

## **Battery Tester/ACR Meter**

# Standard Battery Tester TB-3563 Series

#### > Product description:

TB-3563 series is high-precision, wide-range battery resistance tester controlled by a high performance microprocessor. Whether it is lithium batteries that are trending towards large scale, low-resistance or battery packs with growing high-voltage applications in the face of the ever-evolving battery production industry, this instrument can simultaneously check the internal resistance (IR) and battery voltage (OCV) at high speed. This product has high resolution, good stability, short test cycle, exquisite appearance, powerful functions, rich interfaces, and is suitable for product development and automated production lines.





- o Minimum resolution of internal resistance is 0.1  $\mu\Omega$  and the maximum range is 3.1 kΩ.
- o Voltage minimum resolution 10μV, maximum range 120V (TB-3563D only)
- o 0.005% ultra-high voltage accuracy (TB-3563D only)
- The minimum test cycle is only 10ms
- Super strong anti-static shock (TB-3563D only)
- Strong anti-interference ability
- AC four-terminal method, high-precision measurement of low resistance
- Impedance tolerance of the test line is greatly enhanced, the test channels are infinitely expanded.
- Equipped with temperature measurement function (TB-3563D only)
- Rich standard interfaces suitable for automated test equipment
- Simultaneous high-speed check of internal resistance (IR) and battery voltage (OCV)
- Automatic battery test function
- Used for checking the internal resistance and voltage of battery cells, packs and battery modules.





TB-3563-24 (Rear panel)



