DIAGNOSTIC



# tecmate.com

# **PRO DEALER**









# Diagnostic Tools Battery Testers

Battery Chargers Battery Monitors

CHARGERS

**TESTERS** 

# Carbmate



CarbMate, the cost-effective electronic replacement for mercury sticks, with the advantage of solid state electronic measurement that don't break if you drop it.

CarbMate displays the difference in vacuum intake settings of two separate carburetors (or fuel injection throttle valves) on the same engine very precisely on a single transverse "East-West" 9 fixed resolution LED display. A single green LED at the dead-centre "happy face" mark indicates that the compared manifold vacuums are equal to within the selected resolution.

### **KEY FEATURES:**

Adjustable resolution accuracy of 2 – 0.5cmHg, 0.5cmHg as recommended by motorcycle and outboard marine 0Es.

#### Industrial / medical grade MOTOROLA pressure transducer.

Approved as a recommended tool by Rotax aviation's official club ROAN. Special ROTAX kits are available.

CYLINDERS	2 (4 possible with 2 – 4 cylinder adapter)
METHOD	Compare and display on a single display the difference in pressure between two carburetor / fuel injection manifolds.
DISPLAY RESOLUTION	1 display of 9x hi-bright LEDs, adjustable down to 0.5cmHg resolution
ADJUST	<ul> <li>RANGE : 2 – 0.5cmHg resolution</li> <li>ZER0 : center the displayed value before synchronizing</li> </ul>
POWER	12V DC (11 – 15Vdc), power can be drawn from vehicle battery.
STYLE / INCLUDED	ABS instrument case with durable polycarbonate labels, fuel & oil resistant rubber hoses, DC supply socket with a 6 1/2ft / 200cm power lead ending in battery clips, instructions for use (on instrument and included).
OPTIONS	Protective rubber holster, 2 to 4 cylinder adapter (requires protective holster), power cable extender and adapter options, M5 and M6 manifold adapters, T – vacuum splitter for fuel switch, nylon carry case, ROTAX adapters, Rotax kits.

tecmate.com/products/carbmate/

TS-101



Carburetor / Fuel injection throttle body Synchronizer, with RPM

# SynchroMate offers accurate solid state electronic measurement at a cost no more than a good set of dial gauges, but without the problem of vibrating dial pointers.

SynchroMate displays the difference in vacuum intake settings of two separate carburetors (or fuel injection throttle bodies) on the same engine very precisely on a single transverse "East-West" 30 fixed resolution LED display. A flashing LED at the dead-centre "Pa" mark indicates that the compared manifold vacuums are equal to within 0.5 cmHg (centimeters of mercury).

### **KEY FEATURES:**

Fixed resolution accuracy of 0.5cmHg as recommended by motorcycle and outboard marine OEs.

A built in tachometer displays engine speed in RPM (from pressure pulses, no additional pick-up required).

#### Industrial / medical grade MOTOROLA pressure transducer.

Approved as a recommended tool by Rotax aviation's official club ROAN. Special ROTAX kits are available.

CYLINDERS	2 (4 possible with 2 – 4 cylinder adapter)
METHOD	Compare and display on a single display the difference in pressure between two carburetor / fuel injection manifolds
DISPLAY RESOLUTION	1 display of 30 x hi-bright LEDs, 0.5cmHg resolution.
SELECT / ADJUST	<ul> <li>SYNC</li> <li>RPM : 500 - 2000rpm</li> <li>Absolute vacuum (0–60cmHg), accurately determine manifold vaccum.</li> </ul>
POWER	12V DC (11 – 15Vdc), power can be drawn from vehicle battery.
STYLE / INCLUDED	ABS instrument case with durable polycarbonate labels, fuel & oil resistant rubber hoses and protective rubber holster, DC supply socket with a 6 $1/2$ ff / 200cm power lead ending in battery clips, instructions for use (on instrument and included), 2 x M5 and 2 x M6 manifold adapters, T – vacuum splitter for fuel switch, nylon carry case.
OPTIONS	2 to 4 cylinder adapter, power cable extender and adapter options, ROTAX adapters, Rotax kits.

tecmate.com/products/syncmate/

## Vacuummate marine

Carburetor / Fuel injection throttle valve Synchronizer, RPM & valve diagnostics, battery powered **TS-71** 



# VacuumMate Allweather is the industry standard for fast & accurate synchronizing of up to 4 x carburetor / fuel injection throttle valves on 2 and 4-stroke engines.

