

OptiMATE PRO-S

ampmatic

**Professional
12V battery
management**



1 hour max activation of new MF batteries

Desulfates and recovers neglected batteries

2 or 4 amps bulk charge programs

ampmatic™ automatic current control

Professional test and maintenance cycle

The new **OptiMate PRO-S** is an affordable all-in-one battery care centre for professional motorcycle and similar service workshops. Diagnostics, charging, testing and technically correct activation charging for brand new MF batteries, in a single device. Just select NEW/2A/4A and its radically new **ampmatic™** microprocessor, the result of more than 15 years experience, optimally sets but also continually re-adjusts the bulk charge current to best suit the evolving battery condition. An enhanced multi-stage version of the acclaimed OptiMate desulphation action automatically recovers most badly neglected, otherwise “dead” batteries and dead cells are identified and signaled after 10 minutes of connection.

The affordable new **OptiMate PRO-S**. Total professional battery optimisation.



OptiMATE™

**Battery Performance
Guaranteed!**

How it works

Before connecting, select “NEW” for the first-ever charge of sealed motorcycle batteries, 2A / 4A for others.

- 1. Initialisation:** OptiMate PRO-S checks that it is connected to a battery (= minimum voltage 1,8V).
- 2. Programming:** the ampmatic processor checks the battery’s condition to determine the appropriate program entry point.
- 3. Desulphation and recovery:** if necessary, 2 or 3 stages of high voltage and oscillatory pulsing are applied to recover neglected, flat batteries (removed from the vehicle) from sulphation to a chargeable state.
- 4. Bulk charge:** the ampmatic processor sets and then continually re-adjusts the constant current optimally for each individual battery according to its evolving electrical characteristics.
- 5. Short-circuited cell check:** during charging the ampmatic processor checks for short-circuited or damaged cells.
- 6. Absorption and equalisation:** during 10 minutes the current is delivered in pulses to cause the voltage to oscillate between 13,7 and 14,3V, aiding cell voltage equalization.
- 7. Charge verification:** during 5 minutes the voltage is limited at 13,6V while the ampmatic processor monitors the current absorbed by the battery. If this reveals a less than optimal charge, the program reverts to absorption for a further 10 minutes (maximum 12 reversions).
- 8. Charge retention test:** when the optimal charge has been achieved, the first check for battery (and connected system) power leakage commences. If the battery passes the first 30 minutes test (NEW selection, 10 minutes only), the test is extended up to 12 hours (2A/4A selections) for a definitive result. If the voltage falls below 12,4V in this period the extended test is terminated. Results of the tests can be read at a glance on the easy-to-read LED panel. 30 minute tests are repeated hourly until the OptiMate PRO-S is disconnected, so that the battery status indication is continually updated.
- 9. Charge maintenance:** during alternate 30 minute periods, at a float limit of 13,6V the battery is offered whatever charge current it needs to sustain it against any small connected loads or power leakage and against natural self-discharge. OptiMate PRO-S can be left connected to the battery indefinitely, the battery will stay cool and safe. And optimally charged. Of course.

Technical Specifications

Recommended for AGM/MF, STD, GEL and spiral cell batteries	from 2Ah to 40Ah (12 hour charge)
Programme control	ampmatic™ microprocessor
Input current max.	0,45A @ 230V
Reverse drain current	less than 1mA
Output current (bulk charge)	0,4A – 4A (0,2 – 2A on 2A selection)
Automatic desulphation	multistage (high voltage, turbo and pulsed mode)
Charge time limit	48 hours (maintenance time: unlimited)
Maintain / test cycles	30 min/30 min (alternating hourly). First test on ‘NEW’: 10min
Charge retention test	5 possible results from ‘good’ to ‘bad’
Size	287 x 127 x 80mm
Weight	2,8kg
Enclosure classification	IP30
Mounting	easy direct wall mounting
Input cable length	2m
Output cable length	2,65m (incl. extension, excl. connection set)
Included Accessories	TM-71 fused eyelet set, weather protected TM-74 clamps set for bench charging TM-73 extension cable
Operation ambient temperature range	0°C / +40°C
Warranty	2 years

