



## The ultimate battery maintenance tool :

- Universal, for stationary and automotive applications
- Lightweight
- Easy to use
- TFT-Color-Display
- **RF-ID** wireless battery identification (optional)
- **USB** – Interface (Client) the CRM acts like a user friendly mass storage device
- **Bluetooth** - Interface (optional)
- **securePULSE™** technology

## CELLIZER-Resistance-Meter

### CRM-2010

The **CELLIZER™** - System **CRM-2010** is tailor made for the demands of modern battery maintenance tasks. The **CRM-2010** is a handheld measurement device with user friendly functions for operating a complete **battery management system**.

With one single system you can easily obtain all needed battery parameters like **block voltages, total voltage, internal cell resistance, intercell resistance** and as an option, temperature and electrolyte density.

Our patent pending **securePULSE™** technology allows safe and reliable “in circuit” resistance measurements in stationary and automotive applications.

The comfortable integration and operation of the **CRM-2010** take place via the consequent integration of modern communication and measurement technologies. All measured values can be viewed and examined with the integrated TFT-Color-Display at site.

# CELLIZER-SYSTEMS

## Technical Data – Measuring Inputs

	Range	Resolution
Total voltage	± 245 VDC ± 600 VDC	10 mV 100 mV
Resistance 2V-Block (1,7V – 3V, ≤20A)	100 mΩ	1 μΩ
Resistance 12V-Block (1,7V-16V, ≤10A)	100 mΩ 1000 mΩ	1 μΩ 10 μΩ
Block volt. DC	0V – 16V	1 mV

- Temperature, Density  
Optional with external sensor
- Block volt. AC, optional

## Interfaces

- USB (Client)
- RS232
- TFT-Color-Display
- Transponder System (optional RF-Identification)
- Bluetooth (optional Headset implementation)

## Measuring Method

The **CRM-2010** is based on our **securePULSE™** internal resistance measurement technology. A linear current ramp (up to 20A within 2-1000ms) is applied to the battery. The internal resistance is calculated out of the current ramp and the resulting voltage curve. **This method is extremely stable against noise coupling.** The **CRM-2010** is not only controlling the current ramp, the system is watching the behavior of the internal cell resistance development while the current is increasing. If there is an unexpected increase in resistance, the load current will be turned off immediately. **This behavior is like an electronic fuse, to prevent the user from the danger of cell explosion!**

## Software

A complete battery management software is included in the delivery scope of the **CRM-2010**.

## Scope of Delivery

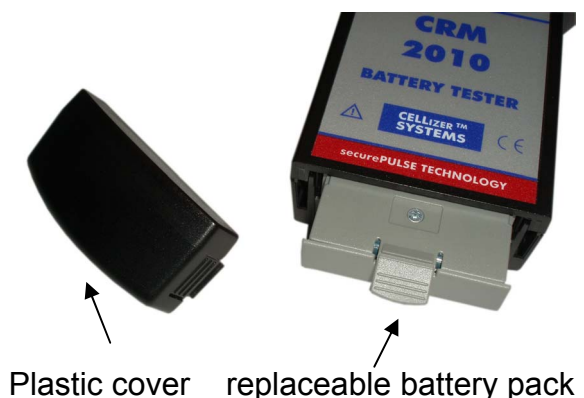
- **CRM-2010** Resistance Tester
- Protection belt
- Battery charger for the CRM
- Two pairs of test leads
- Battery Management PC Software
- Transport Case

Dimensions (L x W x H)  
266mm x 140 / 90mm x 60 / 40mm

Front view:



All interfaces and the replaceable battery pack are placed behind a plastic cover:



## G. Jost - electronic

Larstr. 55  
53844 Troisdorf  
Germany

Tel.: +49 2241 946210  
info@cellizer.com  
www.cellizer.com

All specifications are subject to  
change without notice.