TEKON950 Battery Quality Analyzer

TEKON950A

TEKON950B

To prevent faults or quality issues in critical battery back-up applications caused by defects in stationary batteries, TEKON950 battery quality analyzer enables the user to diagnose and evaluate the performance and the degree of ageing by testing the conditions of individual batteries (500V max) in type of cell, module or pack.

TEKON950 can handle virtually all battery testing (e.g. aged status of battery under test and the condition of a power system) in systems that use high-voltage battery packs, such as ESS, EV, HEV and PV as well as UPS.

1. Features

- Measures internal resistance of 500V max of batteries
- Measures voltages at battery terminals (DC1000V)
- Measures voltage of UPS (AC500V)
- Measures ripple voltage, current and temperature
- Measures capacity of battery (Capacity)
- Diagnoses ageing of battery and predicts its use life (to determine timing for replacement)
- Can conduct history management of battery using 8MB memory
- Auto Hold and Data Storage
- Prints out measurement data in reports
- Transmits measurement data to remote locations (e-mail, server) using Mobile App

2. General specifications

Power (battery)	7.2V/5.2Ah Li-ion, 12V/2.5A DC adaptor
Data storage	8MB
Communication	Bluetooth Ver2.1 + EDR Class2
LCD display	4.0 monographic
Operating temp/humidity	0°C±45°C, RH 85% max
Storage temp/humidity	-20°C±60°C, RH 85% max
Compliant standards	IEC 61010-1 CAT III 500V Pollution Degree 2 EN61326-1:2013
Dimension	240(L)×198(W)×109(H) mm
Weight	1.4kg

3. Electrical specifications

- Measurement of resistance (Auto/Manual)

Range	Resolution	Measurable current	Accuracy
3mΩ	1uΩ	100mA	±0.8%rdg±10dgts
30mΩ	10uΩ	100mA	±0.5%rdg±10dgts
300mΩ	100uΩ	10mA	
3Ω	1mΩ	1mA	
30Ω	10mΩ	0.1mA	
300Ω	100mΩ	0.1mA	

- DCV (Auto/Manual)

Range	Resolution	Accuracy
5, 50, 500	1mV	±0.5%rdg±5dgts

- ACV

Range	Resolution	Frequency	Accuracy
0~500V	100mV	40Hz~500Hz	±0.75%rdg±10dgts

- Ripple voltage

Range	Resolution	Frequency	Accuracy
0~5V	1mV	40Hz~10kHz	±5.0%rdg±10dgts

- Measurement of temperature

Range	Resolution	Accuracy
-10℃ ~ 100℃	0.1℃	±1℃+2dgts

- DC Current

Range	Resolution	Accuracy
4, 40, 400A	1mA	±0.5%rdg±5dgts (+CT Tolerance)

- AC Current

Range	Resolution	Accuracy
4, 40, 400A	1mA	±0.75%rdg±10dgts (+CT Tolerance)

- Measurement of capacity (for only model 950B)

Measuring method	Rated capacity, charge/discharge test
Range	0 ~ 100%
Measurable capacity	0 ~ 1200Ah
Parameters displayed	Efficiency, capacity, Ah, average current, charge-discharge time, graph

- Charge rate SOC (State of Charge) (for only model 950B)

Measuring method	Charge-discharge test
Range	0 ~ 100%
Measurable voltage	500V max
Cell under test	1.2V, 2V, 3.6V, 12V

● Accessories

Standard	Pin-type probe for measurement, test lead, Li-ion battery (7.2V/5.2Ah), 12V/2.5A adaptor, zero-return adjuster, portable bag, PC Program, User's Manual, clamp-on (SCA256AD) for only model 950B
Optional	Extensible rod (500mm), clamp (SCA256AD), clip-type Kelvin probe

40/400A Clamp   7.2V/5.2Ah Li-ion battery Pack   Zero Bar   Extensible rod (500mm)   Test Lead   Kevin Probe (Pin)   Kevin Probe (Clip)

● Comparison of functions in TEKON950 Series

Function		TEKON950A	TEKON950B
Impedance	Scale	3mΩ~300Ω(6range)	3mΩ~300Ω(6range)
	Accuracy	±0.8%	±0.8%
	Max Test Voltage	200V	400V
DC/V		0~500V	0~1000V
AC/V		0~500V	0~500V
Ripple Voltage		0~5V	0~5V
DC/A(Floating Current)		4A/40A/400A	4A/40A/400A
AC/A(Ripple Current)		4A/40A/400A	4A/40A/400A
Temperature		NTC	NTC
Analyzer	Trend	yes	yes
	Change time	yes	yes
Capacity		No	yes
Data record		8MB	8MB
PC Interface		Bluetooth	Bluetooth
External Interface		Mobile App	Mobile App
Auto Hold		yes	yes
Auto Record		yes	yes