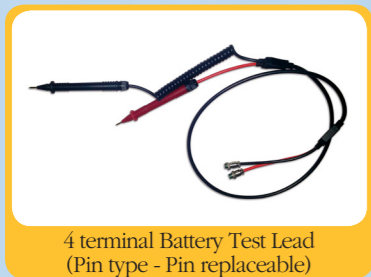


WENS 900 series model selection		WENS 900	WENS 900C
Impedance Measurement	4mΩ / 40mΩ / 400mΩ / 4Ω	✓	✓
	Volt range (100V)	✓	✓
	Ah range (5 ~ 6000Ah)	✓	✓
Voltage measurement	Range (300V DC)	✓	✓
DC Current(Float Current) measurement with external CT	40A / 400A	✓	✓
AC Current(Ripple Current) measurement with external CT	40A / 400A	Option	Option
Temperature	-10°C ~ 100°C / 14°F ~ 212°F	✓	✓
Capacity measurement	% SOC, Efficiency, Ah, Wh	not available	✓
Analyzer		✓	✓
Interface (USB 2.0) Standard		✓	✓
Interface (Bluetooth / Wifi)		Option	Option
Safety	CAT II 300V DC	✓	✓



4 terminal Battery Test Lead (Pin type - Pin replaceable)



4 terminal Battery Test Lead (Clamp type)



Delivery Package

Electrical Specifications

- Impedance Measurement
Range : 4mΩ ~ 4Ω (4 range)/1uΩ resolution
Accuracy : ±0.8%rdg ±10dgts
Voltage Range : max 100V
Ah range : 5 ~ 6000 Ah
- Voltage Measurement : Differential Input
Range : 4V, 40V, 300V (3 range)
Accuracy : ±0.5%rdg ±5dgts
- DC Current(Float Current) Measurement,CT
Range : 40A/400A
Accuracy : ±1%rdg ±5dgts (CT Accuracy added)
- AC Current(Ripple Current) Measurement,CT *Option
Range : 40A/400A
Accuracy : ±1%rdg ±5dgts (CT Accuracy added)
- Temperature
Range : -10°C ~ 100°C / 14°F ~ 212°F
Accuracy : ±2°C ±3.6°F
Battery Temperature Measurement : Internal Sensor,
Guaranteed Accuracy : 23°C +/-5°C, non-condensing
- Capacity Measurement *WENS 900C only
% SOC, Efficiency, Ah, Wh
- Safety : Certified EMS, LVD 61010-1 CAT II 300V DC

General Specifications

- Display : 3.8" Graphic Monochrome LCD Module(320*240)
- Input Method : Differential (Impedance, DC Voltage)
- Auto Power OFF : User Select at User mode
- Maxim Voltage Input : 300V DC
- Interface : USB 2.0 (Standard),
Bluetooth (Option) Wi-Fi (Option)
- Operating Temperature : 0 ~ 40° C, 80% RH or Less
- Continuous Operating Time : 6 hours
- Power Supply : 7.2V, 2.7A NiMH Battery Pack (2)
- Line Power : 12V, 1A Adapter
- Dimensions
: 107m (W) x 220mm (H) x 55mm(D) / 4.2" x 8.3" x 2.2"
- Weight (Main Unit only) : 1.2kg / 2.6 lbs

Accessories

- Standard Accessories : 4 Terminal Battery Test Lead set (Pin type),
Ni-MH Rechargeable Battery Pack (installed)
USB PC Interface Package
(Program and User Manual in CD, USB Cable)
Hardcopy User Manual, O
Ohm Adjustment Bar, ADC Power Adapter
and Internal Charger, Carrying Bag with Shoulder Strap
- Optional Accessories : 4 Terminal Battery Test Lead (Clamp type),
ADC Current Adapter

Specifications subject to change without further notice

WENS

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A ISO 9001 · 14001 Certified Manufacturer



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Battery Quality Analyzer WENS 900 Series

Single, Quick Testing Total Battery Quality Analysis Solution

Super Tool for UPS Battery field Management

Battery Health Analysis

Testing at System Loading condition

Impedance, Voltage, Temperature, Current
and Capacity measurements
(simultaneously or independently)

User Friendly Software



WENS

Alternative Graphing Power

High Performance Battery Quality Analyzer Data Logger with Trend Analysis

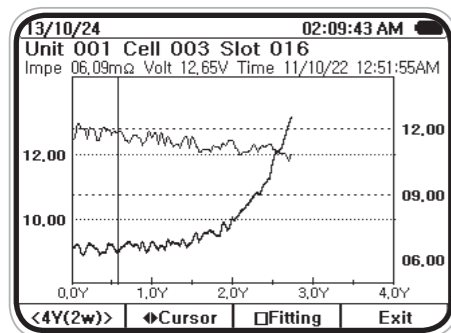
Abundant Data Logging and Accurate Trend Analysis is available backed by Internal SD Card stored up to 7.5 million data in Text or Graphic mode

- The Battery Quality Analyzer is designed for measuring the internal resistance, open-circuit voltage, and terminal temperature of secondary batteries, including Lead Storage Cells (Lead -Acid batteries), nickel-cadmium batteries, lithium-ion batteries and nickel-metal hydride batteries.
- AC four-terminal method to measure the internal resistance by eliminating lead resistance and contact resistance to get the accurate results.
- Multiple display to show the internal resistance, voltage and temperature or voltage, current and temperature of the battery simultaneously.
- It has 99 sets of composite comparator function, which can be set at resistance and voltage values to get the reliable detection of battery deterioration.
- Pin type lead, which can easily contact the battery electrodes supplied as standard to get more accurate 4-terminal measurement.
- Clamp adaptor for DC current or AC current measurements.



