

## BATTERY HiTESTER 3554

Component measuring instruments



### Application Guide



**Get a Complete Diagnosis of  
UPS Batteries with a Single Device**



# Save Time and Money with the 3554

## Audio and Visual Cues



## 4-Terminal Pin Probes

The 4-terminal pin structure delivers stable  $m\Omega$  level readings. Strong and durable pins can be easily replaced in the unlikely event of damage.

## Auto Hold battery data Auto Save to memory

Measurement values are automatically saved once they are stabilized. For optimal efficiency, use Auto Hold and Auto Save at the same time. Data is automatically recorded as soon as the probes touch the battery terminals and values stabilize.

## Measure UPS While Online

There is no need to disconnect individual UPS batteries to take measurements. Measure resistance and voltage while they are still connected to the system. (Embedded UPS batteries and other small devices excluded.)



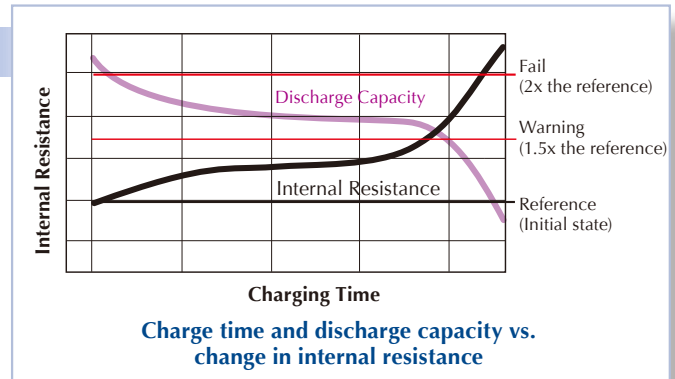
**Go Solo**  
with the 3554

# Diagnose UPS Battery Deterioration

## How much does internal resistance change?

When the internal resistance increases to 2 to 3 times the initial resistance of a new out-of-the-box battery, battery performance will begin to deteriorate.

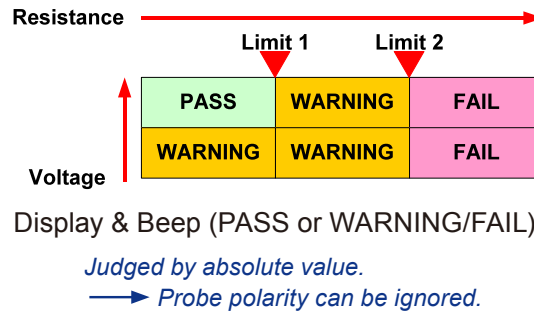
Still, deterioration rates and initial resistance values vary from brand to brand, so the best practice is to first measure the initial internal resistance and voltage between the terminals of the battery and set them as the reference values. Generally, measured results that are 1.5 times the initial values should be regarded as the WARNING state and 2 times the FAIL state.



## Comparator

- Resistance: Two limits
- Voltage: One limit

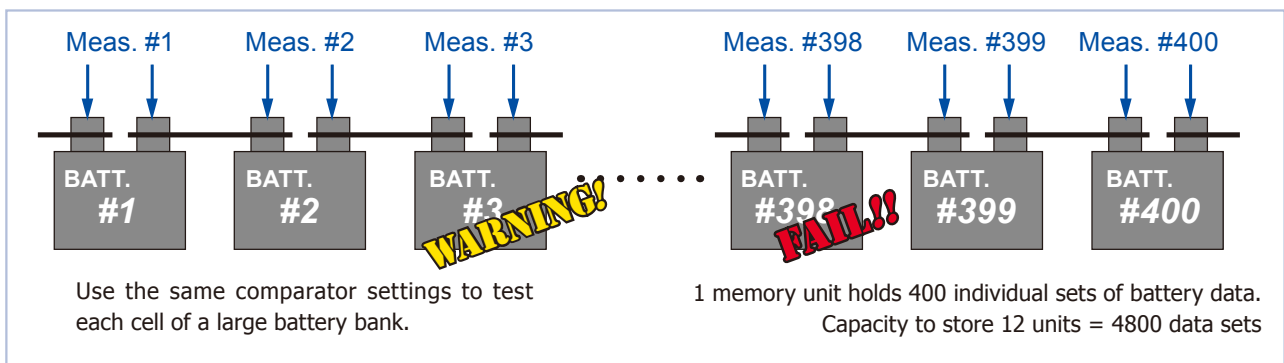
200 comparator settings can be saved to the Battery HiTESTER 3554, letting you recall the threshold limits conveniently so that you can quickly go from battery to battery.



## Repeated Testing of Each Cell

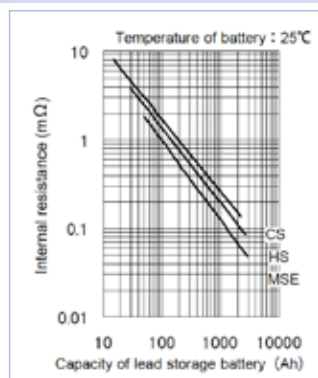
Testing and comparing against thresholds for one battery after another quickly and efficiently saves time and money.

Data for up to 400 individual batteries can be saved as a single memory unit right on the battery tester, enough to support an entire cubicle of batteries with room to spare. The 3554 has memory to store 12 units of such data, essentially supporting the data retention of 4800 individual batteries.



## Compatible Batteries

The 3554 is most effective when used to diagnose the deterioration of backup UPS systems comprised of CS, HS, MSE lead storage batteries. When making a diagnosis, be sure to test the batteries at their fully charged state.



