

MIDTRONICSAdvancing  
Battery Management

DCA-8000

New vehicles.  
New batteries.  
New challenges.

## DCA-8000

### DYNAMIC DIAGNOSTIC CHARGING SYSTEM

#### Advanced diagnostic charging system featuring breakthrough core technology

##### Rapid decisions:

Increases diagnostic speed, generating most battery decisions in five minutes or less.

##### Greater accuracy:

Comprehensive detection diagnostics assess a range of additional battery conditions – including charge acceptance, defect and degradation, cold battery, deep discharge, stratification, and internal battery temperature to deliver a comprehensive picture of battery condition.

##### Support for advanced vehicle systems:

Assesses battery ability to support operation of start-stop, regenerative braking, and variable output alternators; future technologies managed via regular software updates.



*As the complexity of battery and electrical systems continue to evolve, your diagnostic technology must be able to keep pace.*

- New battery chemistries, types and construction
- Advanced power management systems
- Greater demand on batteries to support vehicle electronics and accessories

## DCA-8000 Features

- **5" color touchscreen:**  
More information and graphics on screen
- **New Midtronics User Interface design:**  
Consistent look and feel across all Midtronics equipment, minimizing training time
- **Simple functional flow:**  
Fewer screens & steps to reduce potential confusion points for the technician
- **Dual temperature sensors:**  
Improved temperature accuracy and cold battery detection
- **Field-replaceable cables:**  
In standard 3m or optional 5m lengths
- **Wi-Fi capability:**  
Supports charge data transmission and automatic over-the-air software updates
- **Locking input /output cables:**  
Reduce accidental disconnections
- **Self-diagnostics:**  
Provides users with proactive tool performance warnings; such as cable degradation, internal component malfunction, etc.
- **BMIS integration:**  
BMIS is a cloud-based platform that supports battery service data storage, data sharing among BMIS-capable devices, equipment software updates, and flexible analytical and reporting options.  
Available as an optional subscription service.
- **Customer communication:**  
Email diagnostic results to customers, or print hard-copy results via optional integrated printer
- **VIN capture options:**  
Optional barcode scanner, optional CVG convergence module, integration with DSS-5000 Battery Diagnostic Service System, or manual entry
- **Optional cart:**  
Large back wheels, pivoting front wheels, and a full range push handle improve mobility in the shop environment



## How the DCA-8000 Evaluates TRUE BATTERY CONDITION

The charge process is monitored throughout and discontinued immediately if at any point a battery is determined to be unrecoverable due to physical faults, etc. Most decisions are generated in 5 minutes or less.



### STEP 1: Conductance

Action	Measures a battery's ability to crank the engine
Time Required	5 seconds
Total Time Elapsed	5 seconds



### STEP 2: Conductance Profiling™

Action	Measures a battery's ability to supply power over time
Time Required	55 seconds
Total Time Elapsed	1 minute



### STEP 3: Dynamic Charge Acceptance

Action	Measures a battery's ability to accept charge current
Time Required	60 seconds
Total Time Elapsed	2 minutes



### STEP 4: Further Diagnostics

Action	Load test, recovery charge, and monitoring
Time Required	3 minutes
Total Time Elapsed	5 minutes

**Avg. Diagnostic Time: less than 5 minutes**

Since pioneering a new global standard with conductance technology over 30 years ago, Midtronics has focused on battery management innovation.

Our two newest patented battery service technologies expand and enhance modern battery service:

#### Conductance Profiling™

- Combines our conductance algorithm with new proprietary technology
- Identifies batteries with poor reserve capacity that may start the car, but could fail to support other vehicle accessories
- Ensures service readiness for emerging vehicle systems, batteries, and new points of battery failure

#### Dynamic Charge Acceptance™

- Combined with Conductance Profiling™, enables quick and accurate battery diagnosis, avoiding time wasted charging bad batteries
- Mimics the start event with a large load, then applies a charge for a short period time
- Performs critical diagnostics to verify battery can support start-stop applications

### Charge Cables

- 3m (standard)
- 5m (optional)

### Power Cord

- Accepts locking C19 locking connector for region-specific power cables:
- United States: EMA 5-15 termination, rated at 15A/125V UL CSA

### Applications

- Automotive
- Power Sports
- Marine

### Battery Chemistries

- Flooded lead acid
- AGM (flat and spiral)
- EFB
- Gel
- Li-ion

### Rating System

- CCA
- CA
- MCA
- JIS
- DIN
- SAE
- IEC
- EN
- EN2

### Operating Parameters

- Input Voltage: 100-240~, 50-60 Hz, 12A maximum
- Output: 15VDC; 70A maximum

### Temperature

- Operating temperature range: 0°C to +60°C (32°F to +140°F)
- Storage temperature range: -10°C to +85°C (14°F to 185°F)

### Dimensions

- Height: 9.37" in (23.8 cm)
- Width: 17.25" in (43.81 cm)
- Depth: 17.82" in (45.26 cm)
- Weight: 37.4 lbs (21.55 kg)

### Humidity

- 15% to 85% R.H., non-condensing

### Certifications

- CUL
- FCC
- ETL
- RoHS

### Connectivity

#### Wi-Fi

- 802.11 b/g/n 2.4GHz
- Security – WEP, WP, WPA-2 Enterprise
- Serial

### Bluetooth

- 2.0
- USB 2.0 connection
- BTLE

### Serial CAN bus interface

### Safety Features

- Reverse polarity
- Clamp connection
- Non-12V battery connection
- Battery voltage too low (< 5.5 V)
- Clamp high temperature detection

### BMIS-Enabled

- Remote "over the air" software updates
- Remote diagnostics
- Enterprise asset management
- Reporting and analytic tools
- Communication with next generation Midtronics platforms and tools

### User Interface

- Advanced navigation and charge applications
- Remote notifications (Wi-Fi- or Bluetooth-enabled)
- Intuitive charge cycle feedback
- 5" color touch-screen display

### Corporate Headquarters

Willowbrook, IL USA  
Phone: 1.630.323.2800  
Toll Free in US: 1.800.776.1995  
Toll-Free in Canada: 1.866.592-8053

### European Sales

Midtronics b.v.  
European Headquarters  
Houten, The Netherlands  
Serving Europe, Africa, the Middle East,  
and The Netherlands  
Phone: +31 306 868 150

### Midtronics China Office

China Operations  
Shenzhen, China  
Phone: +86 755 2374 1010

### Asia/Pacific (excluding China)

Contact Corporate Headquarters  
Phone: +1.630.323.2800

### Midtronics India

Mumbai, India  
Phone: +91.989 237 6661