VacuumMate displays the individual manifold pressure of 4 separate carburetors (or fuel injection throttle bodies) on four vertically arranged bright LED bars (40 LEDs per bar) visible in sunlight. making it ideal even for on-board marine & external use.

### Two models are available:

VacuumMate Allweather ME (marine) with rechargeable NiMH battery, featured on this page. VacuumMate Allweather WS (workshop), featured on page 5.

## **KEY FEATURES:**

Fixed resolution accuracy of 0.5cmHg as recommended by motorcycle and outboard marine OEs.

A built in tachometer displays engine speed in RPM (from pressure pulses, no additional pick-up required).

DYNamic mode to troubleshoot poor engine synchronizing; displays valve sealing differences.

4x industrial / medical grade MOTOROLA pressure transducers.

Approved as a recommended tool by Mercury, Honda, Yamaha.

CYLINDERS	4 (6 possible with 4 – 6 cylinder adapter)
METHOD	Compare and display individual pressures of 4 carburetor / fuel injection manifolds.
DISPLAY RESOLUTION	4x display of 40x hi-bright LEDs, fixed 0.5cmHg resolution.
SELECT / ADJUST	<ul> <li>SYNC : 5 – 25cmHg, 20 – 40cmHg, 35 – 55cmHg ranges.</li> <li>RPM : 500 - 2500rpm range, 2 /4 stroke selector.</li> <li>DYNamic mode for troubleshooting valve seating.</li> </ul>
POWER	7.2V NiMH battery with 6 hour autonomy, recharged from 12V DC (11 – 15Vdc), power can also be drawn from vehicle battery.
STYLE / INCLUDED	Shock resistant & water resistant composite molded polyurethane & polycarbonate casing with durable polycarbonate labels and rubber sealed and protected switches, fuel & oil resistant rubber hoses, DC supply socket with a 6 1/2ft / 200cm power lead ending in battery clips, 4 x M5 flexi-rigid adapters, 4 x M6 flexi-rigid adapters, fuel switch T-piece, nylon carry case, instructions for use.
OPTIONS	4 to 6 cylinder adapter.

## tecmate.com/products/vacuummate/

## Vacuummate workshop

Carburetor / Fuel injection throttle valve Synchronizer, with RPM & valve diagnostics

TS-81



# VacuumMate Allweather is the industry standard for fast & accurate synchronizing of up to 4 x carburetor / fuel injection throttle valves on 2 and 4-stroke engines.

VacuumMate displays the individual manifold pressure of 4 separate carburetors (or fuel injection throttle bodies) on four vertically arranged bright LED bars (40 LEDs per bar) visible in sunlight. making it ideal even for on-board marine & external use.

Two models are available:

VacuumMate Allweather WS (workshop), featured on this page.

VacuumMate Allweather ME (marine) with rechargeable NiMH battery, featured on page 4.

### **KEY FEATURES:**

Fixed resolution accuracy of 0.5cmHg as recommended by motorcycle and outboard marine OEs.

A built in tachometer displays engine speed in RPM (from pressure pulses, no additional pick-up required).

DYNamic mode to troubleshoot poor engine synchronizing; displays valve sealing differences.

4 x industrial / medical grade MOTOROLA pressure transducers.

Approved as a recommended tool by Mercury, Honda, Yamaha.

