Resistance Tester

F. TH2515 DC Resistance Meter



TH2515

Features

- Maximum accuracy: 0.01%
- Temperature accuracy: 0.1°C
- Minimum resolution: 0.1uΩ (resistance)
- Low-resistance test mode can effectively protect DUT
- Multiple measurement combinations of R, LPR, T
- 24 bits, 4.3-inch and 4-wire touch LCD screen
- LCD resolution: 480×272
- Temperature compensation(TC)
- Temperature conversion(Δt)
- Maximum sampling rate: 100samps/sec
- Offset voltage compensation (OVC)
- Customer self-correction(0 ADJ)
- Simultaneously output compare results of 10 bins (OVER, PASS and BEEP)
- Statistics function: CpK, Cp

Specifications

- 30 groups of parameter files can be saved and loaded
- Screen information can be stored on U-disk
- Data save function brings convenience for saving measurement result
- Automatically update operation software through USB HOST
- Operation languages: Chinese and English
- Intelligent detection for test state error
- Flexible and convenient file operation system
- Handler interface realizes on-line operation.
- Interfaces such as RS232, USB HOST, USB Device and LAN are available and GPIB is optional.
- Compatible with LXI C standard Specifications

Brief Introduction

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On the basis of rich experience in impedance test and wide market research, now Tonghui launches a new touch screen meter---TH2515 DC Resistance meter. TH2515, with elegant appearance, easy operation and excellent performance, is comparable to the most advanced products in the market.

TH2515 adopts 32 bits CPU and high density SMD technology. 24 bits, 4.3-inch and touch LCD screen brings ease for your eyes and convenience to your operation. For the contact influence of the thermoelectricity on DUT, its elimination is achieved. The maximum 0.01% accuracy and minimum 0.1 $\mu\Omega$ resolution shore up its leading role in testing relay contact resistance, interconnecting resistance, conductor resistance, PCB resistance and welding-hole resistance. Temperature compensation and conversion functions make your tests be free from the effect of the environment temperature. The offset voltage compensation has effectively eliminated the electromotive force of the DUT and its contact potential difference. Automation on production lines can be greatly improved by the realization of ultra-high test speed and the signal output of 10 compare results through HANDLER interface.

Providing 1 optional interface---GPIB and 4 standard ones---RS232C, USB HOST, USB Device and LAN, TH2515 is able to make data communication with PC and further realizes remote control.

| Model | TH2515 | TH2515 | | | |
|------------------------|--------------------------|--|-----------------------------------|--|--|
| Display | | | | | |
| Display | 24-bit, 400 X 272 and to | 24-bit, 400 X 272 and touch TFT LCD screen | | | |
| Reading digits | 5 1/2 digits | 5 ½ digits | | | |
| Resistance measurement | | | | | |
| Measurement range | 0.1μΩ110ΜΩ | 0.1μΩ110ΜΩ | | | |
| Resistance range | Current | Resolution | *Accuracy±(ppm of Rd + ppm of Fs) | | |
| 20 mΩ | 1A | 0.1μΩ | 2500+10 | | |
| 200mΩ | | 1μΩ | 2500+10 | | |
| 200mΩ | 100mA | 1μΩ | 3500+10 | | |
| 2Ω | 100mA | 10μΩ | 350+10 | | |
| Model | TH2515 | | | | |

