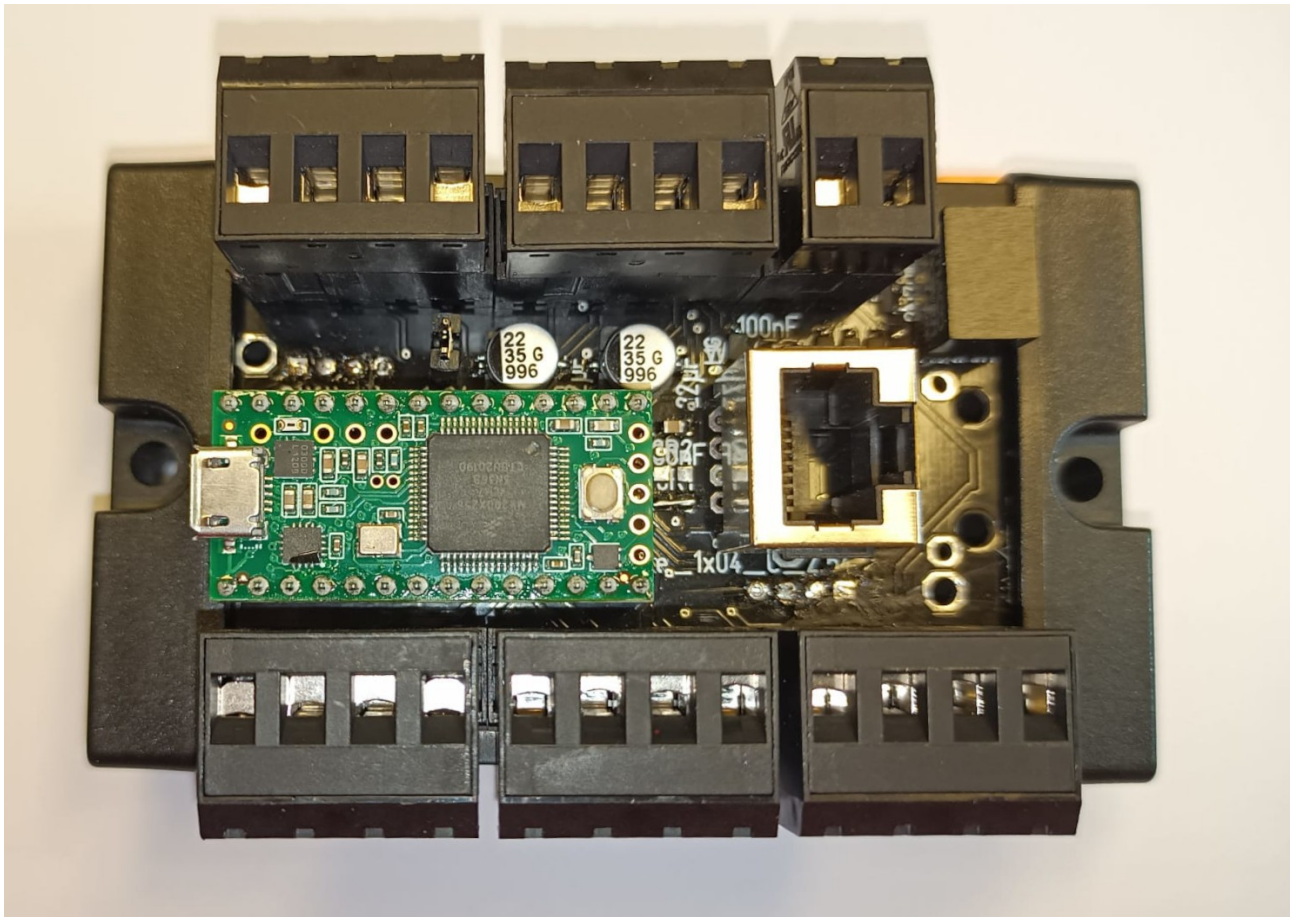
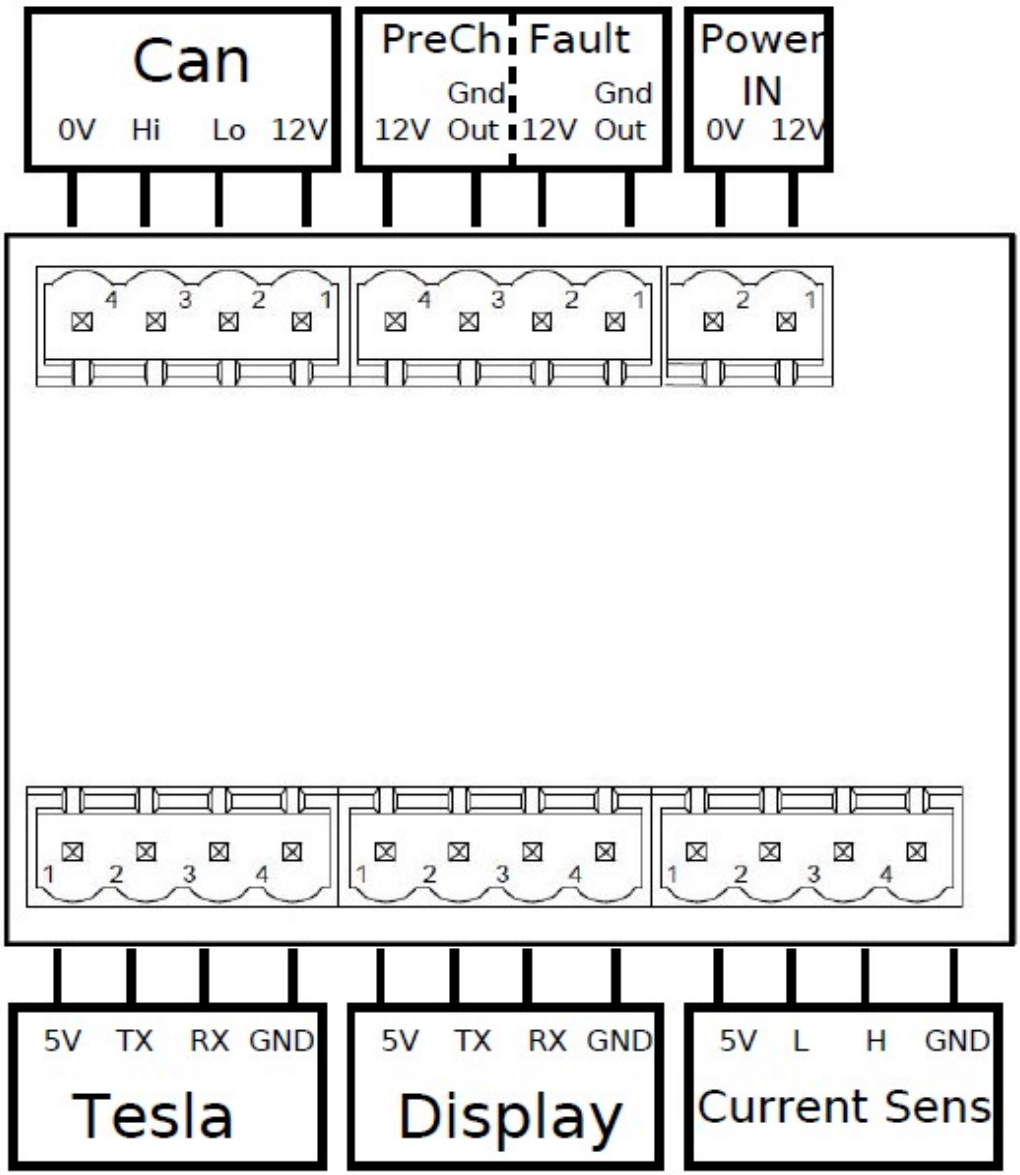
# BLCKbms