CYLINDERS	4 (6 possible with 4 – 6 cylinder adapter)
METHOD	Compare and display individual pressures of 4 carburetor / fuel injection manifolds.
DISPLAY RESOLUTION	4x display of 40 x hi-bright LEDs, fixed 0.5cmHg resolution.
SELECT / ADJUST	<ul> <li>SYNC : 5 – 25cmHg, 20 – 40cmHg, 35 – 55cmHg ranges.</li> <li>RPM : 500 - 2500rpm range, 2 /4 stroke selector.</li> <li>DYNamic mode for troubleshooting valve seating.</li> </ul>
POWER	12V DC (11 – 15Vdc), power can be drawn from vehicle battery.
STYLE / INCLUDED	Shock resistant & water resistant composite molded polyurethane & polycarbonate casing with durable polycarbonate labels and rubber sealed and protected switches, fuel & oil resistant rubber hoses, DC supply socket with a 6 1/2ft / 200cm power lead ending in battery clips, 4 x M5 flexi-rigid adapters, 4 x M6 flexi-rigid adapters, fuel switch T-piece, nylon carry case, instructions for use.
OPTIONS	4 to 6 cylinder adapter.

tecmate.com/products/vacmate/

# Ignitionmate

# Ignition system trouble shooting tool, compare two different signals on 1 cylinder

The compact dual-display peak-voltage ignition tester that makes troubleshooting all types of spark ignition systems easier, surer, quicker.

Ignition signals are fast, high voltage, pulses of energy that can damage even a good digital multimeter whereas the IgnitionMate has been specially designed to measure and dynamically display both primary and secondary ignition signals on bright LED bargraph displays.

### **KEY FEATURES:**

The application of this versatile tool is based on two basic points:

**Different types of ignition systems** (AC-CDI, DC-CDI, transistor, magneto, coil & 'points') have the same basic components with signals measured being generally similar in nature and magnitude.

No disassembling of ignition components are required. (This avoids

accidentally introducing, or correcting, poor contacts in the system, which may further confuse and delay resolution of the unidentified problems.)

### Two signals from the same cylinder can be compared simultaneously, including:

Secondary high tension / peak volts – 10, 20, 40 kV scales – use the caliper to measure high voltage between the ignition coil and the sparkplug.

SPARK current - measure the consistency of the high voltage spark current signal and find / see misfires.

**Primary low tension / peak volts** – 10, 40 or 400Vpk scales – use the RED & BLACK silicon tester cables to measure primary signals between the ICU and the power supply (battery or charge coil), timing pick-up (pulse coil or hall sensor), ignition coil and switches (key, emergency stop, footstand, throttle).

# The power-sports vehicle industry's most recommended problem-solving ignition trouble-shooting tool.

CYLINDERS	1 (two signals)
METHOD	Compare and display two different signals on the same cylinder.
DISPLAY RESOLUTION	2x display of 40 x hi-bright LEDs.
SELECT / ADJUST	Left display : Select between 20kV and SPARK. Adjust SPARK sensitivity. Right display : Select primary voltage 10, 40 or 400VPK. Select secondary voltage 10, 20 or 40kV. Polarity of kV voltage : single output coils have negative signals and dual output coils have negative and positive signals. POWER ON/OFF including 'auto off' if no signal is measured.
POWER	7.2V NiMH rechargeable battery provides 6 hours autonomy, external supply of 12V DC (11 – 15Vdc).
STYLE / INCLUDED	The standard kit includes the instrument with rugged rubberized protective and mounting holster, combination spark cable caliper pick-up with silicon lead, stick-coil adapter, silicon test lead set with insulated crocodile clips and Probulator back probes, 12VDC 6 ½ ft / 200cm power lead, instruction manual & quick reference guide all packed in a custom carry case.

## tecmate.com/products/ignitionmate/

**TS-91** 



# Ignitionmate

### Ignition system trouble shooting tool, compare same signal on two different cylinders

TS-93

The compact dual-display peak-voltage ignition tester that makes trouble-shooting ignition problems in a V twin or multi-cylinder engine easier, or even comparing ignition signals of two different engines!

Ignition signals are fast, high voltage, pulses of energy that can damage even a good digital multimeter whereas the IgnitionMate DUO has been specially designed to measure and dynamically display both primary and secondary ignition signals on bright LED bargraph displays.

