



## CELLTRON ADVANTAGE BATTERY TESTER

The CELLTRON Advantage delivers a user-friendly, customizable, and economical tool for testing battery conductance, voltage, and temperature measurement for a complete battery state-of-health analysis. With the capability to test Valve Regulated Lead Acid (VRLA) and Vented Lead Acid (VLA) batteries, the CELLTRON Advantage is capable of measuring battery voltage down to one (1) volt as well as measuring inter-cell and terminal connection resistance.



**ACCURATE**  
CONDUCTANCE TESTING



**FASTER**  
TESTING



**SUPERIOR**  
HARDWARE

## HIGHLIGHTS & TECHNOLOGY

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

Testing is carried out in a matter of seconds simply by connecting the two test leads (either by clamp or probe) to the battery's positive and negative posts.

Includes integrated temperature measurement, a USB communication port, interchangeable light-up probe and clamp testing interfaces, and a rechargeable on-board battery pack with six to eight hours of service life.

The conductance-based testing approach requires minimal battery discharge allowing for more tests on a single battery without having to recharge.

Firmware updates are programmed via USB drive in the field, with advanced module add-ons also available.

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.

Integrated battery temperature measurement.

Swappable on-board battery pack provides six to eight hours of rechargeable battery life per pack.

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

## APPLICATIONS



CRITICAL POWER



POWER UTILITIES



TELECOMM



TRANSPORTATION



## SPECIFICATIONS

### Voltage Range

- 0.8 - 20.0 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

- USB Flash Drive (Type A)
- USB 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)

### Enhanced/Complete Kit Case Dimensions

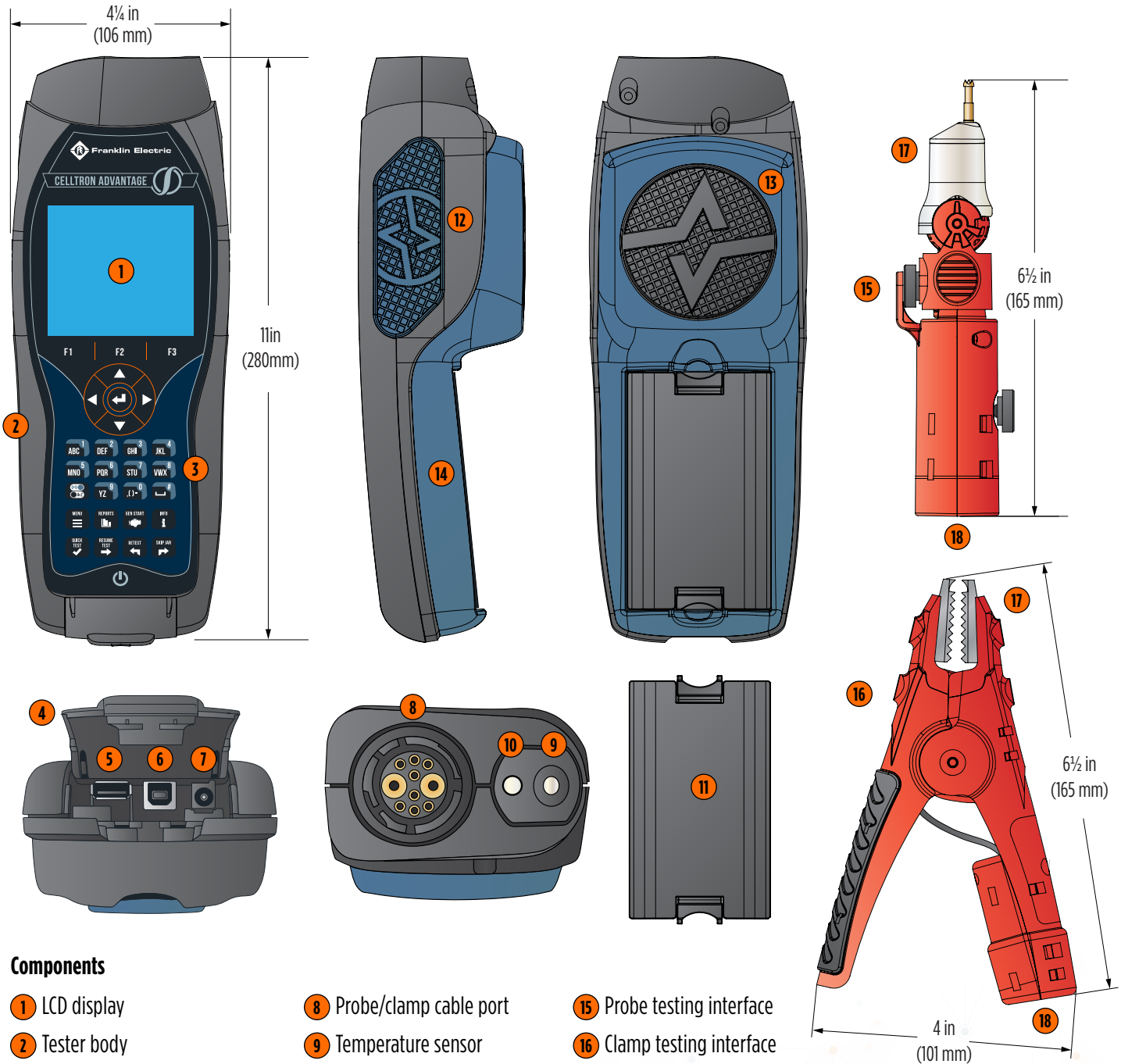
- 19in x 15.5in x 7in  
(485mm x 395mm x 180mm)

