

# KLARI-CHARGE 2



## Features

- This device is used for independent power supply of measurement modules in vehicles.
- Easy configuration and application.
- Especially developed for long-term measurements.
- KLARI-CHARGE 2 is an intelligent charger with an integrated LiFePO4 battery pack.
- No more loss of measuring values as a result of empty measuring equipment batteries.
- Best investment because KLARI-CHARGE 2 can be connected to a variety of measuring modules.
- Easy connection to the vehicle electrical system.
- Immediate ready for operation without any efforts for configuration.

## Operation modes:

- The recharge threshold of the battery is configurable between 90...20%.
- If the motor is running and the battery capacity is higher as the adjusted recharge threshold the battery will not be recharged.
- If the motor is running and the battery capacity is lower as the adjusted recharge threshold the battery will be recharged.
- If the motor is not running and the battery capacity is below the fixed threshold (10%) the battery will be recharged by the vehicle electrical system (emergency charge).
- If the motor is not running and "emergency charge" is disabled the battery will discharge completely.

## Version

- Bopla housing approx. 160/200/55 mm (l/w/h)
- Membrane keypad and LCD-display for configuration and visual presentation
- Protection IP65
- Temperature range -20...+45°C
- Supply 9...48 V DC, current consumption approx. 9...60 mA (at 12 V supply)

For detailed technical information please refer to the user manual.

## Delivery

- PC software for configuration via CAN or USB-2.0 interface
- Documentation on CD ROM
- USB 2.0 connection cable
- DIN socket 5 pin as part of cable for connection to the electrical system
- Connection cable for the measuring module with DIN plug 5 pin and Sub-D plug 15pin



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## TECHNICAL DATA

<b>Input</b>	<ul style="list-style-type: none"> <li>9 V / 24 V input of electrical system for power supply and charging function</li> </ul>
<b>Battery</b>	<ul style="list-style-type: none"> <li>LiFePO4</li> <li>rated voltage 12V</li> <li>rated capacity 3,3 Ah or 6,6 Ah (10 and 15 Ah in process)</li> </ul>
<b>Load current (output)</b>	<ul style="list-style-type: none"> <li>max. approx. 1 A</li> </ul>
<b>Basic functions</b>	<ul style="list-style-type: none"> <li>measuring the voltage of the electrical system.</li> <li>recharge function for 12 and 24 V electrical systems while motor is running. Detection via voltage of the electrical system.</li> <li>input for release of the charging function without considering the voltage of the electrical system.</li> <li>emergency charge function: Below the battery minimum voltage the battery is charged from the electrical system even if the motor is not running. The emergency charge function can be disabled.</li> </ul>
<b>Additional functions</b>	<ul style="list-style-type: none"> <li>setups selectable with various charging thresholds.</li> <li>emergency charge function can be disabled via ToolBox.</li> </ul>
<b>Housing</b> - Protection - Weight - Dimension	<ul style="list-style-type: none"> <li>IP65</li> <li>1300 g (3,3 Ah), 1900 g (6,6 Ah)</li> <li>160/200/55 mm (l/w/h)</li> </ul>
<b>Supply</b>	<ul style="list-style-type: none"> <li>via electrical system or via external power supply 9...48 V DC</li> </ul>
<b>Current consumption</b>	<ul style="list-style-type: none"> <li>at 12 V in power-saving mode approx. 9 mA</li> <li>at 12 V in power-saving mode approx. 15 mA</li> <li>at 12 V without power-saving mode, incl. display backlight approx. 60 mA</li> </ul>
<b>Loading time</b>	<ul style="list-style-type: none"> <li>approx. 60 min. Depending on ambient temperature and recharge threshold</li> </ul>
<b>Temperature range</b>	<ul style="list-style-type: none"> <li>-20...+45 °C</li> </ul>
<b>Isolation</b>	<ul style="list-style-type: none"> <li>80 V DC</li> </ul>

