

## BATTERY DATA LOGGER 12-80V - WI-FI



### INCLUDED

- Current sensor
- Electrolyte level sensor
- Thermal sensor

### Optional:

- The datalogger can be programmed by PC with following tools:
  - CAN To USB Converter (ZIV/Z-C13105)
  - CAN Cable (BAT/49317)
- The datalogger can be programmed by WIFI:
  - Internet connection of your PC by hardware cable or UMTS
  - Datalogger connection by WIFI

### ▶ BAT/49294

THANKS TO THE ZIVAN DATALOGGER THE BATTERY CAN COMMUNICATE WITH THE CHARGER = PERFECTLY CHARGED BATTERY UPON DISCHARGE OF THE BATTERY

### ▶ BAT/49206 (Universal WiFi datalogger)

The data logger is connected to an industrial vehicle battery. It monitors the main battery parameters, recording all essential values then ensuring its utmost care and efficiency.

By external sensors (bidirectional current sensor, thermic sensor, liquid level sensor) all battery data can be read, recorded and broadcasted along working and charging cycle of the machine.

Collected data allows detecting battery status as well as introducing appropriate corrections to charging process insuring an extended battery lifetime.

By battery CAN Bus charger it is possible to modify real-time the charge algorithm.

**MORE INFO: SEE PAGE 81**



HIGH FREQUENCY BATTERY CHARGERS

## TAKE ME SYSTEM MASTER UNIT

### OVERVIEW

The Take Me System is a simple yet very effective way to properly manage a charging room, made of up to 20 Zivan CanBus battery chargers. The Master Unit infact will track the charging process of all the chargers it is connected to, in order to determine which charge has ended first and communicate it to the user who needs to pick up a battery in the charging room. In this way you will make sure that all your battery fleet is regularly cycled, instead of having just a few over-cycled batteries.

To inform the user which battery is ready for being picked up, the Master Unit forces on the green BIG LED in the related charger. All the chargers, when set to work for the Take Me System, will have the red BIG LED on. As soon as the battery is picked up, the Master Unit will light on the green BIG LED of the charger who finished the charge second, and so on.



### BASIC PRINCIPLES

The Master Unit tracks the charging process of all the battery chargers connected to the CanBus; as soon as a charger finishes the charging process (that is, completing equalization), the Master Unit will save that node in a First-In First-Out (FIFO) queue. The first charger in the queue will have its green BIG LED turned on; all the other chargers will have the red BIG LED on. This is true as long as each charger have the Take Me option enabled and the communication from the Master Unit is correctly working. If one of these conditions is not met, the charger will light up the BIG LED accordingly to its original specification.

By drawing the correct battery, the drawing queue will be shifted down. Any charger that completes a charge will be placed on top of the queue.

By drawing a battery which is not the one indicated by the Master Unit, the system will enter an alarm state (wrong battery drawing). This means that, for 60 seconds, the buzzer of both the charger and the Master Unit will beep. Additionally, the Master Unit enables the Auxiliary Output.

The Take Me System has been designed in order to be user-fault-tolerant. For this reason, if the wrongly taken battery is reconnected within the 60 seconds limit, the alarm condition is cleared: the charger will resume the charge from the point it was interrupted and the Master Unit will insert the charger node in the position it was occupying before the alarm, like shown in the image below. In this case, the system completely recovers from the fault, just like it never happened.

## AUTOMATIC WATERVALVE



### ▶ BAT/48449

Automatic Watervalve (220V)

Works on every charger.

The valve is connected by the charger which gives the "end of charge" signal and opens the valve for an xx adjustable time.



### ▶ BAT/48450

For Zivan CANBUS version > 1.06