



## CELLTRON™ ADVANTAGE DIGITAL BATTERY TESTER

The CELLTRON™ Advantage Digital is a fast, user-friendly, premium handheld tester for measuring battery conductance, voltage, temperature and strap resistance in high-noise environments for a complete battery state-of-health analysis. With the capability to test Valve Regulated Lead Acid (VRLA), Vented Lead Acid (VLA), and Nickle Cadmium (Ni-Cd) batteries, the CELLTRON™ Advantage Digital can measure battery voltage down to one (1) volt as well as measure inter-cell and terminal connection resistance.



**ACCURATE**  
CONDUCTANCE TESTING



**WIRELESS**  
COMMUNICATION



**HIGH NOISE**  
IMMUNITY

## HIGHLIGHTS & TECHNOLOGY

The conductance-based diagnostics provided by the CELLTRON™ Advantage Digital delivers a highly accurate and reliable predictor of the battery's end of life.

Built-in Wi-fi enables tester data to quickly and wirelessly be transmitted to and from the tester with no additional cards, cords, or hardware required.

The powerful dual-microprocessor architecture allows the tester to stand up to the high noise environments caused by UPS/battery systems and constant power supply switching (notorious for causing testers to fail).

Dual microprocessor signal filtering, integrated IR temperature measurement, built-in Wi-fi, USB communication port, interchangeable light-up probe and clamp testing interfaces, and a 16-hour rechargeable on-board battery pack.

Cleaner, more precise battery state-of-health measurements are achieved through new "Edge Rejection" technology which filters out anomalies that can corrupt battery signal readings at both the beginning and end of each sample signal.

Interchangeable test interfaces allow the tester to quickly change between a probe and a clamp for varying applications.

Integrated lighted test interfaces allows the user to see battery post connections clearly in dark conditions.

A fast-acting protection relay responds in milliseconds when a signal input in excess of 25 volts is introduced through the testing probes, providing instant protection to both the device and the user.

Tests individual Lead-Acid or Nickel-Cadmium cells or Monoblocs (up to 16Volts) in any common configuration, approximately 10-6000Ah.

## APPLICATIONS



DATA CENTERS



CRITICAL POWER



POWER UTILITIES



TELECOMM



TRANSPORTATION



## SPECIFICATIONS

### Voltage Range

- 0.8 - 23.5 Volts DC

### Conductance Range

- 100 - 19,990 Siemens

### Test Data Storage

- 50 string locations of 240 test results
- Stored internally
- Unlimited transfer to USB drive

### Accuracy

- +/-2% across test range, voltage & conductance

### Voltmeter Resolution

- 5mV

### User Programmable Functions

- Preset values for over 250 battery types
- Low voltage alarm setting
- Low conductance warning
- Low conductance failure
- Test mode (pushbutton/auto start)

### Cable Options

- Dual contact clamps
- Dual contact probes
- Custom cables by quotation

### Power Requirements

- 7.2V, 2300mAh, NiMH
- Internal swappable battery & charger

### LCD Display

- 2.97 in x 2.81 in (75.4 mm x 71.3mm)
- 128 x 128 pixels
- 40 degree viewing angle
- LED backlight

### Keypad

- Alpha-numeric
- Stainless-steel dome
- Polycarbonate overlay
- 1,000,000 actuations

### Data Transfer

- Wifi
- USB 2.0 Flash Drive (Type A)
- USB 2.0 PC Interface (Type B)
- Infra-red
- Half-duplex IrDA protocol for optional printer

### Environmental Operating Range

- 0 to +104°F (0 to +40°C)
- 95% relative humidity
- Non-condensing

### Storage Temperature

- -4 to 180°F (-20 to 82°C)

