

MAHLE



TechPRO® Power Line

The Technical Line
for 12V Batteries.

TechPRO® Power Check: for the electrical system

TechPRO® Power Check represents a new generation of portable testers, designed to provide fast and accurate diagnostics of vehicle batteries and electrical systems. Thanks to the integration of MDX-AI by MIDTRONICS, it analyses millions of real data points to provide reliable results in seconds.

Battery and Electrical System Tester with advanced MDX-AI Technology

Designed for the modern workshop, TechPRO® Power Check combines reliability, speed and accuracy. Its intelligent technology makes it an indispensable tool for battery diagnosis, optimising time and increasing service quality. Thanks to MIDTRONICS' MDX-AI technology, the TechPRO® Power Check portable battery tester offers diagnostic capabilities previously unheard of in portable battery testers, making battery testing extremely fast while delivering professional accuracy.

When to use Power Check

- **Preventive maintenance** - periodic battery status checks, preventing unexpected failures.
- **Vehicle check-in** - quick assessment upon arrival at the workshop.
- **Pre-delivery inspection** - battery efficiency check before delivery of new or reconditioned vehicles.
- **Battery warranties** - Generate detailed reports to support warranty claims.
- **Quick Service Diagnostics** - Ideal for quickly identifying recurring electrical problems.



- Müller or Sport clamps
- With or without printer

Benefits

- **Fast and Accurate Diagnosis:** provides results in 10-20 seconds without the need to manually enter battery data, even in the presence of electrical disturbances or when the CCA value is not readable.
- **Intelligent AI Technology:** uses advanced machine learning algorithms to analyse and interpret battery parameters, continuously improving accuracy over time.
- **Intuitive Colour Display:** Equipped with a 3.5" colour screen and a simple, clear interface to make it easy for all users.
- **Wi-Fi connectivity:** Enables over-the-air software updates and direct report sending via email, improving workshop productivity.
- **Robust and reliable design:** Internal rechargeable battery and field-replaceable cables: perfect for intensive professional use.

Quick to identify new business opportunities

Quick and accurate battery tests eliminate any uncertainty and wasted time, assessing the need for replacement or maintenance as soon as the vehicle is accepted.

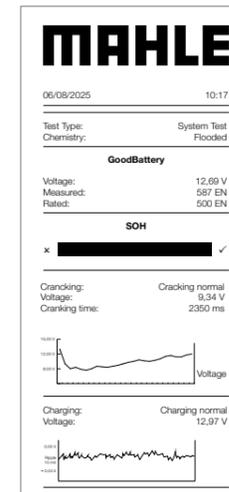
Advanced features

TechPRO® Power Check improves the functionality of standard battery testers, offering distinctive features:

Quick Decision - allows you to perform a quick battery test, **even on a completely flat battery**. The procedure allows you to immediately identify whether the problem is due to battery depletion and therefore requires replacement without further investigation. It also allows the test to be carried out even without further information or input from the operator (e.g. battery type), which may no longer be legible due to wear and tear.

Email report - at the end of the test, a complete report can be sent by email so that the results can be stored and shared with the customer if necessary.

Quick Charge and Retest - with TechPRO® Power Check, it is no longer necessary to fully charge the battery before performing diagnostic tests on the battery and electrical system, which would otherwise prolong the operation time. Simply enter system test mode, start the car for 10 seconds, and the complete cranking and battery health test is available in a few seconds.

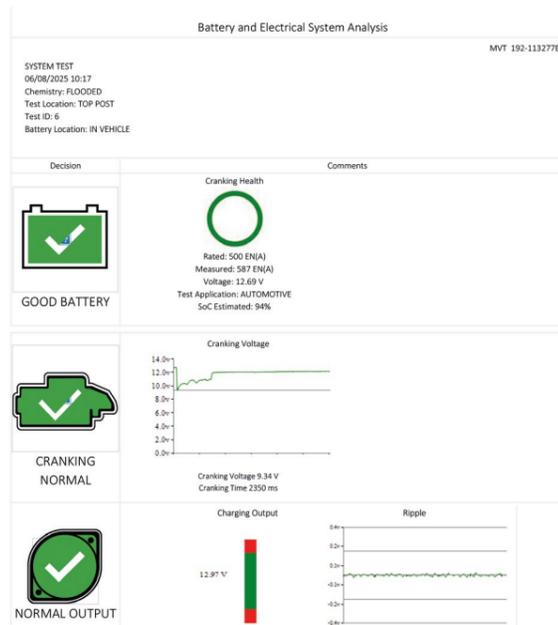


Report printing⁽¹⁾ - at the end of the test, the report can be printed on thermal paper.

⁽¹⁾ only on P models equipped with integrated printer

Technical Specifications

Battery Types:	6V e 12V (Flooded, AGM Spiral, Gel, AGM Flat, EFB)
Supported Charging Systems	12V e 24V
Test Standards	CCA, CA, MCA, DIN, SAE, IEC, EN, EN2, JIS)
Wi-Fi Communication	2.4 Ghz 802.11 b, g, n
Dimensions	241 mm x 105 mm x 51 mm
Weight	1,814 Kg



TechPRO® Power Protect: essential in every workshop

The growing demand for energy, combined with heavy daily use (short trips), requires a healthy battery. Good maintenance means paying particular attention to all operations with the engine on/off. TechPRO® Power Protect is designed to replace the battery in order to preserve it.

12V battery: not just for vehicle starting.

The battery is an essential part of the modern vehicle and is the backbone of the proper functioning of all electronic components in a vehicle. The proliferation of control units and other sensors that respond to the current challenges of integrated electronics makes the demand for energy increasingly important for:

- Limiting vehicle consumption.
- Limiting CO2 emissions.
- Improving safety performance (airbags, driver assistance systems, etc.).
- Improving user comfort (heated seats, on-board computers, etc.).