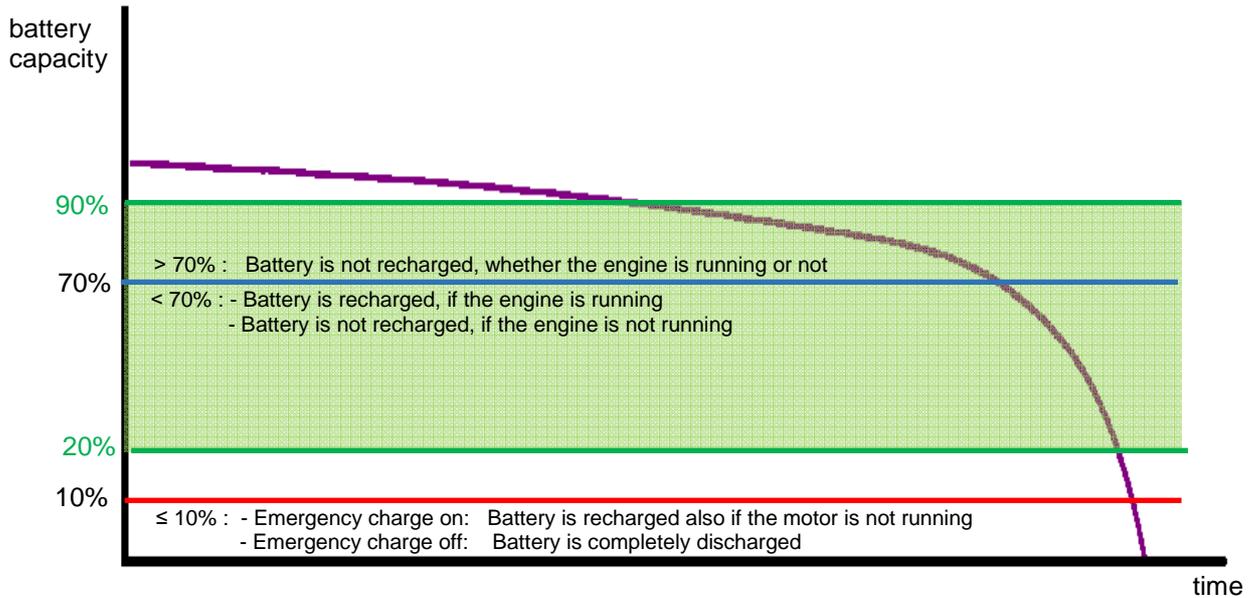
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## Application

Example: Selected threshold value of 70% (selectable between 90 and 20% of the battery capacity)