### Enhanced/Complete Kit Case Weight

- 11 lb (5 Kg)



**COMPONENTS & DIMENSIONS**



**Components**

- ① LCD display
- ② Tester body
- ③ Glove-compatible key pad
- ④ Port access door
- ⑤ USB port (data storage/transfer)
- ⑥ USB 2.0 (PC connection)
- ⑦ On-board re-charging port
- ⑧ Probe/clamp cable port
- ⑨ Temperature sensor
- ⑩ Infrared printer LED
- ⑪ Rechargeable battery pack
- ⑫ Side vent
- ⑬ Rear vent
- ⑭ Rubber handle grip
- ⑮ Probe testing interface
- ⑯ Clamp testing interface
- ⑰ Integrated light
- ⑱ Interchangeable cable port



## ORDERING INFORMATION

### COMPLETE KIT - CELTRON ADVANTAGE BATTERY TESTER



Model	Description
CAD-5500	CELLTRON Advantage complete battery testing kit

#### Included in the Kit

- CELLTRON Advantage battery tester
- Standard mode testing
- Probe, clamp, and cable set
- USB drive for Excel data transfer
- Battery pack (2)
- Hard case
- Multimeter module
- Generator start module
- In-unit trending
- Discharge monitor
- Probes, clamps, and cable
- USB cable
- CELLTRAQ EXPRESS

### ENHANCED KIT - CELTRON ADVANTAGE BATTERY TESTER



Model	Description
CAD-5200	CELLTRON Advantage complete battery testing kit

#### Included in the Kit

- CELLTRON Advantage battery tester
- Standard mode testing
- Probe and cable set
- USB drive for Excel data transfer
- Battery pack (2)
- Hard case
- Multimeter module
- Generator start module

### BASE KIT - CELTRON ADVANTAGE BATTERY TESTER



Model	Description
CAD-5000	CELLTRON Advantage complete battery testing kit

#### Included in the Kit

- Celltron Advantage Battery Tester
- Standard mode testing
- Probe and cable set
- USB drive for Excel data transfer
- Battery pack (1)
- Soft Case





## FIELD UPGRADE SOFTWARE MODULES

CELLTRON Advantage battery testers can be customized in the field with additional software modules. Contact Customer Service to receive a key code that unlocks the modules on the tester.

### CAPACITY MANAGER

Capacity Manager allows a user to capture each battery voltage on a string of batteries during a discharge event. Manage time and capture voltage at prescribed intervals. Compile a full discharge chart in CSV format.



Model	Description
CAD-CP	CELLTRON Advantage capacity manager field upgrade software module

### SITE TRENDING

Integrated Site Trending allows the user to trend captured battery data. Simply select the desired battery then view the conductance or voltage trend of up to 6 test data points.



Model	Description
CAD-ST	CELLTRON Advantage site trending field upgrade software module

### GENERATOR START

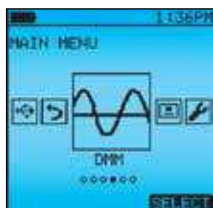
The Generator Starts Module allows the user to test a single 12V cranking battery. Simply select the specified rating unit and battery rating then perform the test to determine the health of the battery. An NFPA 110 Battery Maintenance Solution.



Model	Description
CAD-GS	CELLTRON Advantage generator start field upgrade software module

### DIGITAL MULTIMETER

The Digital Multimeter (DMM) allows the user to probe a battery's DC or AC voltage at an accuracy of +/- 5 millivolts, up to 23 volts.



Model	Description
CAD-DM	CELLTRON Advantage digital multimeter field upgrade software module



## 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

### SITE BUILDER & BATTERY LIBRARY CREATOR PACKAGE



#### Site Builder Software

- Create CDI file to import to the CELLTRON Advantage via USB drive
- Import to the application an existing CDO file with an existing hierarchy to customize
- Import to the application a custom battery library to configure battery information
- Create new sites, plants, and strings
- Set individual string parameters:
  - Tech ID
  - Number of batteries
  - Battery voltage
  - Alarm thresholds
  - Testing configurations



#### Battery Library Creator Software

- Create a Battery Library (LIB) file to import to the CELLTRON Advantage via USB drive
- Import to the application an existing Battery Library file in a CSV format to customize
- Create new battery manufacturers and battery models
- Set desired battery reference values

Model	Description
CBMS-101	CELLTRON Advantage Site Builder & Battery Library Creator package

- Software is delivered via 4GB USB drive
- The two applications will assist technicians to quickly configure a CELLTRON Advantage with a custom hierarchy and custom battery library
- All CELLTRON Advantage configurations can be set with these two applications



## ACCESSORIES & REPLACEMENT PARTS

### RED LIGHTED PROBE



Model	Description
CA093R	Red 6" lighted probe

- 6" probe with rotating head and ½" 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 ½" 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 ½" 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
C040	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 HARD CASE**



Model	Description
CA094	Custom hard case for CELLTRON Advantage

- Hard plastic shell
- Customized foam insert fitted for the CELLTRON Advantage and accessories
- Case only, tester and accessories sold separately
- Weight: 9.5 lbs