



# 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 Nickel Cadmium (NiCad) 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 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).

Tests individual Lead-Acid cells, Ni-CAD, or Monoblocs (up to 18Volts) in any common configuration, approximately 10-6000Ah.

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.

A fast-acting protection relay responds in milliseconds when a signal input in excess of 23.3 volts is introduced through the testing probes, providing instant protection to both the device and the user.

The web-based UNITE™ software is a sophisticated database with advanced data visualization tools that accommodates Franklin's portfolio of industrial IoT devices. It enables users to wirelessly pre-program site string details, export the details to the tester, and upload battery test for analysis and reporting.

## APPLICATIONS

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



DATA CENTERS



CRITICAL POWER



POWER UTILITIES



TELECOMM



TRANSPORTATION

# SPECIFICATIONS

## GENERAL

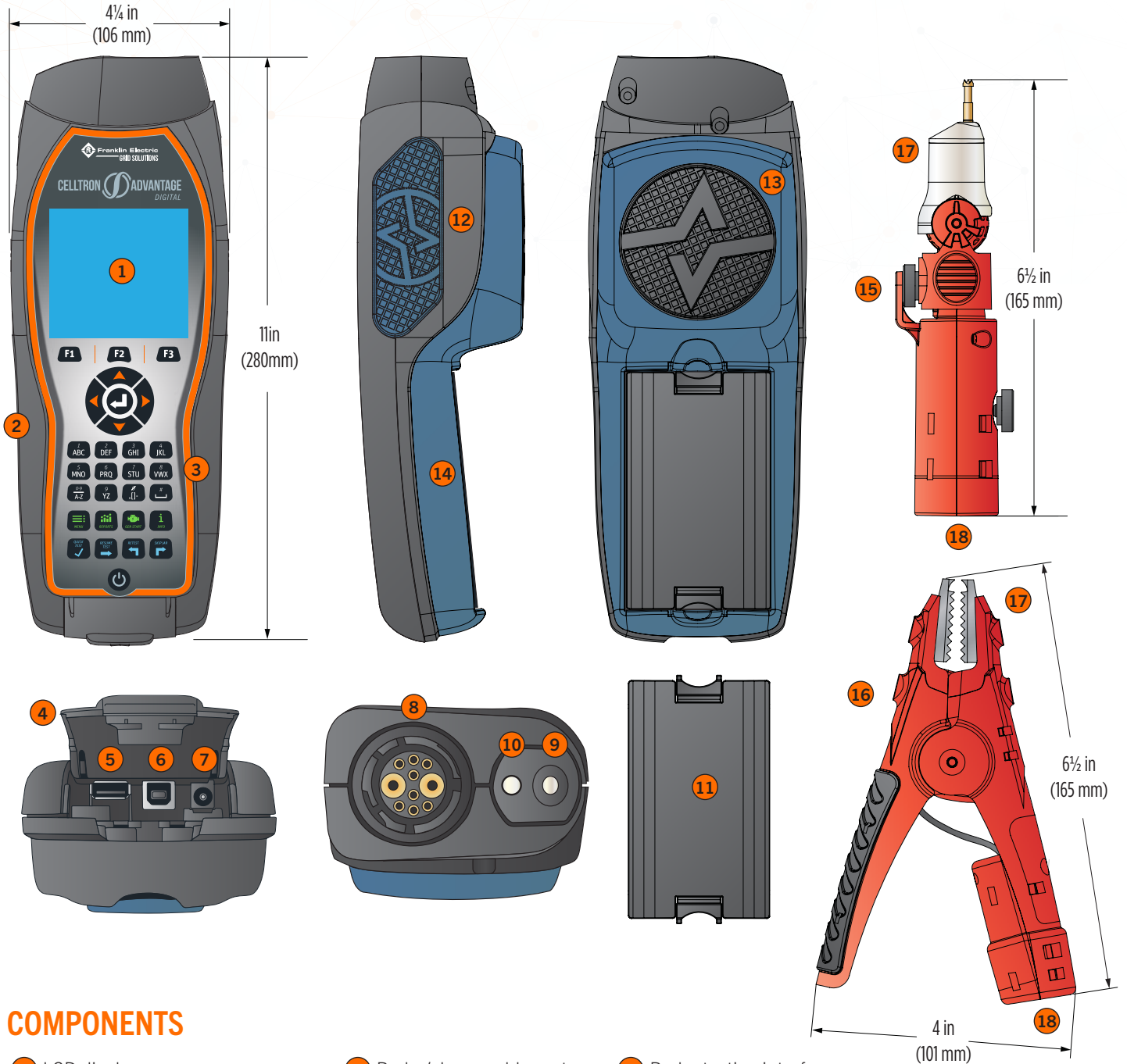
Voltage Range	0.8 - 23.5 Volts DC
Conductance Range	100 - 19,990 Siemens*
Test Data Storage	<ul style="list-style-type: none"><li>– 50 string locations of 240 test results</li><li>– Stored internally</li><li>– Unlimited transfer to USB drive</li></ul>
Accuracy	+/-2% across test range, voltage & conductance
Voltmeter Resolution	5mV
Power Requirements	<ul style="list-style-type: none"><li>– 7.2V, 2300mAh, NiMH</li><li>– Internal swappable battery &amp; charger</li></ul>
User Programmable Functions	<ul style="list-style-type: none"><li>– Preset values for over 250 battery types</li><li>– Low voltage alarm setting</li><li>– Low conductance warning</li><li>– Low conductance failure</li><li>– Test mode (push button/auto start)</li></ul>
Power Requirements	<ul style="list-style-type: none"><li>– English    – German    – Portuguese    – Russian</li><li>– Spanish    – Polish    – Dutch    – French</li></ul>

