



Item no. 322/416
Manufacturer's no. 3101



Automatic Battery Charger

VOTRONIC
Elektronik-Systeme GmbH

Information

Dimensions	230x74x139 mm
Pack size	25.5x20x8 cm
Net weight	1.29 kg
Gross weight	1.6 kg

Fully automatic battery charger with 2 charging outputs for emergency and special vehicles, high-quality motorhomes and boats.

VOTRONIC chargers in the „Pb SMT“ series are characterised by their compact design, low weight (high-frequency switching power supply, switch-mode technology) and full charging power even with large deviations in the mains supply (under/overvoltage, sine wave, frequency).

The intelligent microprocessor charging control with „IU1oU2oU3“ charging programmes (constant current – constant voltage) and dynamic charging time calculation automatically ensures fast and gentle full charging and subsequent 100% charge retention of the connected batteries from any initial charge level and always enables the simultaneous supply of parallel-connected 12 V consumers or the charging of very large batteries (depending on the application). Drained energy is equalised immediately.

- Charging programme no. adjustable to the battery type: gel, AGM, acid, LiFePO₄
- Automatic battery regeneration/Li Auto Wake Up
- Mains adapter function (battery change)
- Remote control connection/display

Specifications

Charging current	20 A
Nominal voltage	12 V
Peak power	330 W
Type	Pb 1220 SMT 2B

- Silent run function
- Lead temperature compensation/LiFePO₄ protection
- The battery voltage is free from peaks and regulated in such a way that the battery cannot be overcharged.

Fully automatic continuous operation: The charger can be permanently connected to the battery and keeps it fully charged. In the event of a mains failure, the batteries are not discharged (disconnection by safety switch).

Lithium LiFePO₄ maintenance, auto wake-up, maintenance phase: Regular automatic activation of battery cell balancing every 10 days to ensure that the battery is always fully charged. Lead battery regeneration twice a week during long downtimes to prevent harmful acid stratification.

Parallel and buffer operation: The battery continues to be charged or kept fully charged during simultaneous consumption. The charger automatically calculates and monitors the adjustment of the charging times.

Monitoring-free charging: Multiple protection against overload, overheating, overvoltage, short circuit, polarity reversal, incorrect behaviour and battery back-discharge through electronic cut-off up to complete disconnection of charger and battery by built-in safety switches.

Connection for battery temperature sensor: In the case of lead batteries (acid, gel, AGM), the charging voltage is automatically adjusted to the battery temperature, resulting in a better full charge of the weaker battery in cold weather and avoiding unnecessary battery gassing and thus battery stress in summer temperatures. With LiFePO₄ batteries, the battery temperature sensor is required for the function: It serves to protect the battery at high and especially at low temperatures below 0 °C.

Silent run function: Noise-optimised operation at the touch of a button (night mode).

Power supply function: Enables consumers to be supplied without a battery (e.g. battery replacement).

Charging cable compensation: Voltage losses on the charging cables are automatically compensated for.

Built-in on-board mains filter: Problem-free parallel operation with solar systems, wind and petrol generators, alternators, etc. on one battery.

Charging aid for deeply discharged lead batteries: Gentle pre-charging of the (lead-acid, -gel, -AGM) battery up to 8 V, then powerful support for the battery if consumers are still switched on. Disconnection of the batteries in the event of mains failure, overheating, malfunction (safety switch per charging output). Separate auxiliary charging output „S“ for supporting and trickle charging the vehicle starter battery.

Scope of delivery: charger, mains cable with IEC plug, operating instructions