, BIN3, NG. Cooperate with auxiliary parameter AUX to realize multi-stage sorting function. Help you better and more carefully control the quality of electronic components.



#### 2.8inch TFT LCD display

UTR2810 series is equipped with 2.8inch full-color LCD display. More parameters are displayed, and the color discrimination of measurement results is more intuitive. It is more conducive to human-computer interaction and improve the use experience.



#### High measurement accuracy

The basic accuracy of UTR2810 series measurement can reach 0.1%. Provide multi frequency, multi-level, multi internal resistance and other measurement parameters. Make the measurement results more

accurate and meet a variety of application scenarios



#### Remote control

The UTR2810 series uses the RS232 interface to connect the upper computer, so as to realize remote control. With the host computer software, the data record and filtering can be displayed at the same time. Support SCPI protocol, which can be applied to automatic construction.



## Technical Specification

Model		UTR2811E	UTR2810E	
Test signal	Frequency	100Hz,120Hz,1kHz,10kHz	100Hz,120Hz,1kHz,10kHz	
frequency	Accuracy	0.02%	0.02%	
AC level	Voltage range	0.1V,0.3V,1V	0.1V,0.3V,1V	
	Accuracy	±10%×set value	±10%×set value	
Internal resistance of AC source	Resistance	30Ω / 100Ω	30Ω / 100Ω	
	Accuracy	±5%	±5%	
		Main parameters: Cp,Cs,Lp,Ls,Z,R,G,Y	Main parameters:	
Maximum input voltage		Secondary parameters Secondary parameters	Cp,Cs,Lp,Ls,Z,R,G,Y	
		D,Q,X,B,Rp,Rs, θr, θ d	Secondary parameters:	
		Auto LCR D,Q,X,B,Rp,Rs,\theta_r,\theta d		
		Free collocation of main and	AutoLCR	
		auxiliary parameters	Free collocation of main and	
			auxiliary parameters	
Test speed (ms / time)		Fast: 30ms; Medium speed: 170ms; Slow speed: 350ms	Fast: 30ms; Medium speed: 170ms; Slow speed: 350ms	
		R, X,  Z : 0.00001Ω ~ 99.9999MΩ	R, X,  Z : 0.00001Ω~99.9999MΩ;	
		G, B,  Y : 0.00001uS~999.999S;	G, B,  Y : 0.00001uS~999.999S;	
		L: 0.00001uH~9.99999kH;	01uH~9.99999kH; L: 0.00001uH~9.99999kH;	
Dianlauranaa		C: 0.00001pF~999.999mF;	00001pF~999.999mF; C: 0.00001pF~999.999mF	
Display range		D: 0.00001~ 9.99999;	D: 0.00001~9.99999	
		Q: 0.00001~99999.9;	Q: 0.00001~99999.9;	
		0d: -179.999°~179.999°;	θd: -179.999° ~ 179.999°;	
		θr: -3.14159~3.14159;	θr: -3.14159 ~ 3.14159	
		C: 0.1% (1+ Cx/Cmax+ Cmin/Cx )(1+Dx )( 1+ks+kv+kf )ke		
		L: 0.1% (1+ Lx/Lmax+ Lmin/Lx)(1+1/Qx)(1+ks+kv+kf)ke		
Verticalresol	ution	Z: 0.1% (1+Zx/Zmax+Zmin/Zx)(1+ks+kv+kf)ke		
verticarresor	ation	R: 0.1%(1+Rx/Rmax+Rmin/Rx)(1+Qx)(1+ks+kv+kf)ke		
		D: 0.0010(1+Zx/Zmax+Zmin/Zx)(1+Dx+Dx2)(1+ks+kv+kf)ke		
		Q: 0.0015(1+Zx/Zmax+Zmin/Zx)(0x+1/0x)(1+ks+kv+kf)ke		
Test end configuration		Open circuit, short circuit	Open circuit, short circuit	
Clear function		Open circuit, short circuit	Open circuit, short circuit	
Equivalent mode		Series, parallel	Series, parallel	
Rangemode		Hold, auto	Hold, auto	
Triggermode		Internal, manual	Internal, manual, external, bus	
Mathematical	operation	Direct reading, △ABS, △%	Direct reading, △ABS, △%	
Comparator		Para A 4-gear sorting, BIN1-BIN3, NG, Para B 2-gear sorting, AUX, NG,	Para A 4-gear sorting, BIN1-BIN3, NG, Para B 2-gear sorting, AUX, NG,	
		front panel LCD display	front panel LCD display	
Interfere		-	RS232、HANDLER	
Interface Upper computer function		-	Statistical analysis of upper computer	
Power		110V/220V 50/60Hz 20W-30W	110V/220V 50/60Hz 20W-30W	
		2.8" TFT LCD 240×320	2.8" TFT LCD 240×320	
Display  Product size (W×H×D)		88mm×174mm×275mm	88mm×174mm×275mm	
		2.5kg	2.5kg	
Product net weight		2.0Ng	z.ong	

## Standard accessories

Name	Number	Description
UTR-001	1	Short circuit board (UTR2810E)
UTR-L10kE	1	Kelvin test cable with crocodile clip
UTR-S100KE	1	4-wire test box (UTR2810E)
Communication cable	1	RS232 Communication cable (UTR2810E)
Power cable	1	Fits the standard of destination country

## Warranty

Three-years warranty, excluding probes and accessories.

Please visit https://instruments.uni-trend.com/list\_190/65.html to learn more information.

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