## HARDWARE

Dimensions	11in x 4in x 3in (279mm x 105mm x 80mm)
Weight	2.6 lb (1 Kg)
Housing Material	<ul style="list-style-type: none"><li>– Acid-resistant ABS plastic</li><li>– Santoprene™ overmold</li></ul>
LCD Display	<ul style="list-style-type: none"><li>– 2.97 in x 2.81 in (75.4 mm x 71.3mm)</li><li>– 128 x 128 pixels</li><li>– 40 degree viewing angle</li><li>– LED backlight</li></ul>
Keypad	<ul style="list-style-type: none"><li>– Alpha-numeric</li><li>– Stainless-steel dome</li><li>– Polycarbonate overlay</li><li>– 1,000,000 actuations</li></ul>
Storage Temperature	-4 to 180°F (-20 to 82°C)
Environmental Operating Range	<ul style="list-style-type: none"><li>– 0 to +104°F (0 to +40°C)</li><li>– 95% relative humidity</li><li>– Non-condensing</li></ul>
Over Voltage Protection	<ul style="list-style-type: none"><li>– Auto-reset disconnect</li><li>– Reverse polarity protected</li></ul>
Data Transfer	<ul style="list-style-type: none"><li>– Wifi</li><li>– USB 2.0 Flash Drive (Type A)</li><li>– USB 2.0 PC Interface (Type B)</li><li>– Half-duplex IrDA protocol for optional printer</li></ul>
Cable Options	<ul style="list-style-type: none"><li>– Dual contact clamps</li><li>– Dual contact probes</li><li>– Custom cables by quotation</li></ul>

\*Conductance testing voltage range 1V to 23.3V. Battery should be fully charged for best results.

# SPECIFICATIONS CONTINUED



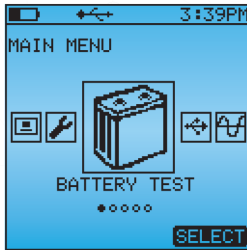
## COMPONENTS

- |                                      |                             |                              |
|--------------------------------------|-----------------------------|------------------------------|
| 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        |                              |

# SPECIFICATIONS CONTINUED

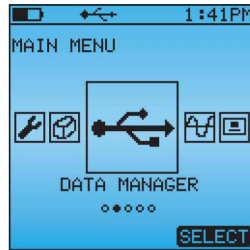
## SOFTWARE, APPLICATIONS & TOOLS

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



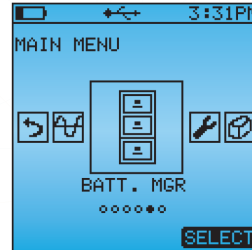
### BATTERY TEST

Standard, conductance-based battery testing.



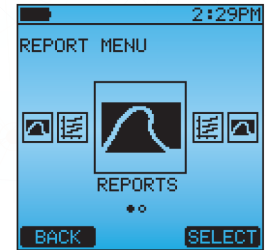
### DATA MANAGER

Upload, download, and delete testing data.



