With the EXP-1000 you can diagnose every part of the electrical system; battery to starter, more accurately and decisively than ever before.

**FEATURES**

**Dynamic Conductance Battery Testing Technology**
- Combines direct temperature measurement with deep scan technology to improve accuracy and decisiveness

**Advanced Electrical System Diagnostics with Digital Signal Processing**
- Digital Signal Processing (DSP) elivers improved accuracy and the ability to analyze the amplitude level and frequency of the ripple pattern to identify open or shorted diodes and open-phase conditions

**DMM Function for Advanced Diagnostics**
- AC/DC Volts • AC/DC Amps • Volts/Amps Mode
- Scope Mode • Temperature • Diode Test
- Ohm Meter

**Patented Conductance Cable Drop Test**
- Interactive test routines using dual cable sets for more effective analysis of voltage drop across ground circuit, starter system, alternator system, and generic system testing

**Enhanced Communications Capabilities**
- IR printer option
- Data card reader/writer for future upgrades

**Superior User Interface**
- Large graphical display screen
- Scroll bar capability
- Alphanumeric keypad, icon-based menus and hot keys improve screen flow

**CONDUCTANCE TECHNOLOGY**

Conductance describes the ability of a battery to conduct current. It is a measurement of the plate surface available in a battery for chemical reaction, which determines how much power the battery can supply. High relative conductance is a reliable indication of a healthy battery, while conductance declines as the battery deteriorates. Years of laboratory and field test data have determined that battery conductance is an indicator of battery state-of-health showing a linear correlation to a battery’s timed-discharge capacity test result. If conductance can be measured, discharge capacity can be predicted, giving a reliable predictor of battery end-of-life. Other testing alternatives like voltage and specific gravity testing are not predictive. Timed discharge testing is very timeconsuming and expensive, and impedance testing does not correlate directly and linearly with discharge capacity. Thus, conductance testing is a very effective and economical battery management tool.

**SPECIFICATIONS**

**Model Number:** SCP-100
**Applications:** Use of sealed lead-acid batteries for security systems, emergency lighting, mobility vehicles, uninterruptible power supplies, more

**Operating range:**
- 6 and 12 volt nominal batteries from 1.2 to approximately 55 ampere hours in capacity
- Voltmeter: +6.0 to +14.0 VDC
- Conductance: 20 to 1200 siemens
- Operating Temperature: -18 to 50ºC (0 to 120ºF)

**BENEFITS**

Simple: Easy to setup, even easier to use!
Quick: Battery voltage and conductance displayed in less than 10 seconds.
Safe: Utilizes patented conductance technology, a passive method that minimizes technician risk and battery stress.
Accurate: Conductance method recognized by IEEE standard for the testing of lead-acid batteries with proven correlation to battery capacity.
Economical: Efficient and accurate battery tester priced to fit into every technician’s tool kit.
- Tests 6V and 12V batteries
- Helps to ensure the operation of critical systems despite power loss
- Prioritizes battery replacements and additional testing for cost-effective system management
- No external power source needed
**BATTERY SUPPLIES.BE**

**BATTERY SUPPLIES.BE**

**BATTERY SUPPLIES.BE**

**BATTERY SUPPLIES.BE**

**BATTERY SUPPLIES.BE**

**BATTERY SUPPLIES.BE**

**SPECIFICATIONS**

- Integrated printer provides immediate results to review with the customer
- User-defined headers on printout
- Tests 12-Volt batteries and electrical systems for cars and light trucks
- Tests starting and charging system voltage and displays results
- Tests batteries from 100 to 900 CCA
- Bad cell detection
- Reverse polarity protection
- Tests discharged batteries down to one Volt
- Multiple rating system compatible (CCA, SAE, DIN, EN, IEC)
- Tests multiple battery chemistries, including standard (flooded), AGM, and Gel
- 19 languages

**APPLICATIONS**

- Automotive / Motorcycle / Truck / 6 & 12 Volt batteries / 12 & 24 Volt charging systems

**BATTERY TYPE**

- Regular flooded / AGM flat plate / AGM spiral / Gel

**TEST RANGE**

- JIS, SAE, EN, DIN, IEC / 6 and 12 Volt batteries

**ADVANCED STARTER/ALTERNATOR TESTING**

- Quick starter analysis without disabling the ignition / Advanced menu-driven interface for a complete charging system analysis in seconds