### Over Voltage Protection

- Auto-reset disconnect
- Reverse polarity protected

### Housing Material

- Acid-resistant ABS plastic
- Santoprene™ overmold

### Tester Dimensions

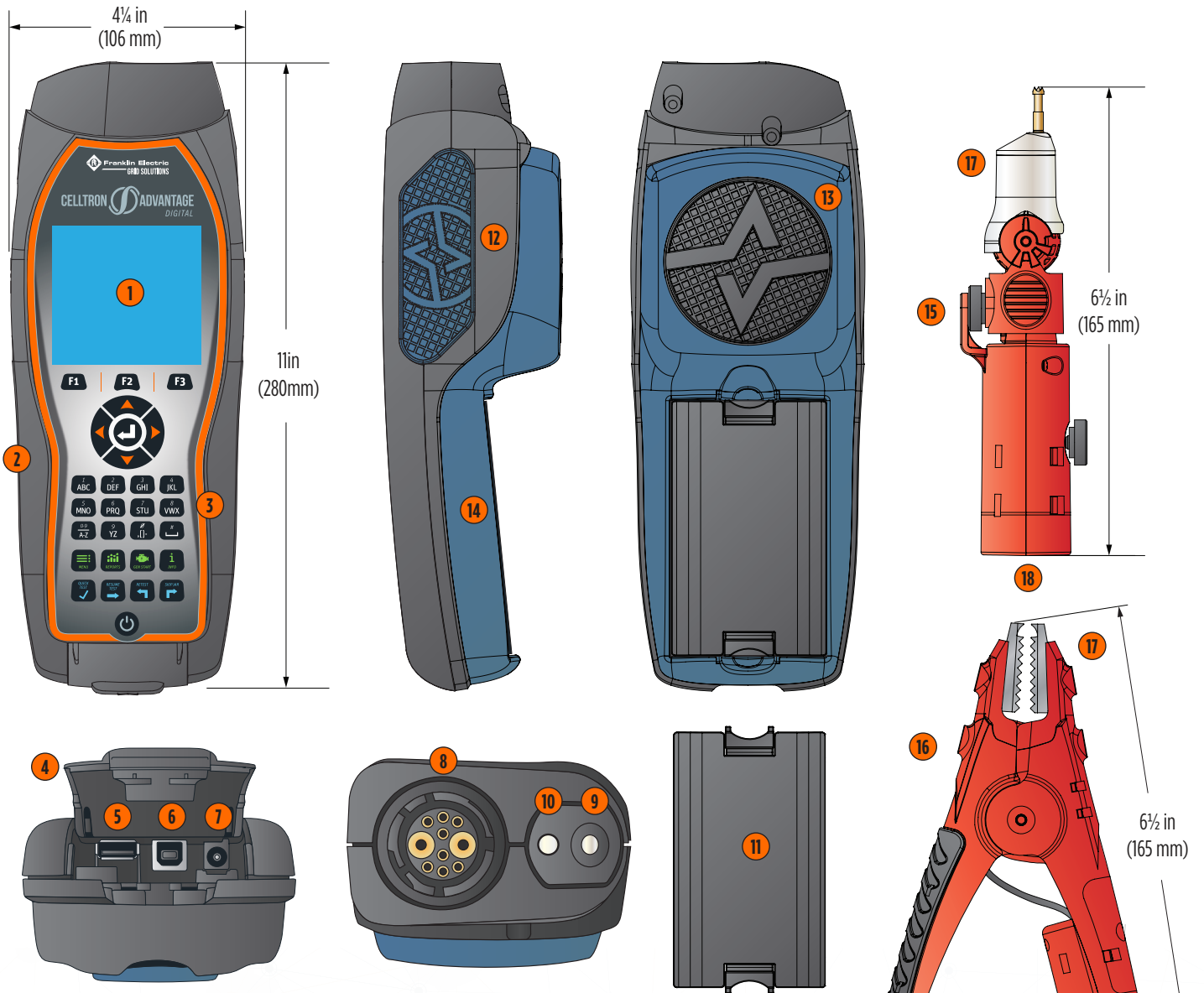
- 11in x 4in x 3in  
(279mm x 105mm x 80mm)

### Tester Weight

- 2.6 lb (1 Kg)