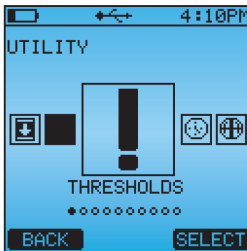
### BATTERY MANAGER

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



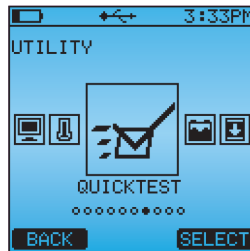
### REPORTS

Generate reports for individual battery string results.



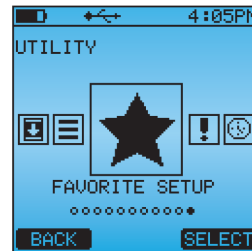
### THRESHOLDS

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.



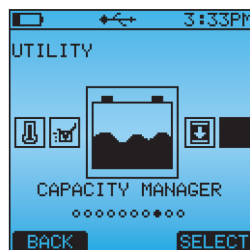
### AUTOSTART

Set the tester to activate a test process on contact.



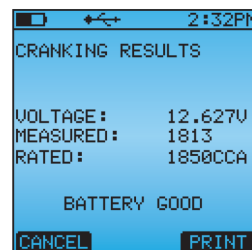
### SITE TRENDING

Effective trend analysis including test comparisons in one screen.



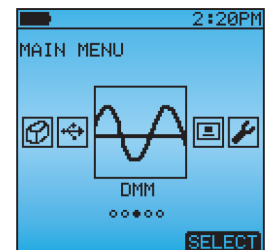
### CAPACITY MANAGER

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
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CADD-5000 KIT | Basic CELLTRON™ Advantage Digital Battery Tester Kit

- Belt loop
- Battery pack
- Universal charger
- Backpack
- Free 90-day UNITE™ trial
- 1 meter USB cable



Model	Description
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CADD-5500 KIT | Complete CELLTRON™ Advantage Digital Battery Testing Kit

- CELLTRON™ Advantage Digital
- Belt loop
- Battery pack (2)
- Universal charger
- 1 meter USB cable
- Backpack
- Free 90-day UNITE™ trial
- 4' interchangeable cable
- 8' probe cable
- Probe set
- Probe tip replacements
- Clamp set
- Waffle replacements
- Probe extender for 8' probe cables
- Probe extender for 4' probe cables



Model	Description
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CADD-5200 KIT | Enhanced CELLTRON™ Advantage Digital Battery Testing Kit

- CELLTRON™ Advantage Digital
- Belt loop
- Battery pack (2)
- Universal charger
- 1 meter USB cable
- Backpack
- Free 90-day UNITE™ trial
- 4' interchangeable cable
- Probe set
- Probe tip replacements
- Clamp set
- Waffle replacements

# ORDERING INFORMATION

## ACCESSORIES & REPLACEMENT PARTS



Model	Description
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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
- Quick connect/disconnect radio frequency BNC connector for easy removal
- Replaceable gold-plated over Duralloy® dual probe tips



Model	Description
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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
- Quick connect/disconnect radio frequency BNC connector for easy removal
- Replaceable gold-plated over Duralloy® dual probe tips



Model	Description
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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
- Quick connect/disconnect radio frequency BNC connector for easy removal
- Replaceable gold-plated over Duralloy® dual probe tips



Model	Description
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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



Model	Description
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CA025

8' CELLTRON™ Advantage probe cable

- Flex strain relief and spread of 48" with "Y" junction, for 6 and 12 Volt batteries only
- 6" rotating heads and half inch tips for instant contact
- Replaceable gold-plated over Duralloy® dual probe tips

# ORDERING INFORMATION

## ACCESSORIES & REPLACEMENT PARTS



Model	Description
CA092R	Red 6.5" piranha lighted clamp
	<ul style="list-style-type: none"><li>- 2" opening to attach to large battery terminals</li><li>- Designed with an internal LED to light those hard to see battery posts in dark places</li><li>- Quick connect/disconnect radio frequency BNC connector for easy removal</li></ul>



Model	Description
CA092B	Black 6.5" piranha lighted clamp
	<ul style="list-style-type: none"><li>- 2" opening to attach to large battery terminals</li><li>- Designed with an internal LED to light those hard to see battery posts in dark places</li><li>- Quick connect/disconnect radio frequency BNC connector for easy removal</li></ul>