### **KEY FEATURES:**

The application of this versatile tool is based on two basic points:

Works on different types of ignition systems (AC-CDI, DC-CDI, transistor, magneto, coil & 'points') Ignition systems have the same basic components with signals measured being generally similar in nature and magnitude.

No disassembling of ignition components are required. This avoids accidentally introducing, or correcting, poor contacts in the system, which may further confuse and delay resolution of unidentified problems.

#### The same signal on two different cylinders can be compared, including:

Secondary high tension / peak volts – 20, 40 kV scales – use the caliper to measure high voltage between the ignition coil and the sparkplug.

**SPARK current** – measure the consistency of the high voltage spark current signal and find / see misfires. **Primary low tension / peak volts** – 400Vpk scales – use the RED & BLACK silicon tester cables to measure primary (input) ignition coil voltage.

CYLINDERS	2
METHOD	Compare and display two different signals on two different cylinders.
DISPLAY RESOLUTION	2x display of 40x hi-bright LEDs.
SELECT / ADJUST	Center selector : 400VPK, 20kV, 40kV, SPARK. Polarity of kV voltage : each display independently. (Single output coils have negative signals and dual output coils have negative and positive signals.) Reference: Select LEFT or RIGHT display as reference (e.g. select good engine or cylinder as reference). SPARK sensitivity : Selecting coarse or fine damping of spark signal. POWER ON/OFF including 'auto off' if no signal is measured.
POWER	7.2V NiMH rechargeable battery provides 6 hours autonomy, external supply of 12V DC (11 $-$ 15Vdc).
STYLE / INCLUDED	The standard kit includes the instrument with shock resistant & water resistant composite molded polyurethane & polycarbonate casing with durable polycarbonate labels and rubber sealed and protected switches, 2 x matched combination spark cable caliper pick-ups with silicon lead, 2 x silicon test lead set with insulated crocodile clips and 2 x Probulator back probe sets, 12VDC 6 ½ ft / 200cm power lead, instruction manual & quick reference guide all packed in a custom carry case.

MONITORS

TS-171

# **Optimate pro-S**

Professional battery saving charger for power sport & small engine 12V batteries



The OEM recommended battery care center for correct activation of NEW batteries and recovery, charge and testing of neglected sulphated / low-voltage batteries.

## **KEY FEATURES:**

**NEW mode** – 1 hour activation charge only for new batteries that have received acid just prior to charging, such as STD flooded batteries with removable filler caps and AGM-MF 'dry-charged' batteries that are delivered with a separate custom acid pack.

2A/4A mode – 12 hour max. charge mode for diagnoses, recovery, charging, testing of low volt sulphated batteries. Suitable for recharge of all batteries including factory activated sealed AGM batteries (e.g. Yuasa YTZ, GYZ) prior to sale.

CHARGING AMPS	4A maximum, <i>Ampmatic</i> control. (2A max. when 2A is selected).
USE	Indoor / workshop environment (lowest temperature: -20F° / -20°C).
SAVE	Low Volt Start of 1.8V + 2-step desulphation recovery.
IDEAL FOR	STD AGM GEL 2 – 40Ah
INPUT	Selectable 110-120VAC / 220-240VAC 50-60Hz, with $ON/OFF$ power switch and replaceable fuse protection.
STYLE	Vented industrial case with wall mounts, 6ft / 180cm AC supply lead and 6ft / 180cm charge lead ending in SAE connector. 1 x standard battery clip set included.

tecmate.com/products/pros/



The OEM recommended 2-bank battery care center for recovery, charge and testing of all 12V batteries, including neglected sulphated / low-voltage batteries.

### **KEY FEATURES:**

Fully automatic – No selections have to be made, no battery knowledge required! Connect up to 2 x 12V batteries and let the charger do the rest!

Ampmatic 2A charge current – Current will be varied according to battery condition and size; smaller batteries will receive less current, sulphated batteries will start with low current and it will be increased as the battery recovers.

