





Battery change time estimate



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.

Features

- Measures internal resistance of 500V max of batteries
- Measures voltages at battery (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
- Battery management using identification code

General specifications

Certification

| 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 II I500V Pollution Degree 2, EN61326-1:2013 | |
| Dimension | 240(L)×198(W)×109(H) mm | |
| Weight | 1.4kg | |
| Case Color | Black, Yellow, Orange | |

Electrical specifications

| Measurement of resistance (Auto/Manual) | | | |
|---|------------|--------------------|-----------------|
| Range | Resolution | Measurable current | Accuracy |
| 3mΩ | 1uΩ | 100mA | ±0.8%rdg±10dgts |
| 30mΩ | 10uΩ | 100mA | |
| 300mΩ | 100uΩ | 10mA | |
| 3Ω | 1mΩ | 1mA | ±0.5%rdg±10dgts |
| 30Ω | 10mΩ | 0.1mA | |
| 300Ω | 100mΩ | 0.1mA | |

| 00017 | 1001112 | | |
|-------------------|------------------|--|--|
| DCV (Auto/Manual) | | | |
| Range | 5, 50, 500V | | |
| Resolution | 1mV | | |
| Accuracy | ±0.5%rdg±5dgts | | |
| ACV | | | |
| Range | 0~500V | | |
| Resolution | 100mV | | |
| Frequency | 40Hz~100Hz | | |
| Accuracy | ±0.75%rdg±10dgts | | |
| Ripple voltage | | | |
| Range | 0~5V | | |

| Measurement of temperature | | |
|----------------------------|---------------|--|
| Range | -10°C ~ 100°C | |
| Resolution | 0.1°C | |
| Accuracy | ±1°C+2dgts | |

1mV

40Hz~10Hz

±5.0%rdg±10dgts

| DC | | |
|--------------------------------|--|--|
| Range | 4, 40, 400A | |
| Resolution | 1mA | |
| Accuracy | ±0.5%rdg±5dgts (+CT Tolerance) | |
| AC | | |
| Range | 4, 40, 400A | |
| Resolution | 1mA | |
| Accuracy | ±0.75%rdg±10dgts (+CT Tolerance) | |
| Measurement of capacity (950B) | | |
| Measuring method | d Rated canacity charge/discharge test | |

| Measurement of capacity (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) / 950B | | |
|--|--------------------------|--|
| Measuring method | Charge-discharge test | |
| Range | 0 ~ 100% | |
| Measurable voltage | surable voltage 500V max | |
| Cell under test | 1.2V, 2V, 3.6V, 12V | |

Accessories

| Standard | Pin-type Kelvin Probe, Test Lead, Li-ion battery (7.2V/5.2Ah), 12V/2.5A adaptor, Zero-Bar, Portable bag, PC Program, User's Manual, clamp-on/950B | |
|----------|---|--|
| Optional | Extensible rod (500mm), clamp, Clip-type Kelvin probe | |



Resolution

Frequency

Accuracy





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 | 0~500V |
| AC/V | | 0~500V | 0~500V |
| Ripple Voltage | | 0~5V | 0~5V |
| DC/A(Floating Current) | | 4A/40A/400A | 4A/40A/400A |
| Ac/V(Ripple Current) | | 4A/40A/400A | 4A/40A/400A |
| Temperature | | NTC | NTC |
| Analyzer | Trend | 0 | 0 |
| | Change time | 0 | 0 |
| Capacity | | × | 0 |
| Data record | | 8MB | 8MB |
| PC Interface | | Bluetooth | Bluetooth |
| External Interface | | Mobile App | Mobile App |
| Auto Hold | | 0 | 0 |
| Auto Record | | 0 | 0 |