TechPRO® Power Protect is an indispensable solution for supplying the necessary power when the engine is off, especially during diagnostics or when the vehicle is on display in showrooms.

Thanks to its ability to deliver **120 A at 25°C** continuously and with a certified performance cycle, it is the most efficient solution even for vehicle brands with the most demanding power requirements.

116 A if the ambient temperature is 40°C

Why TechPRO® Power Protect in workshops

The maintenance of a modern vehicle in the workshop is based on actions that have a significant impact on the battery:

- Locating any faults through a diagnostic phase involving numerous control units, which can sometimes take a long time (several minutes/hours).
- Calibrating ADAS systems using TechPRO® Digital ADAS.
- Reprogramming control units.

Diagnostic work with TechPRO® Power Protect allows you to:

- Follow the manufacturers' recommendations.
- Maintain all the vehicle's electrical systems at a stable voltage, regardless of the vehicle's power consumption being tested.
- Avoid errors due to voltage drops during ADAS system calibration.
- Perform error-free updates to the vehicle's control units.

Maintain the right charge on the go

Thanks to inverter technology, TechPRO® Power Protect is a high-power smart unit capable of maintaining all batteries (lead, lithium, service, etc.) at a perfectly stabilised voltage in any situation that could compromise their performance.

Operation modes

1. Diagnostic Mode

- Compensates for power demands up to 120 A.
- Adjustable voltage from 12 to 14.8 V in 0.1 V steps according to manufacturer recommendations.
- Automatic warning in case of excessive consumption.

2. Battery Charge Mode

- Automatic lead charge curves in 9 distinct stages.
- Lithium charging curve in 9 stages incorporating TechPRO® Power Protect's 'UVP' (Under Voltage Protection) and "EBS" (Equalising Battery System) technologies.
- Automatic 'SOS Recovery' desulphation.
- Charges 50% faster than a traditional battery charger.
- Real-time display of charging progress.

3. Test Mode

- Measures battery voltage (voltmeter).
- Assesses the condition of a vehicle's starting system (starter + battery) when the engine is started.
- Determines the condition of the vehicle's alternator.

4. Showroom Mode

- Compensates for energy requirements up to 120 A.
- Detachable cables for easy access to the engine compartment.
- Can be used without a battery in the vehicle ('No battery' function).
- Automatic restart in the event of a power failure.
- 'Showroom lock' function to lock the charger and prevent tampering.

Features

Battery change function ^(*)

- Maintains power requirements without risk of losing vehicle memory when changing batteries

Power Supply Function ^(*)

- Transforms TechPRO® Power Protect into a continuous stabilised power supply (DC).
- Adjustable voltage in 0.1 V steps: 2>16 V
- Adjustable current in 1 A steps: 2>Imax

Start Assist ^(*)

- Precharges the battery of thermal vehicles and delivers the maximum current of the battery charger during the engine start phase.

^(*) activation available on request

Traceability

Charging data is saved in the internal flash memory and sent to a PC via WiFi connection.

Flexible Voltage

The proprietary '**Flexible Voltage**' technology makes the device compatible with all power ranges (85 V <-> 265 V), compensating for drops or instability in the mains supply and thus protecting the vehicle's electronics and the charger. In the event of a brief power failure, the **Auto-Restart** function restores the settings from the moment of the interruption. and the user.

Active PFC correction system

Active power factor correction (PFC) system, which optimises and improves the performance of the device. 2000 W of power with 95% efficiency -> 1900 W transferred to the battery.



Its **reduced height** (only 13 cm) and **adjustable cable length** (5 metres, with a diameter of 25 mm to prevent any voltage drop) make it a multi-purpose tool, ideal for any situation where a battery support unit is required.

Maximum power protection

The electronics are programmed to monitor the current and voltage supplied by the cables at all times.

Polarity reversal, sparks and short circuits are promptly detected and trigger the device's protection system, preventing damage.

- Abnormal low voltage protection
- Internal thermal protection of the battery charger
- Reverse polarity protection
- Battery overvoltage protection
- Battery disconnection protection
- Charging time protection

In addition, a **fan cooling system** maintains the correct temperature, ensuring **IP40 protection**.

Which batteries?

- Lead batteries (GEL, AMG, EFB)**, both open and sealed. They feature an automatic desulphation phase with 8 charging steps.
- Lithium batteries (LifePo4)**. They feature 9 charging steps, with a wake-up phase if the battery has gone into protection mode. They also feature a cell voltage balancing phase.

If you are unable to correctly identify the battery type, you can use the **Easy Charge function**.

Finally, for **Mid-Hybrid batteries**, a specific 12V service battery charging function is available, which resolves the 48V battery protection lock.

Technical features

Nominal supply voltage	220-240 VAC ~ 50/60Hz 100-127 VAC ~ 50/60Hz
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Nominal power	100-127 Vac - 1500 W 220-240 Vac - 2000 W
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Nominal output voltage	12 VDC
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Nominal output current	100-127 Vac - 100 A 220-240 Vac - 120 A
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Dimensions	333 x 130 x 270 mm
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Weight	10,400 Kg
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MAHLE

TechPRO[®]
Power Protect

Pb-CHARGE
normal

12V
60Ah

START
STOP

MODE

SELECT SEL

MAHLE

MAHLE Aftermarket Italy S.r.l.
Rudolf Diesel 10/a
43122 Parma
Italy
Phone +39 0521 9544-11
Fax +39 0521 9544-90
info.aftermarket@mahle.com

www.mahle-aftermarket.com
www.mpulse.mahle.com