

Intelligent Charging MB73+ Universal Battery Charger-Analyser



□ Three universal charge modes:

- Constant Potential
- Constant Current
- Multistep

□ Three capacity test modes:

- 100% Capacity Test
- Actual Capacity Test
- Deep Cycle Discharge

□ Automatic Operation

□ Hard copy facility.

□ Support For Top Hat

The MB73+ Battery Charger / Analyser is an electronically controlled combined universal battery charging unit with built in battery analysing (capacity testing) capabilities. It is housed in a metal enclosure designed for bench mounting. As it is supplied it is configured for use from a 240V 50/60Hz supply, it can be alternatively supplied for use with 115V 50/60Hz supply.

Equipment control is via an interactive 253 x 32 dot matrix display and data entry is via a 16-key keypad. Operating modes and functions are selected by the use of a simple menu system. Access to charging and testing operations is performed by either entry of six digit battery library names,

repeat of last charge or capacity test or new manual parameters. During operation the display will show the instantaneous values of battery voltage, current and time elapsed through the selected program.

Battery data is stored internally in the units non-volatile memory. The operator can add and modify this list by entering the details of the battery to be included on the display and keyboard. Battery library entries are identified by the use of the digits 0-9, A,B,C and the '.' Character, up to a maximum of six digits

Batteries are connected to the front of the unit by means of two individual high current connectors. Connection to the battery has to be made via the appropriate connectors for that battery. The unit is supplied with M8 ring crimps which must have the appropriate connector for the battery type being tested fitted. Intelligent Charging can supply certain types of connector upon request.

The unit has extended operating capabilities compared to its predecessor. Maximum charge current has been increased to 30A from 1.2V up to 18V and 15A from 18V to 38V. Capacity testing has been increased to a maximum of 60A or 1000W.

The unit contains a high flow rate fan to extract the heat energy generated internally when running in capacity test mode.

There are two capacity test programs built into the unit. One will discharge the battery connected at the current specified for the test duration specified thus reporting the battery is 100% or more efficient, the second will discharge the battery down to the terminal voltage specified thus reporting the actual percentage efficiency. The capacity test will be stopped if the target threshold voltage is reached before the full test time has elapsed. During the capacity test and when it is terminated the display will show the amount the capacity test is complete as a percentage.

There are three charging modes built into the unit.

- Constant Voltage: Where the battery is charged at a reducing current when the constant voltage threshold is met. Parameters for this mode are maximum charge time, optional minimum current to stop charge and a current threshold which detect a potentially faulty battery.
- Constant Current: Where battery is charged at a constant current until a terminal voltage is met, at this point it can be charged for an additional time at a user set current. The overcharge voltage is set in this mode to prevent overcharging of the battery.
- Multiple Step Charge: Up to 4 constant current steps can be implemented for the charge cycle. this mode also has an overcharge voltage setting to prevent overcharging of the battery. Charge current can be set to zero for "rest" periods between charge steps.

The unit has a Top Hat or Crown support where a full discharge and cell balancing can be performed in addition to capacity test and charge individual cell monitoring to capture rogue cells within a battery pack.

The unit contains the software that will allow it to be calibrated by the end user doing away with the need to send the unit to a service centre for periodic calibration. The re-calibration process only takes a few minutes and this is done without the need to access the internals of the unit.

The printer when fitted allows the operator to print hard copies of the charge and test results upon completion of the test. This report can be used to complement the service schedule by providing full traceability



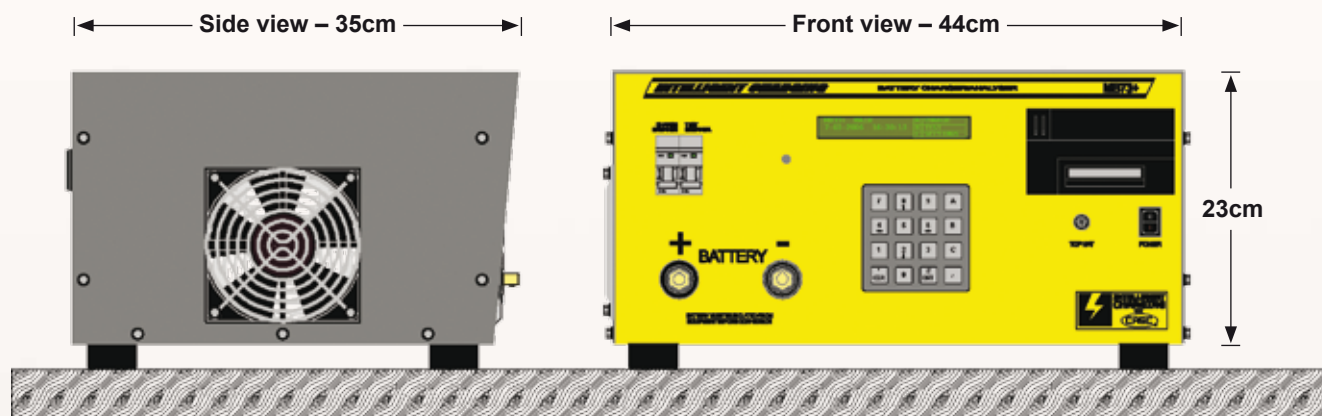
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Overall Dimensions



Weight: 22 Kg/30Kg

Specifications

- Charging and capacity testing of almost all battery technologies.
- Constant voltage charge
- Constant current charge
- Constant current 4 step charge – steps can be used as rest periods
- Battery failure or overcharge detection
- MB73+ Charge: 30A from 1.8V to 20V and 15A from 20V to 40V
- MB73P+ Charge: 50A from 1.2V to 20v and 25A from 20V to 40V
- 60A capacity test capability for 12V batteries: 40A for 24V
- Capacity test to 100% or to actual capacity
- Test result can be recorded on a signed and dated printed report
- Battery fault detection
- 24 user-programmed battery data libraries
- Battery charge & capacity test status displayed on a clear VFD display
- Intuitive data entry
- Only three keystrokes needed to start
- Audio alarm to indicate process completion or failure
- Upgrade to support top hat assemblies for individual cell conditioning
- 240V or 115V 50-60hz mains input
- Bench mounted
- Weight 22Kg. ("P" version = 30kg)
- Dimensions 44cm x 35cm x 23cm (W x D x H)
- Supplied with 1 set of leads 1m long with 8mm ring crimps
- Alternative or longer lead sets available
- 1 year RTB warranty. Extended warranty available