**COMPONENTS & DIMENSIONS**



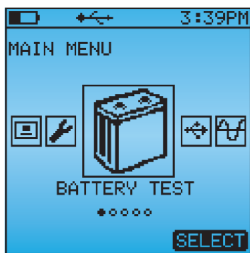
**Components**

- |                                      |                             |                              |
|--------------------------------------|-----------------------------|------------------------------|
| ① LCD display                        | ⑧ Probe/clamp cable port    | ⑮ Probe testing interface    |
| ② Tester body                        | ⑨ Temperature sensor        | ⑯ Clamp testing interface    |
| ③ Glove-compatible key pad           | ⑩ Infrared printer LED      | ⑰ Integrated light           |
| ④ Port access door                   | ⑪ Rechargeable battery pack | ⑱ Interchangeable cable port |
| ⑤ USB A port (data storage/transfer) | ⑫ Side vent                 |                              |
| ⑥ USB B port (PC connection)         | ⑬ Rear vent                 |                              |
| ⑦ On-board re-charging port          | ⑭ Rubber handle grip        |                              |



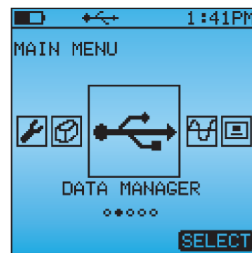
## SOFTWARE, APPLICATIONS & TOOLS

All CELLTRON™ Advantage Digital Battery Testers come fully-loaded with these standard applications and tools for quick testing, tester customization, and easy data management.



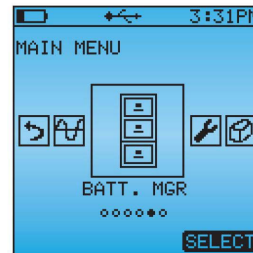
### BATTERY TEST

Standard, conductance-based battery testing.



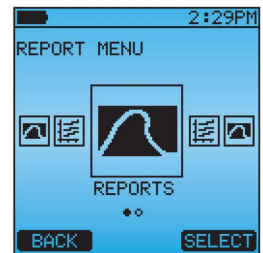
### DATA MANAGER

Upload, download, and delete testing data.



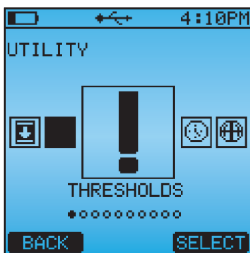
### BATTERY MANAGER

Select from a library of pre-loaded battery manufacturers and types.



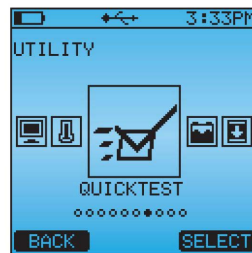
### REPORTS

Generate reports for individual battery string results.



### THRESHOLDS

Set tester thresholds for voltage, conductance, and temperature.



### QUICK TEST

Start a test on a single cell or monoblock without setting up a site.



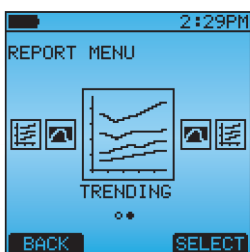
### FAVORITE SETUP

Set up favorites for quick access.



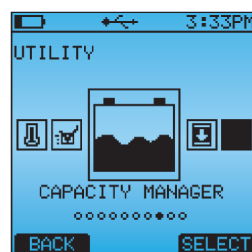
### AUTOSTART

Set the tester to activate a test process on contact.



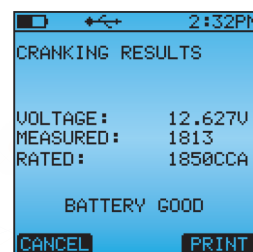
### SITE TRENDING

Effective trend analysis including test comparisons in one screen.



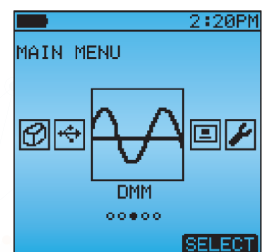
### CAPACITY MANAGER

Record cell voltages on a timed interval during a capacity load test.



### GEN START

Test the state of health of generator starting batteries.



### DIGITAL MULTIMETER

Accurately measure a battery's DC voltage.