**SUPPORTED LANGUAGES**

- 24 languages

**MDX-600 SERIES**

**BATTERY CONDUCTANCE AND ELECTRICAL SYSTEM ANALYZER**

The MDX-600 series combines industry standard conductance technology for battery testing with more than 25 years of experience and innovation gained from selling essential tools to nearly every car and truck OEM in the world. MDX Series advanced features include:

- Multiple vehicle applications, battery types, and rating systems
- Large back-lit screen and improved user interface
- Integrated printer option
- Improved Replaceable Cable Design

**APPLICATIONS**

- Automotive / Motorcycle / Truck / 6 & 12 Volt batteries / 12 & 24 Volt charging systems

**BATTERY TYPE**

- Regular flooded / AGM flat plate / AGM spiral / Gel

**TEST RANGE**

- JIS, SAE, EN, DIN, IEC / 6 and 12 Volt batteries

**ADVANCED STARTER/ALTERNATOR TESTING**

- Quick starter analysis without disabling the ignition / Advanced menu-driven interface for a complete charging system analysis in seconds

**SUPPORTED LANGUAGES**

- 24 languages

---

**MDX-335P**

**BAT/26723**

Complete with an integrated printer, the Midtronics MDX-300 series makes it easy and more affordable to determine and present the current state of a battery and electrical system. The MDX-300 series perform a quick, simple, and accurate battery or system test in seconds without heat, sparks, or user interpretation. The results can then be printed and reviewed immediately with customers to add impact to preventative maintenance routines and customer service.

---

**MDX-600 SERIES**

**BATTERY CONDUCTANCE AND ELECTRICAL SYSTEM ANALYZER**

**Ref.** Includes:

**BAT/26721** MDX-645 Battery Conductance Analyzer including 120 cm cable (6 and 12 Volt batteries)

**BAT/26722** All of the MDX-645 features, including 120 cm cable plus an Integrated Printer

**BAT/26725** Battery and Electrical System Analyzer combines the full MDX-645 capabilities for battery testing with in-vehicle capabilities for analyzing the starting and charging systems including 300 cm cable (6 and 12 Volt batteries and 12 and 24 Volt charging systems)

**BAT/26726** All of the MDX-655 features, including 300 cm cable plus an Integrated Printer
**System voltage**: 12 Volts
**Input voltage range**: 9V–15V
**Power requirements**: No internal batteries required. Power on when hooked up during testing.
**Testing range**: 100 ~ 2000 CCA, 100 ~ 1000 DIN, 100 ~ 1000 IEC, 100 ~ 1700 EN
**Weight**: 0.5kg

**BATTERY ANALYSER**

This Battery tester is designed to test the condition of the automotive battery using conductance method. Unlike the conventional method of draining the battery by applying resistance load to it and obtain the result from the meter gauge; this analyzer utilizes a series of pulsed voltage across the battery cells and observes the AC current that flows in response to it.

**System voltage**: 12 Volt
**Input voltage range**: 9V–15V
**Power requirements**: No internal batteries required. Power on when hooked up during testing.
**Testing range**: 100 ~ 2000 CCA, 100 ~ 1000 DIN, 100 ~ 1000 IEC, 100 ~ 1700 EN
**Weight**: 0.5kg

**THE BENEFITS OF THIS TEST METHOD ARE**

- Conductance correlates directly to the battery capacity Passive testing method is safe.
- Never discharges or drain the battery.
- Able to test condition of discharged battery. Consistent and repeatable results.
- Provides unique indication of battery conditions.

**BATTERY MONITOR**

**SPECIFICATIONS**

- Shows voltage information when user is close to the vehicle, no need to open app;
- Check vehicle starting (cranking) system automatically when each time engine started;
- Check charging system (alternator);
- Alert mobile phone automatically if something wrong;
- Review voltage history in graph mode;
- Store all the history data in app;
- Store historical data in hardware up to 90 days;
- Check battery voltage each 2 minutes automatically;
- Check starting voltage each 10ms when engine is starting;
- Engine starting detect automatically;
- Ultra-low power consumption, average current: 0.6mA;
- Connect with battery directly;
- Free app for iOS & Android users;
- Compatible with all 12-volt vehicle batteries;
- Each link technology, no pairing;

**KEY FEATURES**

- Android 4.3+, iPhone 4S+, iPad3+
- Alert user if charge is low
- Review charge history in graph mode
- Show the state of charge of battery in real time
- Check starting and charging systems
- All 12V car battery
### AUTO EXACT EXPRESS TEST / CHARGE CENTER