BANKS / CHARGING STATIONS	2 (each bank operates independently).
CHARGING AMPS (PER BANK)	2A maximum, <b>Ampmatic</b> control.
USE	Indoor / workshop environment (lowest temperature: -20F° / -20°C).
SAVE	Low Volt Start of 1.8V + 2-step desulphation recovery.
IDEAL FOR	STD GEL 12V batteries from 2Ah.
INPUT	Selectable 110-120VAC / 220-240VAC 50-60Hz, with ON/OFF power switch and replaceable fuse protection.
STYLE	Vented industrial table top case with integrated wall mounts, 6ft / 180cm AC supply lead and 2 x 6ft / 180cm charge lead ending in SAE connector. 2 x standard battery clip sets included.





Professional 2-bank battery saving charger for automotive, marine, leisure batteries

TS-185



The 2-bank battery care center for 12V automotive, marine, RV starter and deep cycle batteries; temperature compensated recovery, charge and testing of all discharged or neglected sulphated / low-voltage batteries from 24Ah.

## **KEY FEATURES:**

**14.4V / 14.7V modes** – Select 14.4V mode for any 12V flooded (with filler caps or sealed) lead-acid battery or 14.7V for sealed hi performance AGM batteries such as delivered by Odyssey, OptiMa (red, blue, yellow top) and North Star.

FAST mode – 3 hour maximum current charge mode for quick charging of a deep discharged battery. Desulphation SAVE mode has been de-activated for safe recharging with battery connected to vehicle / craft circuitry.

BANKS / CHARGING STATIONS	2 (each bank operates independently).
CHARGING AMPS (PER BANK)	10A maximum, <b>Ampmatic</b> control.
USE	Indoor / workshop environment (lowest temperature: -20F° / -20°C).
SAVE	Low Volt Start of 1.8V + 2-step desulphation recovery.
IDEAL FOR	STD GEL 12V batteries from 24 - 240Ah
INPUT	Selectable 110-120VAC / 220-240VAC 50-60Hz, with 0N/OFF power switch and replaceable fuse protection.
STYLE	Vented industrial table top case with wall mount option (TS-218), 6ft / 180cm AC supply lead and 2 pairs high current x 6ft / 180cm charge lead ending in heavy duty battery clamps



CHARGERS

**TESTERS** 

MONITORS



Professional 4-bank battery saving charger for power sport & small engine 12V batteries

**TS-53** 



The OEM recommended 4-bank battery care center for correct activation of NEW batteries and recovery, charge and testing of neglected sulphated / low-voltage batteries.

## **KEY FEATURES:**

**NEW mode** – 1 hour activation charge only for new batteries that have received acid just prior to charging, such as STD flooded batteries with removable filler caps and AGM-MF 'dry-charged' batteries that are delivered with a separate custom acid pack.

2A/4A mode – 12 hour max. charge mode for diagnoses, recovery, charging, testing of low volt sulphated batteries. Suitable for recharge of all batteries including factory activated sealed AGM batteries (e.g. Yuasa YTZ, GYZ) prior to sale.

BANKS / CHARGING STATIONS	4 (each bank operates independently).
CHARGING AMPS (PER BANK)	4A maximum, <i>Ampmatic</i> control. (2A max. when 2A is selected).
USE	Indoor / workshop environment (lowest temperature: -20F° / -20°C).
SAVE	Low Volt Start of 1.8V + 2-step desulphation recovery.
IDEAL FOR	STD AGM GEL 2 – 40Ah
INPUT	Selectable 110-120VAC / 220-240VAC 50-60Hz, with 0N/0FF power switch and replaceable fuse protection.
STYLE	Vented industrial table top case with wall mount option (TS-218), 6ft / 180cm AC supply lead and 4 x 6ft / 180cm charge lead ending in SAE connector. 4 x standard battery clip sets included.

TS-45

# **Optimate pro-8**

Professional 8-bank battery saving charger for power sport & small engine 6V & 12V batteries



The OEM recommended 8-bank battery care center for recovery, charging and testing of all 6V and 12V batteries, including neglected sulphated / low-voltage batteries.

