

# Portable Testers for Automotive Electronics



**THERMOTRON**<sup>®</sup>  
**PRODUCT TEST SOLUTIONS**

## Portable Tester for Automotive Electronics

When assessing the operation of automotive electronic modules, it is often necessary to perform testing in locations where typical equipment is not feasible. There is a need to provide not only module stimulus and monitoring, but simulated product loads as well. Serial communication with the product is also a frequent requirement to run diagnostics. The Product Test Solutions group of Thermotron is pleased to announce the availability of a Portable Tester for Automotive Electronics that satisfies these requirements in an efficient and economical manner.

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# Convenience in Automotive Module Testing



## Programmable Stimulus Abilities

A variety of sources are available in the Portable Automotive Module Test System. Output sources are available for switching products inputs between BATT, open and ground. This type of stimulus can be used to simulate switch or sensor connections to the product. Programmable analog outputs provide the ability to simulate a variety of signals from sources such as sensors, controls and feedback. Digital outputs are provided for both steady state and programmable frequency purposes. All outputs are monitored and protected against damage from shorts.

## Measurement Proficiency

Product operation can be effectively monitored in several ways. Both analog voltages and currents can be accurately measured to ensure proper operation. The ability of the system to measure duty cycle and frequency on digital and switched signals ensures that the system will be adaptable to a variety of applications.

## Communication Talent

Applications of the Portable Automotive Module Test System will benefit from the ability to communicate in several common Automotive serial schemes such as J1850, CAN, CCD, CLASS II, SCP and RS232.

## Loads

To provide a simulated situation, in which a product can operate, a number of electrical loads may be required. These loads are used to simulate solenoids, lamps, motors and other devices. The Portable Automotive Module Test System offers a standard selection of loads, with special requirements easily accommodated.

## Power to Spare

The tester will operate from a standard 120VAC outlet for extended uses, or will operate on it's internal battery power. A sealed, non-spillable battery allows field use. The battery is automatically charged when connected to 120VAC. For extended field use, external battery jacks are provided.

## Computing Results

The Portable Automotive Module Test System is provided with a laptop that has application software installed. Provided software has been developed with National Instruments LabWindows®. Additional software can be easily developed for unlimited applications. An Interchangeable Virtual Instrument (IVI) driver is provided for use with a variety of programming techniques. Functions are provided to define stimulus, accomplish communications and monitor product operation.

## Rugged Construction

The Portable Tester for Automotive Electronics is constructed with durable materials and techniques that assure reliability. The locking lightweight aluminum case provides complete protection of the contents. A durable textured black powder-coat finish maintains the appearance. Locking latches supply security but permit complete removal of the lid.

Space is provided for the laptop, product cables, power cord and laptop power supply. A jack is provided for anti-static strap connection. Four captive screws can be removed for easy access to the electronics inside. With a size of 13" x 21" x 7.75", and a weight of approximately 28 pounds (without laptop or cables), it is small enough to carry onto a commercial airline.

## Want More Information?

To obtain more information about how the Thermotron Portable Tester for Automotive Electronics can simplify your module testing, contact your Thermotron sales representative. Custom designs, detailed data sheets and application notes are available. Visit us at

[www.thermotron.com/pts](http://www.thermotron.com/pts)

