



**Franklin Electric**  
**GRID SOLUTIONS**

# CONDUCTANCE TESTING

## HIGHLIGHTS

CELLGUARD™ Battery Monitoring Systems and CELLTRON™ Battery testers utilize conductance-based testing technology to effectively determine battery state-of-health. A battery's "conductance" is the ability it has to conduct current, which is a direct indicator of the battery's state-of-health and a highly accurate and reliable predictor of the battery's end of life.

### Minimally Invasive

- The CELLTRON Advantage's conductance-based testing approach requires minimal battery discharge.

## BENEFITS

- Test a battery at any time to identify major problems.
- Fast, low-frequency AC test that does not affect the battery being tested.
- Does not prematurely age the battery.
- No heat is produced, reducing potential safety issues.
- Ideal to qualify a battery as being safe for further discharge testing.
- Test can be repeated immediately with same accuracy to verify the results.
- Test results are available in seconds per battery, with no calculations.
- Battery is always available to support the loads.
- Battery system and handheld testers are, lightweight, easy to use, and operate with no external power required.



**CELLTRON™ ADVANTAGE DIGITAL**  
Handheld Battery Tester



**CELLGUARD™ WIRELESS**  
Battery Monitoring System

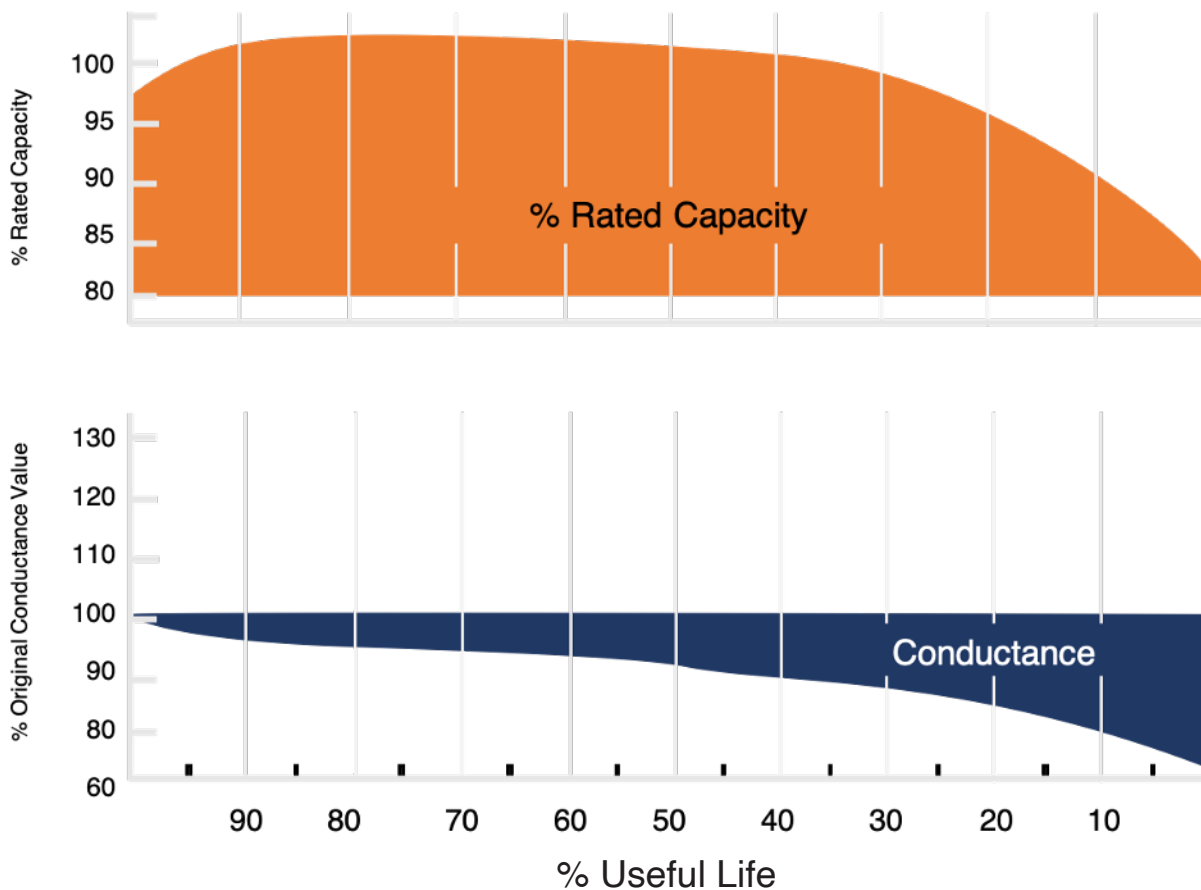


## QUICK FACTS

Conductance is a measurement of the plate surfaces available for chemical reaction to determine how much power the battery can supply.

- The units for Conductance is MHOS (G), also known as Siemens (s).
- As batteries age, their chemical efficiency declines equaling a loss of capacity.
- This loss of capacity is usually accompanied by a loss of measured conductance (it is not a one-to-one correlation).
- Conductance testing is a quick, safe, accurate and easy way to determine a battery's relative condition or state-of-health.
- High conductance is one indication of a healthy battery.
- Conductance declines as the battery fails.

*Conductance is not a measure of battery capacity; it is a measure of battery state of health. There is a relationship between capacity and conductance to determine battery end of life.*



*When a battery is at 60% conductance it is near end of life.*