## **KEY FEATURES:**

Selectable charge voltage - Select battery voltage of 6V or 12V for each bank.

Fully automatic – Once voltage selection has been made, no further battery knowledge required! Connect up to 8 x 6 and 12V batteries and let the charger do the rest

BANKS / CHARGING STATIONS	8 (each bank operates independently).
CHARGING AMPS (PER BANK)	1A
USE	Indoor / workshop environment (lowest temperature: -20F° / -20°C).
SAVE	Low Volt Start of 1.8V + 1-step desulphation recovery.
IDEAL FOR	STD AGM GEL 6V or 12V batteries from 2Ah.
INPUT	Selectable 110-120VAC / 220-240VAC 50-60Hz, with 0N/0FF power switch and replaceable fuse protection.
STYLE	Vented industrial table top case with wall mount option (TS-218), 6ft / 180cm AC supply lead and 8 x 6ft / 180cm charge lead ending in SAE connector. 8 x standard battery clip sets included.





Professional 12V/24V automatic charger for automotive, marine & leisure batteries



#### Ideal for deep cycle and starter batteries

AccuMate PRO with its 4 stage program is ideal for deep cycle and starter batteries. Selectable 12/24V (7Amp/3.5Amp). Fully automatic, with full electronic safety features and safe "Connect & Forget" long term maintenance

### **KEY FEATURES:**

**OEM-approved in automotive and marine** 

Cable storage space, easy wall-mount

### Highly visible, clear LED indications

CHARGING AMPS	3.5A (24V) / 7A (12V) (temperature compensated)
USE	Indoor / workshop environment (lowest temperature: -20F° / -20°C).
SAVE	Low Volt Start of 3V for 12V / 16V for 24V batteries.
IDEAL FOR	STD ACM GEL 12V & 24V lead-acid batteries starter and deep cycle, from 17Ah (12V) or 9Ah (24V) up to 300Ah.
INPUT	Selectable 110-120VAC 50-60Hz, with ON/OFF power switch and replaceable fuse protection.
STYLE	Standard case (vented) with 6ft / 180cm AC supply lead and charge lead ending in SAE connector. Standard battery clip set & 6ft / 180cm extender included.

tecmate.com/products/pro1224v/

# Accumate pro-5

Professional 5-bank automatic charger for power sport, automotive, marine & leisure batteries

TM-131



# Charge and maintain 5 x 12V lead-acid battery, both starter and deep cycle, with integrated wall mounts.

Battery wholesalers, garages, boat & vehicle storage facilities often need to charge or maintain several batteries at a time.

AccuMate PR0 5 offers unbeatable value with 5x independent charging stations that offer 1.8 Amps to separate or series connected 12V batteries.

More than one station can be connected across a single battery if more charge current is required.

## **KEY FEATURES:**

100% automatic 100% safe Fully automatic smart charger-maintainer for indoor use. No output when not connected to the battery. Short circuit, over current and reverse polarity protection.

Electronically protected Identification of batteries with internally short-circuited cell

Effective interactive float charge for long term battery maintenance

If during the maintenance mode the battery starts to lose charge, whether due to an internal problem or due to an additional outside load being imposed on it, the maintenance "float-charge" reverts to to the absorption stage to provide the additional current necessary to counter the discharge until the cause of the problem is removed.

BANKS / CHARGING STATIONS	5 (each bank operates independently).
CHARGING AMPS	5 x 1.8A (temperature protected)
USE	Indoor / workshop environment (lowest temperature: -4F° / -20°C).
SAVE	Low Volt Start of 3V
IDEAL FOR	STD         GEL         12V lead-acid batteries starter and deep cycle, up to 50Ah.
INPUT	Europe: 220-240V 50-60Hz
STYLE	Standard case (vented), with 6ft / 180cm AC supply lead and 6ft / 180cm charge lead ending in SAE connector. Fused battery lead & standard battery clip set included.

TS-02

## Batterymate 150-9

Selectable load-tester, NEW battery activator, power desulphator & charger for neglected batteries.