Comparator settings :
Impedance / voltage High / Low limits.

Comparator output :
LCD display of PASS, WARNING, or FAIL results and beeper for warning and fail results.



Curve Trend Analysis

Record No	Unit	Slot	Time				
Unit info							
Unit 1							
Roket RP100-1 Lead-acid 100,0AH							
12,00V (10,00V) 06,00mΩ (09,00mΩ/12,00mΩ)							
There is record of 100 cells							
#	W	Ω	V	V%	°C	Time	
005	W	10.44mΩ	-0.0	11.83V	-0.0	19.8°C	23:32:07
061	W	10.44mΩ	-0.0	12.27V	-0.0	19.8°C	23:33:28
069	W	10.27mΩ	-0.0	12.26V	-0.0	19.9°C	23:33:40
011	W	10.19mΩ	-0.0	12.26V	-0.0	20.3°C	23:32:15
082	W	09.94mΩ	-0.0	11.98V	-0.0	19.6°C	23:33:59
030	W	09.84mΩ	-0.0	11.97V	-0.0	19.7°C	23:32:43

Distortion Order Table

Help

Impedance measurement

- If press Resistance key, Resistance, Voltage and Temperature are measured simultaneously.
- If press \square , always enter Auto Ranging (40mΩ - 4 Ω)
- 4mΩ range is activated in Manual Ranging only - press \square to convert.
- If need to change Range in Manual Ranging from Auto ranging in 40mΩ - 4 Ω range, press **AUTO RANGE** and change Range with click sound. Each time key press changes Range resp 24/167

Help

Applications

Field Management of **UPS Back Up batteries** in Industrial Systems -Telecom, Renewable Energy Power Plant (Solar, Water, Wind), Recreational, Marine, Airplane, Military, Electric Vehicle And Battery Related Industry (Manufacturer, Dealer) of most batteries including Lead Storage Cells (Lead -Acid batteries), nickel-cadmium batteries, lithium-ion batteries and nickel-metal hydride batteries.

WENS 900 Series

Unsurpassed Performance in a portable, Compact package

Battery Health Analysis Information, Comparator on Impedance, Voltage Auto Hold and Data Storage Interface : USB Host / Client 2.0 Large 3,8" 320 x 240 pixel High Resolution Monochrome LCD display.

Super Tool in Field Measurements and Management of UPS batteries



Battery SOC, Capacity measurements (WENS 900C only)

14/02/21 STOP 0s 0 04:42:59 PM

Charge/Discharge Capacity Measurement

Discharge Rated Efficiency	30hr Record Length	12.00v Total Voltage
12.00v Cell Voltage	10.50v EndPoint	100.0Ah Total Capacity
1 Cell Serial	1 Cell Parallel	07.71v Meas. Voltage
100.0Ah Cell Capacity	20hr Hour rate	000.0A Meas. Current

Capacity Measurement

02/18/14 STOP 0s 905 02:56:31 PM

Charge 2.722Ah

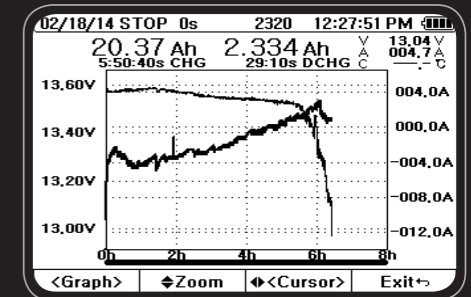
1:02:50s 2.599A

Discharge 2.455Ah

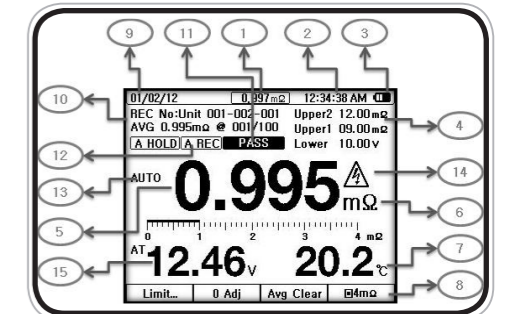
52:30s 2.806A

Efficiency 90%

Capacity Measurement Data



Capacity Measurement Graph



LCD Display

- 1 Present Measurement Value when Auto-Hold mode
- 2 Measurement Data and Time
- 3 Battery / Adapter Sign
- 4 Limit : Upper, Lower (WENS 900C only)
- 5 Impedance Value Display
- 6 Unit of Measurement
- 7 Temperature Value Display
- 8 4m Ω Convert key
- 9 "Unit-Cell-Times" display
- 10 Measurement Ave range and number of Averaged data (displayed with Auto Hold)
- 11 Limit (Comparator) Pass - Warning-Fail
- 12 Auto Saving : When Auto Holding, Auto Saving is automatically activated. Saved at Auto Record Memory in order, max 300 cells x 100 times measurement Record number : storage date Recording Number.
- 13 Auto : Auto, manual ranging
- 14 Warning Sign
- 15 DC Voltage measurement