MIDTRONICS

Battery Management Innovation

Celltron® Advanced

New & Improved

Stationary Battery String Analyzer

The Celltron Advanced is the ultimate tool for stationary battery management. Research proven technology and field-tested design make it a must for critical power maintenance.

CTA-2000 Tester

CTA-4000 Kit

Features:

- Voltage Measurement to 3 decimal places*
- Reduced testing time*
- 16 volt testing capability*
- Tests double straps & 8 posts*
- Export / Print / Delete “All Strings”*
- New inFORM™ software*
- Quick, simple, safe & accurate operation
- High ampere-hour testing capability
- 16 internal memory registers capable of storing 480 consecutive test results and overall string statistics
- Enhanced backlit display and screen resolution
- Voltage logging only option
- Quick reset option for erroneous test entries
- Measures individual cell and overall string health and voltage
- Consistent, repeatable on-line testing without discharge to batteries
- Tests 2-volt through 16-volt batteries on-line or off-line
- Provides advanced warning of potential battery failures
- Test each cell in under 10 seconds
- Helps prioritize battery replacements for more cost-effective system management
- Tests both battery cell and intercell strap integrity
- No external power source needed
- Portable IR wireless printing and data transfer to PC laptop
- User definable battery reference number storage and fault thresholds

Accessories included in CTA-4000 Kit

- Protective boot*
- Rechargeable battery pack*
- Infrared PC data receiver & software*
- Infrared printer
- Infrared temperature sensor
- Protective carrying case
- Both clamp and probe cables
- Spare fuses, printer paper, 9-V batteries, probe tips

*New features & accessories indicated by **

Celltron® Advanced

Model Number:
CTA-4000 (Kit); CTA-2000 (Tester Only)

Applications:
Tests individual lead acid cells or monoblocs (up to 16 Volts) in any common configuration

Voltage:
1.0 - 20 Volts DC

Conductance:
100 - 19,990 Siemens

Test Data Storage:
16 string locations of 480 test results stored internally

Accuracy:
± 2% across test range

Voltmeter Resolution:
5 mV DC

User Programmable Functions:
- Preset values for over 250 battery types
- Low voltage alarm setting
- Low conductance warning / failure

Calibration:
Auto-calibration prior to every test, no future calibration required

Power Requirements:
9.6, 1600 mAH, NiMH rechargeable battery pack & charger

Environmental Operating Range:
0 to +40°C, 95% relative humidity, non-condensing

Storage Temperature:
-20 to 82°C

Over Voltage Protection:
- Fused protection to 16 volts DC
- Reverse polarity protected

Housing Material:
Acid resistant ABS plastic

Tester Dimensions:
9" x 4" x 2.5"
230 mm x 102 mm x 65 mm

Case Dimensions:
19" x 15.5" x 5"
750 mm x 610 mm x 200 mm

Tester Weight:
2 lbs / 907 gm

CTA-4000 Test Kit Shipping Weight:
14 lb / 6.4 kg

inFORM battery management software

Conductance Technology

Conductance describes the ability of a battery to conduct current. It is a measurement of the plate surface available in a battery for chemical reaction, which determines how much power the battery can supply. High relative conductance is a reliable indication of a healthy battery, while conductance declines as the battery deteriorates.

Years of laboratory and field test data have determined that battery conductance is an indicator of battery state-of-health showing a linear correlation to a battery's timed-discharge capacity test result. If conductance can be measured, discharge capacity can be predicted, giving a reliable predictor of battery end-of-life.

Other testing alternatives like voltage and specific gravity testing are not predictive. Timed discharge testing is very time-consuming and expensive, and impedance testing does not correlate directly and linearly with discharge capacity. Thus, conductance testing is a very effective and economical battery management tool.

Conductance Technology Industry Approvals and Recommendations:

- IEEE Standards 1188 and 484
- EPRI (Electrical Power Research Group)
- Guide for Testing Stationary Batteries International Telecommunications Energy Conference
- Bellcore T1Y1
- Presentation for American National Standards Institute
- International Lead Zinc Research Organization
- Battery Council International

MIDTRONICS 20 YEARS BATTERY MANAGEMENT INNOVATION

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