- CS: Clad type stationary lead storage battery
- HS: High rate discharge paste type stationary lead storage battery
- MSE: Seal type stationary lead storage battery

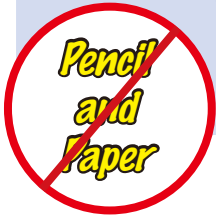
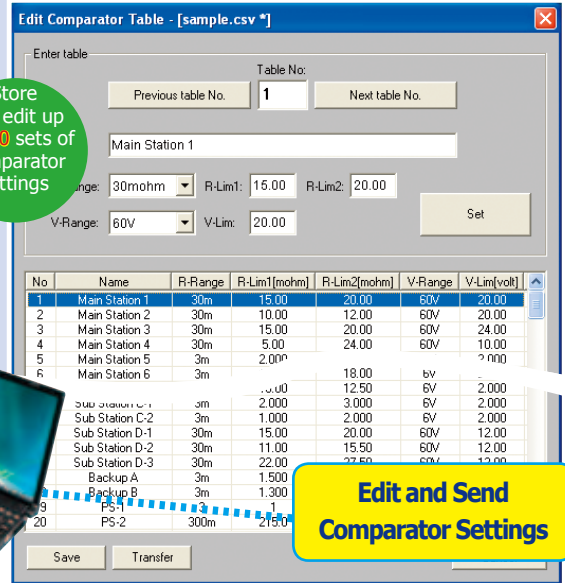
From "Textbook of storage battery fitters qualification lecture notes" of the Japan Battery Industry Association

# Quickly Download Data to a PC via USB Interface - Effortlessly Manage Using Bundled Software

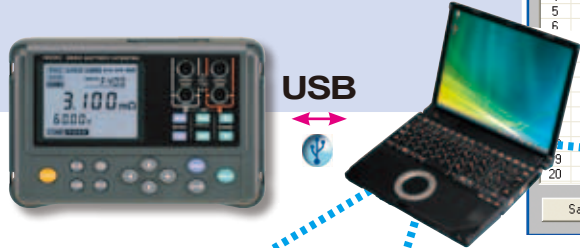
After returning from the field, the diagnostic data can be easily uploaded to the PC for further analysis using the free bundled software. Get a complete look at the condition of the backup battery system from the comfort of your office.

The hassle-free measurement process is extended to data management and processing using the bundled data management software. All 4800 sets of data can be uploaded to the PC quickly and effortlessly via a USB cable, and displayed neatly in table format. Edit comparator tables and send them back to the 3554.

Store and edit up to 200 sets of comparator settings



Not Required

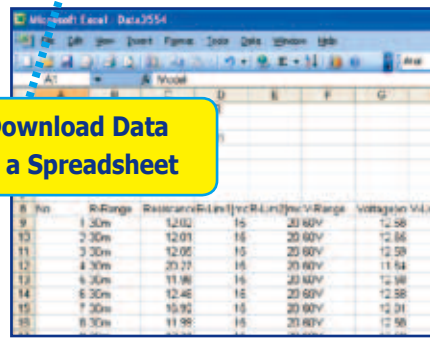


Automatically clear data from the 3554

Download Data to a Spreadsheet

Edit and Send Comparator Settings

- Download:**
- ✓ Data Memory Number
  - ✓ Range
  - ✓ Resistance value
  - ✓ Resistance limits
  - ✓ Voltage value
  - ✓ Voltage limit
  - ✓ Temperature
  - ✓ Judgement
  - ✓ Date & time



## Model Configuration



**BATTERY HIESTER 3554**

The standard 3554 Package comes bundled with one Pin type Lead 9465-10, one USB Cable, data management PC software, tough carrying case, zero-adjustment board, eight AA batteries, and one spare fuse.



## Options

**Primarily for use with lead acid batteries, etc.**

Easy 4-terminal measurement, 2.7 mm dia. single-axis type

Large angle of probe application, 2.5 mm pitch 2-axis pin type

**Measurement Lead**

**PIN TYPE LEAD 9465-10**  
A: 80 mm (3.15 in) (red), 140 mm (5.51 in) (black, max. 550 mm (21.65 in)), B: 121 mm (4.76 in), L: 1883 mm (6.18 ft)

**TIP PIN 9465-90**  
To replace the tip on the 9465-10

**PIN TYPE LEAD 9772**  
A: 80 mm (3.15 in) (red), 140 mm (5.51 in) (black, max. 550 mm (21.65 in)), B: 118 mm (4.65 in), L: 1780 mm (5.84 ft)

**TIP PIN 9772-90**  
To replace the tip on the 9772

**ZERO ADJUSTMENT BOARD 9454**  
For the L2100, 9465-10, 9465, 9461  
Tip  $\phi$ 29 mm (1.14 in)

**LARGE CLIP TYPE LEAD 9467**  
A: 300 mm (11.81 in), B: 116 mm (4.57 in), L: 1360 mm (4.46 ft), 50V DC, Not CE marked

**REMOTE CONTROL SWITCH 9466**  
Use with the 9465 (for the 3554, 3551, 3560)

**CLIP TYPE LEAD WITH TEMPERATURE SENSOR 9460**  
For the 3540, 3554, A: 300 mm (11.81 in), B: 106 mm (4.17 in), L: 2268 mm (7.44 ft)

**About probe length**

A: From junction to probe  
B: Probe part  
L: Whole length

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