



# RDC Charger

## User manual



**Robotina d.o.o.**  
OIC-Hrpelje 38 Hrpelje  
SI-6240 Kozina  
Slovenia



---

# Table of Contents

<b>BM-CS</b> .....	5
<b><i>Highlights &amp; Features</i></b> .....	5
<b><i>Technical specification</i></b> .....	5
<b><i>Wiring</i></b> .....	6



# BM-CS

## BTMS Cell sensor



Order code:	<b>BM-CS-12</b>	for 12 V battery
	<b>BM-CS-02</b>	for 2 V battery
Mounting:	On battery, 3M double sided adhesive tape	
Dimensions:	60 × 95 × 25 mm	

## Highlights & Features

- Real-time cell voltage measurement
- Internal resistance measurement on line
- Negative pole temperature measurement
- Balancing function

## Technical specification

<b>Power supply</b>	BM-SS-02	2 VDC (1.6 .. 2.6 VDC)
	BM-SS-12	12 VDC (7.5 .. 15.6 VDC)
<b>Power loss</b>	BM-SS-02	110 mW
	BM-SS-12	90 mW
<b>Operating temperature</b>	standard	0 .. 45 °C
	max	-10 .. 55 °C
<b>Storage temperature</b>	-40 .. 70°C	
<b>Operating humidity</b>	5 .. 95 % RH, Non condensing	
<b>Dimensions:</b>	width	60 mm
	height	80 mm
	height max	95 mm
	depth	25 mm
<b>Voltage measurements</b>	BM-SS-02	1.6 .. 2.6 VDC
	BM-SS-12	7.5 .. 15.6 VDC
	accuracy	±0.2 %
	resolution	0.001 V
<b>Resistance measurements</b>	range	0.1 .. 50 mΩ
	consistency	±(1.5 % + 25 μΩ)
	repeatability	±(1.0 % + 25 μΩ)
	resolution	0.001 mΩ

<b>Balancing</b>	Current	0.2 A
	Time	1 min

**LED indicator**

<b>Normal operation</b>	Green LED breathing mode
<b>Alarm</b>	Red LED flashing

**Battery SOC is calculated using the default battery characteristic parameters:**

<b>Battery voltage level</b>	<b>2 V</b>	<b>12 V</b>
Float range	-0.02 C* .. +0.02 C*	
Float voltage	2.23 V	13.38 V
Cut-off voltage	1.75 V	10.8 V
Recovery voltage	2.12 V	12.68 V

\* C is the battery capacity

**Wiring**