The power sport OEM recommended load tester, power desulphator, charger for all types of 12V lead-acid batteries. BatteryMate has been saving batteries for 25 years!

### **KEY FEATURES:**

**Quick new battery activation** – Automatically tests battery cranking amps up to 330CCA. 3 second test simulates normal engine cranking / start, 15 second test checks battery health.

True load tester selectable from 15A to 150A – Automatically tests battery cranking amps up to 330CCA. 3 second test simulates normal engine cranking / start, 15 second test checks battery health.

**Powersport specific charging algorithm** – 4 step charging method recovers any 12V battery. MF mode allows up to 16.9V for 'dry-charged' AGM batteries.

Temperature regulated charging – Charge voltage is adjusted according to ambient temperature. (-4mV/°C/cell above/below 68°F/20°C).

Accurate voltage sensing – Charge leads have integrated voltage sense wires for exact voltage measurement at the battery.

**Easy to use** – 6-position combination selector allows selection of correct test and charge current for connected battery. TEST and then select max. charge time according to result, press CHARGE button. Program completes charging automatically and then tests the battery.

CHARGING AMPS	9A maximum; 1, 2, 3, 5, 7, 9 amp selection.
TESTING AMPS	150A maximum; 15, 35, 50, 70, 100, 150 Amp selection.
USE	Indoor / workshop environment (lowest temperature: -F° / -20°C).
SAVE	Low Volt Start of 1V + high power desulphation recovery.
IDEAL FOR	STD AGM GEL 12V batteries from 2 - 40Ah.
INPUT	Selectable 110-120VAC / 220-240VAC 50-60Hz, with $\ensuremath{\text{ON/OFF}}$ power switch and replaceable fuse protection.
STYLE	Vented industrial table top case with wall mount option (TS-218), 6ft / 180cm AC supply lead and 1 pair high current 6ft / 180cm charge leads ending in heavy-duty battery clamps.



State of charge tester - all 12V lead-acid & 12.8V / 13.2V lithium

TS-127



The smart choice for a battery sales counter – check new batteries before sale or test returned batteries!

## **KEY FEATURES:**

**Easy to use** – Connect clips to the battery and read the result. The OptiMate battery tester's microprocessor draws very low power from the battery itself to determine and display battery status.

Tests all – 12V Lead-acid and 12.8V / 13.2V LiFePO4 (LFP) Lithium batteries and displays result that can be used to convey information to customer.

- State of charge result in VOLTS and %, 3 different bands for STD, AGM/ GEL and LiFePO4 4 series batteries
- Easy to follow instructions on rear panel of the tester.
- Industry standard SAE 2-pin connector.
- 40" / 100cm battery clip set.
- Flashing indicator for discharged battery.



Cranking & Alternator 12V tester for battery state of charge, cranking performance and vehicle charging system.

TS-121



The ultimate pocket tester for on-vehicle battery performance & alternator voltage testing that every service technician or gear head should have!

## **KEY FEATURES:**

Easy to use - Connect clips to the battery or connect to an installed SAE battery lead, then:

- 1. Check battery charge level. A low battery cranks (starts engine) poorly.
- 2. Start engine. OptiMate TEST records and indicates (for 20 sec) the lowest start volts.
- 3. With engine running, verify charging voltage from alternator and voltage regulator.

TIP: Low charge voltage causes poor battery performance. Too high charge voltage causes excessive gassing and will eventually damage a lead-acid battery. *Too high charge voltage is FATAL for a LiFePO4 starter battery!* 

- Microprocessor accuracy.
- · Easy to follow instructions on rear panel of the tester.
- Industry standard SAE 2-pin connector.
- 40" / 100cm battery clip set.
- Fully sealed.



## Accurate starter battery diagnostics

TA-9



TestMate provides within seconds a professional assessment of the state of health, state of charge and CCA capability of a 12V battery. TestMates are compact, light, and can be used in the workshop or at the sales counter.