Model	Description
CA092	(1) red and (1) black 6.5" piranha lighted clamps
	<ul style="list-style-type: none"><li>- 2" opening to attach to large battery terminals</li><li>- Designed with an internal LED to light those hard to see battery posts in dark places</li><li>- Quick connect/disconnect radio frequency BNC connector for easy removal</li></ul>



Model	Description
CA026	4' interchangeable CELLTRON™ Advantage cable
	<ul style="list-style-type: none"><li>- Flex strain relief and spread of 24" with "Y" junction</li><li>- Quick connect/disconnect radio frequency BNC connector for easy removal</li><li>- Compatible with CA092 clamps and CA093 probes</li></ul>



Model	Description
CA034	30" probe extenders
C034	30" lighted probe extenders
C033	Replaceable optic lamp kit for probe extenders with adhesive tape
	<ul style="list-style-type: none"><li>- Soft rubber handles</li><li>- Utilized in hard-to-reach areas such as UPS cabinets</li><li>- Weight: 2 lbs</li><li>- CA034 are used with the CA026/CA093</li><li>- C034 are used with the CA025, 8' CELLTRON™ Advantage probe cable</li></ul>

# ORDERING INFORMATION

## ACCESSORIES & REPLACEMENT PARTS



Model	Description
CA090	CELLTRON™ Advantage 7.2V NiMH rechargeable battery pack
	<ul style="list-style-type: none"><li>– Battery pack can be recharged by the CELLTRON™ Advantage or with the CA096 desktop charger</li><li>– Holds a nominal capacity of 2280mAh of standard charge for a full day of testing</li><li>– Rapid charge rate of 2250mA per 1.2hrs for quick recharge</li></ul>



Model	Description
CA096	CELLTRON™ Advantage desktop rapid battery charger
	<ul style="list-style-type: none"><li>– For use with the CELLTRON™ Advantage battery pack CA090 with rated voltage of 7.2VDC</li><li>– Rapid charge to 80% of rated voltage in 1 to 2.5 hours, trickle charge the remaining voltage</li><li>– Automatically end charging with negative delta voltage greater than 50mVDC</li><li>– AC power adapter included with an input of 120-240VAC 50-60HZ and output of 12VDC 2.5Amp</li></ul>



Model	Description
CA091	CELLTRON™ Advantage universal in-unit battery charger
	<ul style="list-style-type: none"><li>– Input: 100-240V 60Hz/50Hz 14W</li><li>– Output: 7.2V, 700mA 5.04VA</li></ul>



Model	Description
CA049	CELLTRON™ Advantage 39" USB A/B cable
	<ul style="list-style-type: none"><li>– For USB 2.0 communication between a PC and the CELLTRON™ Advantage</li></ul>



Model	Description
CA089	4GB USB 2.0 drive for use with CELLTRON™ Advantage
	<ul style="list-style-type: none"><li>– Export test data from the tester on to the USB drive or import tester configuration from the USB drive to the tester</li></ul>



Model	Description
CA087	Thermal IR / RS232 printer for use with CELLTRON™ Advantage
	<ul style="list-style-type: none"><li>– Power adapter and 4 NMH rechargeable AA batteries included</li><li>– Weight: 1 lb</li><li>– Dimensions: 2.25"H X 75"L X 3.25"W</li></ul>

# ORDERING INFORMATION

## ACCESSORIES & REPLACEMENT PARTS



Model	Description
A090	Power adapter / charger for CA087 thermal IR / RS232 printer
	<ul style="list-style-type: none"><li>- Battery pack can be recharged by the CELLTRON™ Advantage or with the CA096 desktop charger</li><li>- Holds a nominal capacity of 2280mAh of standard charge for a full day of testing</li><li>- Rapid charge rate of 2250mA per 1.2hrs for quick recharge</li></ul>



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



Model	Description
CO40	Multidigital Amp and Volt meter
	<ul style="list-style-type: none"><li>- 40A DC/AC range</li><li>- .90" (23mm) diameter jaw</li><li>- One touch zero button</li><li>- 400V DC/AC range</li><li>- Requires 2 AA batteries</li><li>- 600V overload protection for Ohm measurement</li><li>- Weight: 1.5 lbs</li><li>- Dimensions 10"L X 2"H X 4"W</li></ul>



Model	Description
CA100	Custom backpack for CELLTRON™ battery testers
	<ul style="list-style-type: none"><li>- Customized inserts fitted for the CELLTRON™ handheld testers and accessories</li><li>- Backpack only, tester and accessories sold separately</li></ul>