**BAT/47508**

AC Voltage: 220 V – 240Vac 50Hz

**DIAGNOSTIC CHARGING**

- **Maximum Charge Current**: 50 Amp DC
- **Engine start**: 150 Amp@ 7.2V (5seconds)
- **Maximum Charge Voltage**: 16Vdc

**TESTING**

<table>
<thead>
<tr>
<th>Application</th>
<th>12V Batteries / 12V START - STOP Batteries / 12V &amp; 24V Charging/Starting System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Range</td>
<td>200 ~ 3,000 CCA (SAE)</td>
</tr>
<tr>
<td>Rating System</td>
<td>SAE, DIN, EN, IEC, JIS (Battery Type No.)</td>
</tr>
<tr>
<td>Voltmeter</td>
<td>1.5 V – 30V via Battery Clamp / 1.5 V – 60V via Test Probe</td>
</tr>
<tr>
<td>Automated Load Test</td>
<td>200 Amp (Max.)</td>
</tr>
<tr>
<td>Display</td>
<td>Back-Lit Display, 4 Lines 16 Characters LCD</td>
</tr>
<tr>
<td>Thermal printer</td>
<td>Integrated</td>
</tr>
<tr>
<td>Languages</td>
<td>English, French, Spanish, German, Italian, Portuguese</td>
</tr>
<tr>
<td>Features</td>
<td>Easy-Link Communication to PC via USB, Date /Time Function, Test Counter and Stores Previous 1,000 Tests, Over Temperature / Current / Voltage, Reverse Polarity and Short Circuit Protection, Fully Customizable Printout</td>
</tr>
<tr>
<td>Included accessories</td>
<td>1 Roll of Printer Paper, 1 Detachable Charging/Test Lead: 6-Gauge (13.3mm²), Approx. 8 Feet (2.5M)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Approx. L 330mm x W 300mm x H 200mm</td>
</tr>
</tbody>
</table>

### BATTERY & ELECTRICAL PERFORMANCE PLATFORM WITH PRINTER

**BAT/47510**

Application 6V & 12V Batteries / 12V START - STOP Batteries / 12V & 24V Charging/Starting System

| Operation Range | 40 ~ 3,000 CCA (SAE) |
| Rating System | SAE, DIN, EN, IEC, JIS (Battery Type No.) |
| Voltmeter | 1.5 V – 30V via Battery Clamp / 1.5 V – 60V via Test Probe |
| Display | Back-Lit Display, 4 Lines 16 Characters LCD With Adjustable Brightness |
| Thermal printer | Integrated |
| Detachable Test Lead | 70 inch/180 cm |
| Languages | English, French, Spanish, German, Italian, Portuguese |
| Features | Easy-Link Communication to PC via USB, Date /Time Function, Test Counter and Stores Previous 1,000 Tests, Fully Customizable Printout, Temperature Sensor & Temperature Compensation |
| Included accessories | 1 Roll of Printer Paper, Detachable Test Lead, 6 AA Batteries, Heavy-duty Blow Molded Plastic Case |
| Dimensions | Approx. L 275 x W 135 x H 80 (mm) |
2 IN 1 DIGITAL VOLTMETER & MINI TESTER
FOR TESTING BATTERY / ALTERNATOR

**BAT/47507**
- Back-lit LCD display with 4 digit readout
- Ranges: 4.5 – 39.99V
- OCV vs. State of Charge for Battery Tester
- Available Testing Battery Voltage: 6V, 12V & 24V
- LED indicator for Alternator test
- Reverse polarity & over voltage protection
- Cable length: 20.9 inch / 53 cm
- Dimension: L 120 x W 70 x H 18 (mm)