Display   3.5 inch TFT-LCD display   Number of channel   1 channel   12 channels   24 channels   1 channel   1 channel   12 channels   24 channels   1 channel	Model		TR-3563	TR-3563-12	TR-3563-24	TR-3563D
$\begin{tabular}{l lllllllllllllllllllllllllllllllllll$	Display		3.5 inch TFT-LCD display			
ResistanceAccuracy Range0.5% (3mΩ); 0.5% (30mΩ); 0.3% (≥300mΩ)VoltageAccuracy Range0.001 %0.005%TemperatureAccuracy Range0.00001 ∨ ~60.0000 ∨0.00001 ∨ ~120.000 ∨Signal Source RangeMeasuring current frequency : 1 kHz ± 0.2Hz , Open circuit voltage : <25V, Test current : <100mA	Number of channel		1 channel	12 channels	24 channels	1 channel
$ \begin{array}{c} \text{Range} & 0.0001  \text{m}  \Omega < 3.10  \text{OOk}  \Omega \\ \text{Voltage} & \text{Accuracy} & 0.01\% & 0.005\% \\ \text{Range} & 0.00001 \text{V} \sim 60.0000 \text{V} & 0.00001 \text{V} \sim 120.000 \text{ V} \\ \text{Temperature} & \text{Accuracy} & 1  ^{\circ}\text{C} \\ \text{Range} & \text{Range} &$	Measurement parameters		AC resistance, DC voltage			
$\begin{tabular}{lll} Range & 0.0001 m\Omega \sim 3.10 00k\Omega \\ \hline Voltage & Accuracy & 0.01\% & 0.005\% \\ \hline Range & 0.00001V \sim 60.0000V & 0.00001V \sim 120.000 V \\ \hline Temperature & Accuracy & 1°C \\ \hline Range & Accuracy & 1°C \\ \hline Range & Measuring current frequency: 1 kHz \pm 0.2Hz, Open circuit voltage: <25V, Test current: <100mA \\ \hline Range & 3m\Omega/30m\Omega/300m\Omega/3\Omega/300\Omega/3 k\Omega; 7 levels full range automatic or manual test mode \\ \hline Test speed & Ultra fast: 100 times/s, Fast: 50 times/s, Medium: 20 times/s, slow: 3 times/s \\ \hline Calibration method & Short circuit reset within full range \\ \hline Comparator & 4-stage sorting and stage counting \\ \hline Trigger & Internal (INT), Manual (MAN), External (EXT), automatic (AUT) and Bus \\ \hline Interface & RS-232/RS-485, LAN, I/O port \\ \hline Power Input & 100 \sim 256VAC, 50 \sim 60Hz, \\ \hline \end{tabular}$	Posistanco	Accuracy	0.5% (3mΩ); 0.5% (30mΩ); 0.3% (≥300mΩ)			
$\begin{tabular}{ l l l l l l l l l l l l l l l l l l l$	Resistance	Range	$0.0001\text{m}\Omega\sim3.10~00\text{k}\Omega$			
Range $0.00001V \sim 60.0000V$ $0.00001V \sim 120.000 V$ $0.00001V \sim 120.0000 V$ $0.00001V \sim 120$	Voltage	Accuracy	0.01%			0.005%
Temperature  Range  Measuring current frequency: $1 \text{ kHz} \pm 0.2 \text{Hz}$ , Open circuit voltage: $<25 \text{V}$ , Test current: $<100 \text{mA}$ Range $3 \text{m} \Omega / 30 \text{m} \Omega / 300 \text{m} \Omega / 30 \Omega / 300 \Omega / 3 \text{k} \Omega$ ; $7 \text{ levels full range automatic or manual test mode}$ Test speed  Ultra fast: $100 \text{ times/s}$ , Fast: $50 \text{ times/s}$ , Medium: $20 \text{ times/s}$ , slow: $3 \text{ times/s}$ Calibration method  Short circuit reset within full range  Comparator  4-stage sorting and stage counting  Trigger  Internal (INT), Manual (MAN), External (EXT), automatic (AUT) and Bus  Interface  RS-232/RS-485, LAN, I/O port  Power Input $100 \sim 256 \text{VAC}$ , $50 \sim 60 \text{Hz}$ ,		Range	0.00001V ~ 60.0000V			0.00001 V ~ 120.000 V
Signal Source Measuring current frequency: 1 kHz ± 0.2Hz , Open circuit voltage: <25V, Test current: <100mA  Range 3mΩ/ 30mΩ/ 300mΩ / 3Ω/ 30Ω/ 30Ω/ 30Ω/ 3 kΩ; 7 levels full range automatic or manual test mode  Test speed Ultra fast: 100 times/s, Fast: 50 times/s, Medium: 20 times/s, slow: 3 times/s  Calibration method Short circuit reset within full range  Comparator 4-stage sorting and stage counting  Trigger Internal ( INT ), Manual ( MAN ), External ( EXT ), automatic (AUT) and Bus  Interface RS-232/RS-485, LAN, I/O port  Power Input 100 ~ 256VAC, 50 ~ 60Hz,	Temperature	Accuracy				1°C
Range $3m\Omega/300m\Omega/300m\Omega/3\Omega/3000MO/3\kappa\Omega$ ; 7 levels full range automatic or manual test mode  Test speed Ultra fast: 100 times/s, Fast: 50 times/s, Medium: 20 times/s, slow: 3 times/s  Calibration method Short circuit reset within full range  Comparator 4-stage sorting and stage counting  Trigger Internal (INT), Manual (MAN), External (EXT), automatic (AUT) and Bus  Interface RS-232/RS-485, LAN, I/O port  Power Input $100 \sim 256$ VAC, $50 \sim 60$ Hz,		Range				-20 ~ 99.9 °C
Test speed Ultra fast: 100 times/s, Fast: 50 times/s, Medium: 20 times/s, slow: 3 times/s  Calibration method Short circuit reset within full range  Comparator 4-stage sorting and stage counting  Trigger Internal (INT), Manual (MAN), External (EXT), automatic (AUT) and Bus  Interface RS-232/RS-485, LAN, I/O port  Power Input 100 ~ 256VAC, 50 ~ 60Hz,	Signal Source		$Measuring\ current\ frequency: 1\ kHz \pm 0.2Hz\ ,\ Open\ circuit\ voltage: <25V,\ Test\ current: <100mA$			
Calibration method Short circuit reset within full range  Comparator 4-stage sorting and stage counting  Trigger Internal ( INT ), Manual ( MAN ), External ( EXT ), automatic (AUT) and Bus  Interface RS-232/RS-485, LAN, I/O port  Power Input 100 ~ 256VAC, 50 ~ 60Hz,	Range		$3m\Omega/30m\Omega/300m\Omega$ / $3\Omega/30\Omega/300\Omega/3$ k $\Omega$ ; 7 levels full range automatic or manual test mode			
Comparator  4-stage sorting and stage counting  Trigger Internal ( INT ), Manual ( MAN ), External ( EXT ), automatic (AUT) and Bus  Interface RS-232/RS-485, LAN, I/O port  Power Input 100 ~ 256VAC, 50 ~ 60Hz,	Test speed		Ultra fast : 100 times/s, Fast : 50 times/s, Medium : 20 times/s, slow : 3 times/s			
Trigger Internal ( INT ), Manual ( MAN ), External ( EXT ), automatic (AUT) and Bus  Interface RS-232/RS-485, LAN, I/O port  Power Input 100 ~ 256VAC, 50 ~ 60Hz,	Calibration method		Short circuit reset within full range			
Interface         RS-232/RS-485, LAN, I/O port           Power Input         100 ~ 256VAC, 50 ~ 60Hz,	Comparator		4-stage sorting and stage counting			
Power Input 100 ~ 256VAC, 50 ~ 60Hz,	Trigger		Internal ( INT ), Manual ( MAN ), External ( EXT ), automatic (AUT) and Bus			
	Interface		RS-232/RS-485, LAN, I/O port			
Power Consumption 15VA	Power Input		100 ~ 256VAC, 50 ~ 60Hz,			
	Power Consumption		15VA			
Dimension (LxWxD) 325mm x 215mm x 96.5mm	Dimension (LxWxD)		325mm x 215mm x 96.5mm			
Weight 3kg.	Weight		3kg.			

### Ordering Informations

**TB-3563** : Single channel, 60Vdc/3.lkΩ Battery Tester **TB-3563-12** : 12 channels, 60Vdc/3.lkΩ Battery Tester

**TB-3563-24**: 24 channels, 60Vdc/3.1kΩ Battery Tester

**TB-3563D**: Single channel, 120Vdc/3.1kΩ/99.9 °C Battery Tester

#### **Standard Accessories:**

- User Manual
- Four-terminal Test clip
- Communication cable
- Power cable
- PB36 connector