## 2 MODELS AVAILABLE:

TestMate SPORT model is for motorcycle and similar batteries from 2-35Ah.

TestMate AUTO 200Ah model for car, van, marine and all other 12V starter batteries up to 200Ah.

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Select battery type and Ah / CCA, then TEST

- For all battery technologies (STD, AGM, GEL)
- Result available in seconds
- Rugged, ideal for workshop use

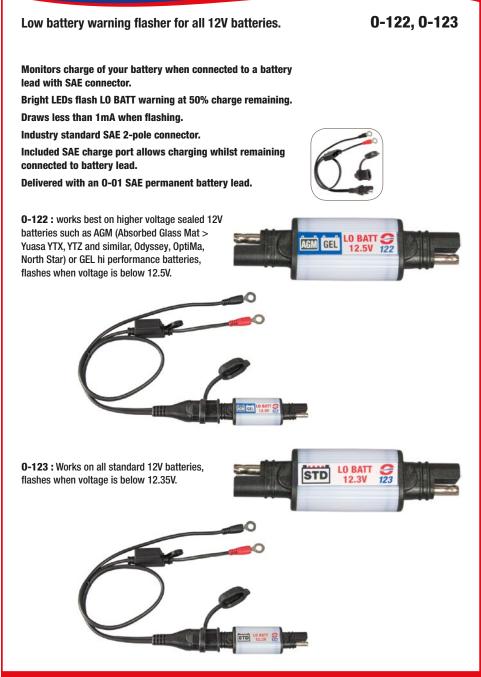
DIAGNOSTIC

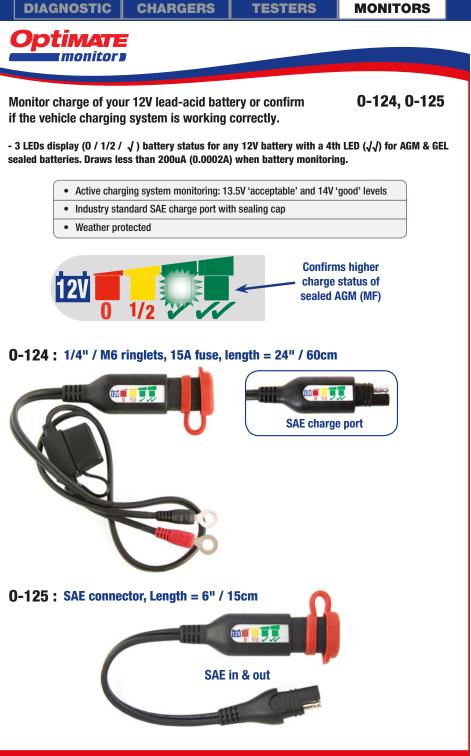
CHARGERS

**TESTERS** 

MONITORS









Monitor charge of your 12.8V / 13.2V LITHIUM starter battery **0-127** or confirm if the vehicle charging system is working correctly.

3 LEDs display (0 / 1/2 /  $\surd$  ) battery status for lithium battery. Draws less than 200uA (0.0002A) when battery monitoring.

Active charging system monitoring: 14V 'good' and 14.6V 'OVERCHARGE' levels.

- Industry standard 2-pin SAE connector
- Weather protected
- Length = 24" / 60cm
- 15A fuse
- 1/4" / M6 ringlets





Floor Displays & Countertop Displays are available to display consumer chargers & accessories.

360° DISPLAY





FLOOR DISPLAYS For Optimate 1 through 6 & Accessories



COUNTERTOP DISPLAYS For Optimate 1 through 6





# **AC POWERED BATTERY CHARGERS**

## Selectable AC supply range: 110-120V / 220-240V

**ROHS** Complies with ROHS lead-free regulations.

# WARRANTY

Two-year product replacement warranty. Find more information at *www.tecmate.com/warranty.* 

# DESIGN

All TecMate products are 100% designed by **TecMate**.

Find the full range of OptiMate Battery Saving Chargers and OptiMate Accessories CABLE, USB, LED, battery MONITOR and TESTER at **optimate1.com** 