## 1 Table of Contents

# 2 Overview


Can
0V Hi Lo 12V
PreCh
Gnd
12V Out
Fault
Gnd
12V Out
Power
IN
0V 12V
4 3 2 1
4 3 2 1
2 1
1 2 3 4
1 2 3 4
1 2 3 4
5V TX RX GND
Tesla
5V TX RX GND
Display
5V L H GND
Current Sens

# 3 Interfaces for Second Life Batteries

The following interfaces are available with the BMS (see block diagram):

## 3.1 Tesla Interface

| Connector BMS | Connector Tesla Modul |
|---|---|
| TX | 1. Modul PIN 2/7 |
| RX | Last Modul PIN 4/9 |
| +5V | PIN 5 |
| GND | PIN 3 |

## 3.2 Can Interface:

**Mitsubishi Outlander:**

| Connector BMS | Modul 1-x (Outlander) | Last Modul (Outlander) |
|---|---|---|
| 12V | PIN 4 | PIN 4 |
| GND | PIN 6 | PIN 6 |
| Lo | PIN 1 | PIN 1 + PIN 8 |
| Hi | PIN 5 | PIN 5 + PIN 2 |

**BMW I3**

| Connector BMS | First I3 Pin | Next I3 Pin |
|---|---|---|
| 5V | PIN 7 | PIN 1 |
| GND | PIN 12 | PIN 6 |
| Lo | PIN 10 | PIN 4 |
| Hi | PIN 11 | PIN 5 |

**Victron Wechselrichter**

| Connector BMS | Victron RJ45 | Aderfarbe Patchkabel |
|---|---|---|
| 12V | PIN 2 + PIN 4 | orange + blue |
| GND | PIN1 + PIN 5 | blue/white + orange/white |
| Lo | PIN 8 | brown/white |
| Hi | PIN 7 | brown |

# 4 Fault Output

This output switches in the event of overvoltage, undervoltage, overtemperature or undertemperature. With this output, the battery is to be switched off via a suitable switching device. The output (Out) is ground-switching. If a relay is connected, free-wheeling diodes have to be used.

# 5 PreCharge Output

# 6 Current sensor:

**Connection Current Sensor: LEM DHAB S/161**

| Connector BMS | Connector | Description |
|---|---|---|
| L | D | Vout low current range |
| GND | C | GND |
| H | B | Vout high current range |
| 5V | A | 5V |