



Franklin Electric
GRID SOLUTIONS

BATTERY TESTERS

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

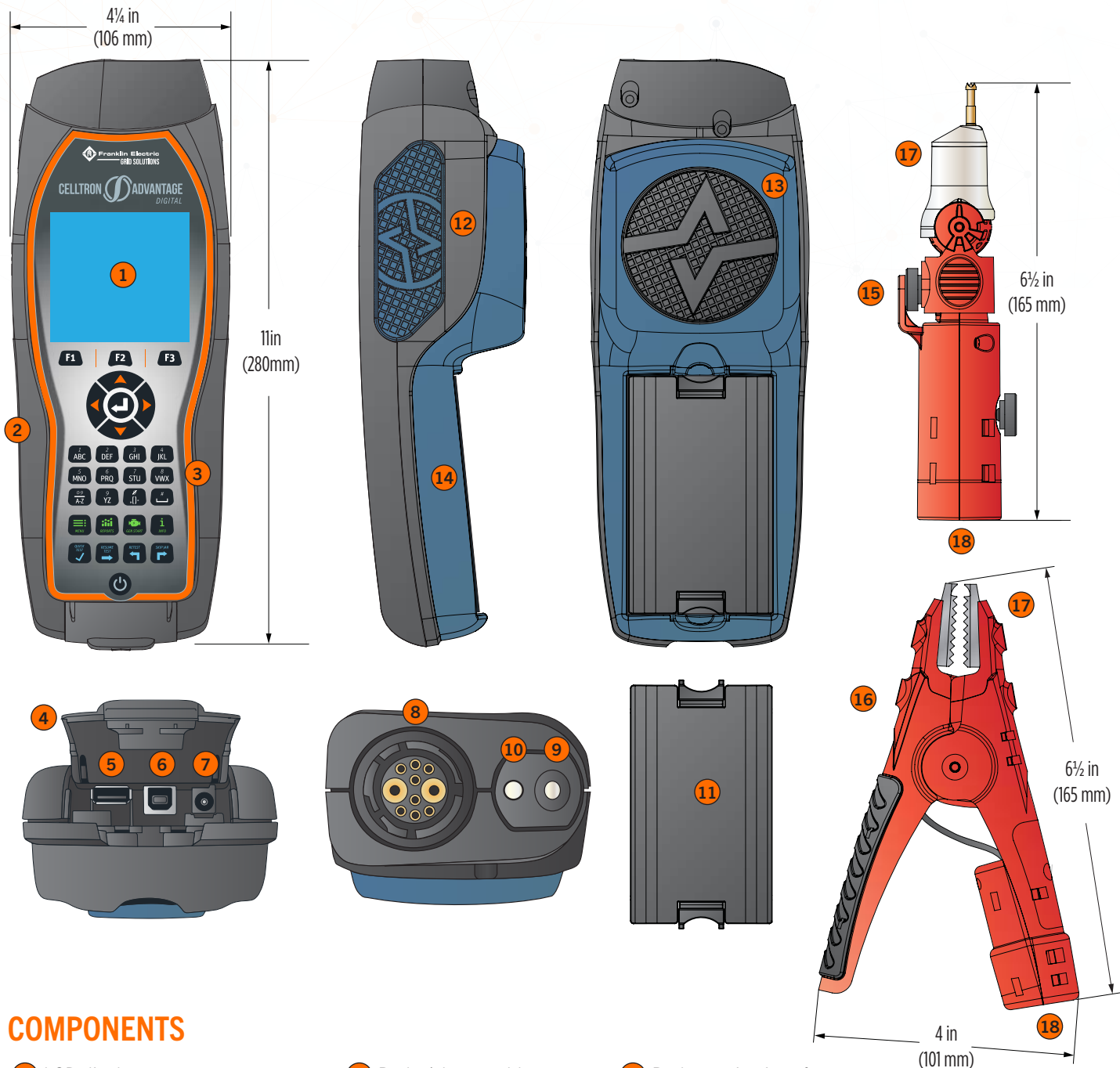
| | |
|-----------------------------|---|
| Voltage Range | 0.8 - 23.5 Volts DC |
| Conductance Range | 100 - 19,990 Siemens* |
| Test Data Storage | <ul style="list-style-type: none">– 50 string locations of 240 test results– Stored internally– Unlimited transfer to USB drive |
| Accuracy | +/-2% across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

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

*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.



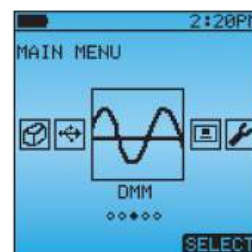
CAPACITY MANAGER

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 |
|---|--|
| CADD-5000 KIT | Basic CELLTRON™ Advantage Digital Battery Tester Kit |
| <ul style="list-style-type: none"> – Belt loop – Battery pack – Universal charger – Backpack – Free 90-day UNITE™ trial – 1 meter USB cable | |



| Model | Description |
|---|--|
| CADD-5500 KIT | Complete CELLTRON™ Advantage Digital Battery Testing Kit |
| <ul style="list-style-type: none"> – 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 |
|---|--|
| CADD-5200 KIT | Enhanced CELLTRON™ Advantage Digital Battery Testing Kit |
| <ul style="list-style-type: none"> – 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 |
|--------|----------------------|
| 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 |
|--------|------------------------|
| 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 |
|-------|--|
| 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 |
|-------|---|
| 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 |
|-------|------------------------------------|
| 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">– 2" opening to attach to large battery terminals– 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 | |



| Model | Description |
|---|----------------------------------|
| CA092B | Black 6.5" piranha lighted clamp |
| <ul style="list-style-type: none">– 2" opening to attach to large battery terminals– 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 | |



| Model | Description |
|---|---|
| CA092 | (1) red and (1) black 6.5" piranha lighted clamps |
| <ul style="list-style-type: none">– 2" opening to attach to large battery terminals– 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 | |



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



| 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">– Soft rubber handles– Utilized in hard-to-reach areas such as UPS cabinets– Weight: 2 lbs– CA034 are used with the CA026/CA093– C034 are used with the CA025, 8' CELLTRON™ Advantage probe cable | |

ORDERING INFORMATION

ACCESSORIES & REPLACEMENT PARTS



| Model | Description |
|---|---|
| CA090 | CELLTRON™ Advantage 7.2V NiMH rechargeable battery pack |
| <ul style="list-style-type: none">– 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 | |



| Model | Description |
|---|---|
| CA096 | CELLTRON™ Advantage desktop rapid battery charger |
| <ul style="list-style-type: none">– 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 | |



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



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



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



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

ORDERING INFORMATION

ACCESSORIES & REPLACEMENT PARTS



| Model | Description |
|-------|---|
| A090 | Power adapter / charger for CA087 thermal IR / RS232 printer |
| | <ul style="list-style-type: none"> – 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 |



| 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"> – 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 |



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