**BAT/47505**
MOTORCYCLE & POWER SPORT BATTERY & ELECTRICAL SYSTEM ANALYZER

**BAT/47506**
MOTORCYCLE & POWER SPORT BATTERY & ELECTRICAL SYSTEM ANALYZER WITH PRINTER

<table>
<thead>
<tr>
<th>REFERENCE</th>
<th>BAT/47505</th>
<th>BAT/47506</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>12V Motorcycle &amp; PowerSport Battery 12V Charging/Starting System</td>
<td></td>
</tr>
<tr>
<td>Operation Range</td>
<td>Battery OE Code Number &amp; 2.3-30 AH</td>
<td></td>
</tr>
<tr>
<td>Voltmeter</td>
<td>1.5V – 30V</td>
<td></td>
</tr>
<tr>
<td>Display</td>
<td>Back-lit Display, 2 Lines 16 Characters LCD</td>
<td>Integrated</td>
</tr>
<tr>
<td>Thermal printer</td>
<td>NA</td>
<td>Integrated</td>
</tr>
<tr>
<td>Test Lead</td>
<td>31 inch / 80 cm</td>
<td></td>
</tr>
<tr>
<td>Languages</td>
<td>English, French, Spanish, German, Italian, Portuguese</td>
<td></td>
</tr>
<tr>
<td>Included accessories</td>
<td>1 9V Battery 2 rolls of Printer Paper 4 AA Batteries</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>L 198 x W 114 x H 53 (mm)</td>
<td>L 195 x W 114 x H 50 (mm)</td>
</tr>
</tbody>
</table>
BATTERY & ELECTRICAL SYSTEM ANALYZER WITH PRINTER

**BAT/45009**

- **Application**: 6V & 12V Batteries
- **Operation Range**: 12V & 24V Charging/Starting System
- **Rating System**: SAE, UNI, EN, IEC, JIS (Battery Type No.)
- **Voltmeter**: 1.5 V ~ 30V
- **Display**: Back-Lit Display, 2 Lines 16 Characters LCD
- **Thermal Printer**: Integrated
- **Detachable Test Lead**: 31 inch/800 cm
- **Languages**: English, French, Spanish, German, Italian, Portuguese
- **Included accessories**: Heavy-duty Blow Molded Plastic Case
- **Dimensions**: Approx. L 195 x W 114 x H 50 (mm)

**BAT/27627**

- **Application**: 6V & 12V Batteries
- **Operation Range**: 12V & 24V Charging/Starting System
- **Rating System**: SAE, UNI, EN, IEC, JIS (Battery Type No.)
- **Voltmeter**: 1.5 V ~ 30V
- **Display**: 2 Lines 16 Characters LCD
- **Test Lead**: 31 inch / 800 cm
- **Languages**: English, French, Spanish, German, Italian, Portuguese
- **Included accessories**: Heavy-duty Blow Molded Plastic Case - 19V Batteries
- **Dimensions**: L 198 x W 114 x H 53 (mm)

**BAT/47509**

- **Amp Clamp** (measures amperage/charging current)
- **Volt Test Probe** (Red test probe measures DC voltage)

**BAT/48138**

- Replacement paper roll
  - 57 mm (W) x 50m (L)
  - 1 roll/bag

**BAT/47515**

- **Amp Clamp** (measures amperage/charging current)
- **Volt Test Probe** (Red test probe measures DC voltage)
**BATTERY ACCESSORIES**

**BATTERY TESTERS**

**100 AMP BATTERY LOAD TESTER**

- **REFERENCE** BAT/19665
- **Application** 6V & 12V Batteries
- **Operation Range** Up to 1,000 CCA (SAE)
- **True Loading Capacity** 100 Amp
- **Display** Analog Meter
- **Test Lead** 20 inch / 50 cm

**FEATURES**
- Test battery state of charge, battery cranking ability, charging system output and starter condition
- Complete test in 10 seconds

**125 AMP DIGITAL BATTERY LOAD TESTER/ CHARGING SYSTEM ANALYZER**

- **REFERENCE** BAT/26622
- **Application** 12V Batteries
- **Operation Range** Up to 1,000 CCA (SAE)
- **True Loading Capacity** 100 Amp
- **Display** 3 Digital LED display
- **Test Lead** 20 inch / 50 cm

**FEATURES**
- Automatically turns off the load after 10 sec. and holds the voltage
- Unique 3 Step design: LED polarity checking function, battery load test and charging system test readout
- Microprocessor controlled design guarantees an easy and accurate load test

**500 AMP CARBON PILE BATTERY LOAD TESTER**

- **REFERENCE** BAT/37281
- **Application** 6V & 12V Batteries
- **Operation Range** Up to 1,000 CCA (SAE)
- **True Loading Capacity** 500 Amp
- **Display** Analog Meter
- **Test Lead** 20 inch / 50 cm

**FEATURES**
- Color-coded, temperature compensation pass fail bands on the voltmeter insure precise battery load test results.
- Separate voltmeter and ammeter provide easy to monitor battery load tests.
- Tests batteries up to 1,000CCA.
- Tests 12V batteries, alternators, regulators & starters.
- Built with warning beeper.
- Meets UL standards.