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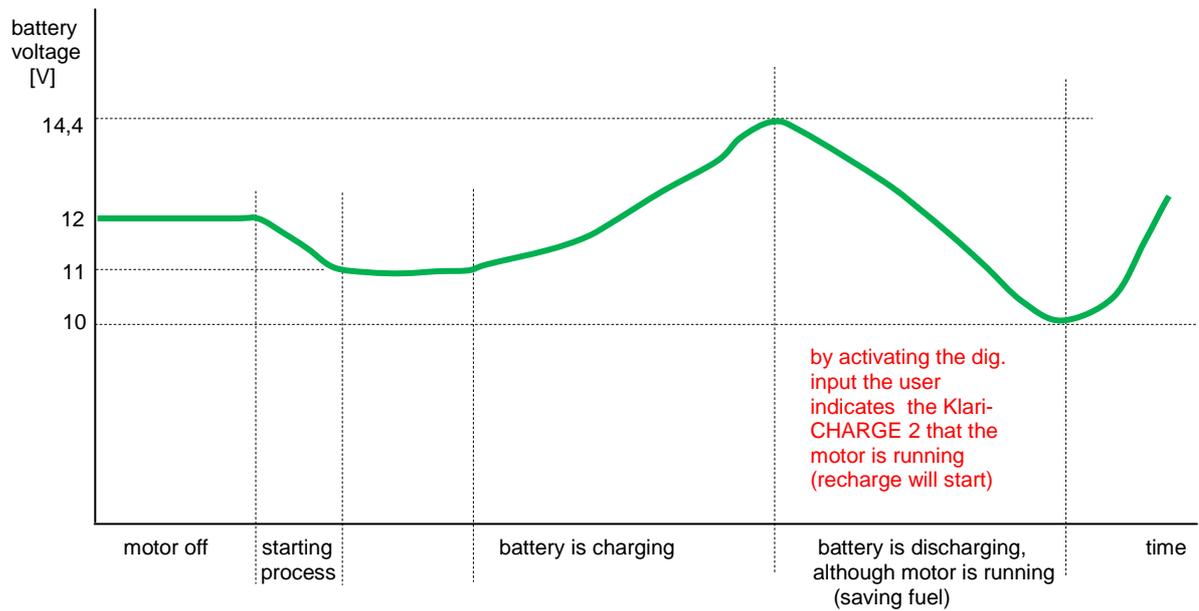
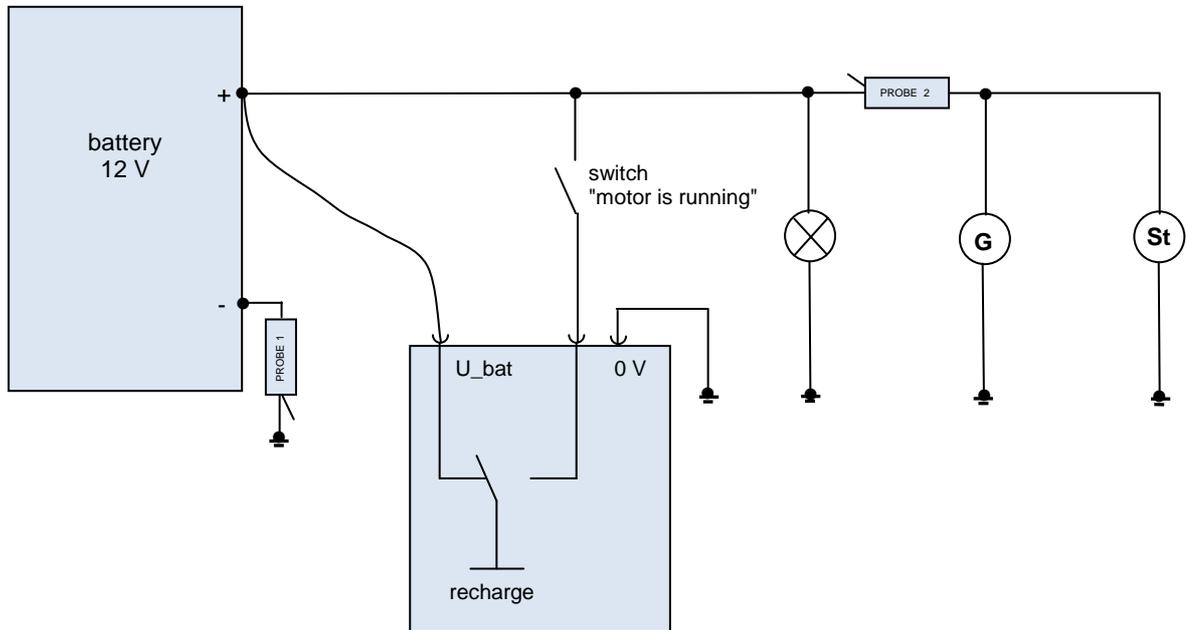
	Emergency charge enabled		Emergency charge disabled
	halt	drive mode	halt
Threshold 90...20%	halt	drive mode	halt
Example 70%	no recharge	recharge	no recharge
Emergency charge: Threshold 10%	recharge	not relevant because this threshold is not reached	internal electrical shutdown. Recharge is possible if dig. input is enabled (motor is running)
Completely discharge	not relevant	not relevant	internal electrical shutdown. Recharge is possible if dig. input is enabled (status: motor is running)





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## Recharge enabled via digital input:



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