-56-

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| 20Ω | | | 400.0 | 050:40 | | |
|---|---|---|--|------------------------|--|--|
| | | 10mA | 100μΩ | 250+10 | | |
| 200Ω | | | 1mΩ | 100+10 | | |
| 2kΩ | | 1mA | 10mΩ | 100+10 | | |
| 20kΩ | | - 100µA | 100mΩ | 100+5 | | |
| 100/200kΩ | | · · | 1Ω | 100+30 | | |
| 1/2MΩ | | 10µA | 10Ω | 200+10 | | |
| 10MΩ | | 1µA | 100Ω | 1000+60 | | |
| 100MΩ | | 100nA | 1kΩ | 8000+600 | | |
| Measuremen | nt function | | | | | |
| Resistance measuremen | | FAST: 7ms; MED: 22ms; SLOW1: 102ms; SLOW2: 402ms Above data is correct when DISPLAY is OFF; When DISPLY is ON, 20ms should be added. | | | | |
| Temperature measuremen | | 100 ± 10ms | | | | |
| Test terminal | | 4-terminal | | | | |
| Average setu | qu | 1-255 | | | | |
| Zero clearing | 9 | \checkmark | | | | |
| Range switch | h | AUTO and Manual | | | | |
| Trigger mode | | Internal, Manual, External, BUS | | | | |
| Power frequency selection $\sqrt{(avoid the interference of the power noise)}$ | | | | | | |
| Setting data storage | | 30 groups | | | | |
| Low voltage measuremen | | | | | | |
| Thermal | | Ellective range: 202, 2002, 2002 | 2, 2812 | | | |
| electromotive force eliminat | ition | \checkmark | | | | |
| Statistics fun | | AVG, MAX, MIN, OSD(Overall standard deviation), SSD(Sample standard deviation), Process capacity index (Cp, CpK) | | | | |
| Measuremen | nt error detection | $\sqrt{(\text{Detect the measurement cable has been connected correctly or not.)}}$ | | | | |
| Multipole con | | $\sqrt{(Noise abatement function of)}$ | | | | |
| Beep state | | | | | | |
| Key lock | | | | | | |
| | measurement | • | | | | |
| Temperature measuremen | | | | | | |
| Temperature measurement2 | | Analog input: 0V2V Display: -99.9°C 999.9°C | | | | |
| Temperature compensation | | (Convert the resistance measurement value to that one measured under preset temperature) | | | | |
| Temperature | | (Temperature rising is gained fr | om resistance test values befo | ore and after warming) | | |
| Compare Jud | dge | | | . | | |
| | Signal output HI/IN/LO | | | | | |
| Comparator | Веер | Beep mode: OFF, IN, HI/LO | | | | |
| | Limit setup mode | Absolute value high/low limit, P | ercentage high/low limit +nom | inal value | | |
| Sorting | | 10 bins, absolute value/ percentage | | | | |
| External trigger | | AUTO: dependent on range, low voltage mode ON/OFF, OVC (offset voltage compensation) ON/OFF | | | | |
| | | MANUAL: 0.0009.999s | | | | |
| delay time | trigger | Rising/Falling edge | | | | |
| delay time External input | trigger | | | | | |
| delay time External input Interface | trigger | | | | | |
| delay time External input Interface Interface | | USB DEVICE, USB HOST, RS | 232C、HANDLER、GPIB(OP | TION) | | |
| delay time External input Interface General spec | cification | | | TION) | | |
| delay time External input Interface General spec Working cond | cification dition | Temperature:0℃ - 40℃,Humi | dity:≤ 80%RH | TION) | | |
| delay time External input Interface General spec Working com Storage cond | cification dition dition | Temperature:0°C - 40°C, Humi Temperature:-10°C-50°C, Humi | dity:≤ 80%RH dity: ≤90%RH | TION) | | |
| delay time External input Interface General spec Working cond Storage cond Accuracy gua | cification dition dition arantee condition | Temperature:0°C - 40°C,Humi Temperature:-10°C-50°C, Humi Temperature:18°C - 28°C,Hun | dity:≤ 80%RH dity: ≤90%RH | TION) | | |
| delay time External input Interface General spec Working com Storage cond | cification dition dition arantee condition Voltage | Temperature:0°C - 40°C, Humi Temperature:-10°C-50°C, Humi Temperature:18°C - 28°C, Hum 99V—242V | dity:≤ 80%RH dity: ≤90%RH | TION) | | |
| delay time External input Interface Interface General spec Working cond Storage cond Accuracy gua Power | cification dition dition arantee condition Voltage Frequency | Temperature:0°C - 40°C, Humi Temperature:-10°C -50°C, Humi Temperature:18°C - 28°C, Humi 99V—242V 47.5Hz—63Hz | dity:≤ 80%RH dity: ≤90%RH | TION) | | |
| delay time External input Interface General spec Working cond Storage cond Accuracy gua | cification dition dition arantee condition Voltage Frequency | Temperature:0°C - 40°C, Humi Temperature:-10°C-50°C, Humi Temperature:18°C - 28°C, Hum 99V—242V | dity:≤ 80%RH dity: ≤90%RH nidity:≤ 80%RH | TION) | | |

*: the accuracy is guaranteed under certain environmental and test conditions:temperature of 18° - 28° ,humidity is $\leq 80\%$ RH,test speed is SLOW2 and OVC function is ON(see details in Manual).