## ORDERING INFORMATION

### CELLTRON™ ADVANTAGE DIGITAL BATTERY TESTERS



Model	Description
CADD-5000 TESTER	CELLTRON™ Advantage Digital battery tester

#### Included Software

- Multimeter module
- Generator start module
- In-unit trending
- Discharge monitor



Model	Description
CADD-5500 KIT	Complete CELLTRON™ Advantage Digital battery testing kit

#### Included in the Kit

- CELLTRON™ Advantage Digital
- Standard mode testing
- Probe, clamp, and cable set
- USB drive for CSV data transfer
- Battery pack (2)
- Multimeter module
- Generator start module
- In-unit trending
- Discharge monitor
- USB cable
- CELLTRAQ™ EXPRESS
- Backpack



Model	Description
CADD-5200 KIT	Enhanced CELLTRON™ Advantage Digital battery testing kit

#### Included in the Kit

- CELLTRON™ Advantage Digital
- Standard mode testing
- Probe and cable set
- USB drive for CSV data transfer
- Battery pack (2)
- Multimeter module
- Generator start module
- In-unit trending
- Discharge monitor
- Backpack



Model	Description
CADD-5000 KIT	Base CELLTRON™ Advantage Digital battery testing kit

#### Included in the Kit

- CELLTRON™ Advantage Digital
- Standard mode testing
- Probe and cable set
- USB drive for CSV data transfer
- Battery pack (1)
- Multimeter module
- Generator start module
- In-unit trending
- Discharge monitor
- Backpack



**ACCESSORIES & REPLACEMENT PARTS**

**RED LIGHTED PROBE**



Model	Description
CA093R	Red 6" lighted probe

- 6" probe with rotating head and 1/2" tip for instant contact
- Designed with an internal LED to light those hard to see battery posts in dark places
- Incorporates a quick connect/disconnect radio frequency BNC connector for easy removal.
- Replaceable gold-plated over Duralloy® dual probe tips

**BLACK LIGHTED PROBE**



Model	Description
CA093B	Black 6" lighted probe

- 6" probe with rotating head and 1/2" tip for instant contact
- Designed with an internal LED to light those hard to see battery posts in dark places
- Incorporates a quick connect/disconnect radio frequency BNC connector for easy removal.
- Replaceable gold-plated over Duralloy® dual probe tips

**RED & BLACK LIGHTED PROBES**



Model	Description
CA093	(1) red and (1) black 6" lighted probe

- 6" probe with rotating head and 1/2" tip for instant contact
- Designed with an internal LED to light those hard to see battery posts in dark places
- Incorporates a quick connect/disconnect radio frequency BNC connector for easy removal.
- Replaceable gold-plated over Duralloy® dual probe tips

**REPLACEMENT PROBE TIPS**



Model	Description
CA069	Replacement probe tips (4 probe tips, 2 probe caps)
CA031	Replacement probe waffle tips (4 probe tips)

- Replaceable gold-plated over Duralloy® dual probe tips



**RED LIGHTED PIRANHA CLAMP**



Model	Description
CA092R	Red 6.5" piranha lighted clamp

- 2" opening to attach to large battery terminals
- Designed with an internal LED to light those hard to see battery posts in dark places
- Incorporates a quick connect/disconnect radio frequency BNC connector for easy removal

**BLACK LIGHTED PIRANHA CLAMP**



Model	Description
CA092B	Black 6.5" piranha lighted clamp

- 2" opening to attach to large battery terminals
- Designed with an internal LED to light those hard to see battery posts in dark places
- Incorporates a quick connect/disconnect radio frequency BNC connector for easy removal

**RED & BLACK LIGHTED PIRANHA CLAMPS**



Model	Description
CA092	(1) red and (1) black 6.5" piranha lighted clamps

- 2" opening to attach to large battery terminals
- Designed with an internal LED to light those hard to see battery posts in dark places
- Incorporates a quick connect/disconnect radio frequency BNC connector for easy removal

**INTERCHANGEABLE CABLES**



Model	Description
CA026	4' interchangeable CELLTRON Advantage cable

- Flex strain relief and spread of 24" with "Y" junction
- Incorporates a quick connect/disconnect radio frequency BNC connector for easy probe or clamp removal
- Compatible with CA092 clamps and CA093 probes



**30" PROBE EXTENDERS**



Model	Description
CA034	30" probe extenders

- Soft rubber handles
- Utilized in hard-to-reach areas such as UPS cabinets
- Weight: 2 lbs

**RECHARGEABLE BATTERY PACK**



Model	Description
CA090	CELLTRON™ Advantage 7.2V NiMH rechargeable battery pack

- Battery pack can be recharged by the CELLTRON™ Advantage or with the CA096 desktop charger
- Holds a nominal capacity of 2280mAh of standard charge for a full day of testing
- Rapid charge rate of 2250mA per 1.2hrs for quick recharge

**DESKTOP RAPID BATTERY CHARGER**



Model	Description
CA096	CELLTRON™ Advantage desktop rapid battery charger

- For use with the CELLTRON™ Advantage battery pack CA090 with rated voltage of 7.2VDC
- Rapid charge to 80% of rated voltage in 1 to 2.5 hours, trickle charge the remaining voltage
- Automatically end charging with negative delta voltage greater than 50mVDC
- AC power adapter included with an input of 120-240VAC 50-60HZ and output of 12VDC 2.5Amp

**UNIVERSAL IN-UNIT BATTERY CHARGER**



Model	Description
CA091	CELLTRON™ Advantage universal in-unit battery charger

- Input: 100-240V 60Hz/50Hz 14W
- Output: 7.2V, 700mA 5.04VA





**39" USB A/B CABLE**



Model	Description
CA049	CELLTRON™ Advantage 39" USB A/B cable

- For USB 2.0 communication between a PC and the CELLTRON Advantage

**4GB USB FLASH DRIVE**



Model	Description
CA089	4GB USB 2.0 drive for use with CELLTRON™ Advantage

- Export test data from the tester on to the USB drive or import tester configuration from the USB drive to the tester

**THERMAL IR / RS232 PRINTER**



Model	Description
CA087	Thermal IR / RS232 printer for use with CELLTRON Advantage

- Power adapter and 4 NMH rechargeable AA batteries included
- Weight: 1 lb
- Dimensions: 2.25"H X 75"L X 3.25"W

**PRINTER POWER ADAPTER / CHARGER**



Model	Description
A090	Power adapter / charger for CA087 thermal IR / RS232 printer

**THERMAL PRINTER PAPER**



Model	Description
A095	6 pack of thermal printer paper for CA087 printer



**DIGITAL AMP CLAMP / METER**



Model	Description
CO40	Multidigital Amp and Volt meter

- 40A DC/AC range
- .90" (23mm) diameter jaw
- One touch zero button
- 400V DC/AC range
- Requires 2 AA batteries
- 600V overload protection for Ohm measurement
- Weight: 1.5 lbs
- Dimensions 10" L X 2" H X 4" W

**CUSTOM BACKPACK**

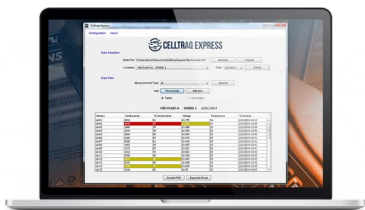


Model	Description
CA100	Custom backpack for CELLTRON™ battery testers

- Customized inserts fitted for the CELLTRON™ handheld testers and accessories
- Backpack only, tester and accessories sold separately

**BATTERY ASSET MANAGEMENT SOFTWARE**

**CELLTRAQ™ EXPRESS**



Model	Description
CT-EXPRESS SOFTWARE	CELLTRAQ™ Express reporting software for CELLTRON™ Advantage

- Utilizes a CELLTRON™ Advantage .CSV file to create a PDF report
- Allows the configuration of test data reference values and threshold values to denote poor test results
- Outputs the test results in a table and graph format for easy analysis
- Reports can be customized to include company logo and site information