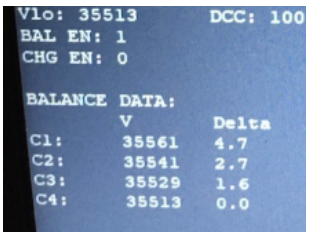
5.10 Monitoring Cell Data

Cell data monitoring makes it possible to monitor cell voltages and other data:

- Cell voltages (five digits: 0.0000 V)
- Delta for each cell, difference to the lowest cell (0.0 mV)
- Which cells are being balanced
- Which cells have triggered IDA balancing
- Battery temperature (°C)
- Alternator A temperature (°C)
- Alternator B temperature (°C)
- Temperature of BMS 1 / circuit board (°C)
- Temperature of BMS 2 / circuit board (°C)
- Status of outputs (12 pcs relays and remotes)
- Status of outputs to BMS Control (11 pcs)
- Which cell has triggered; HTP or LVP for different levels
- Settings of DIP switches



Cell data for Cell1: 3.5561 V Delta 4.7 mV as the voltage difference to the lowest cell.

Cell data monitoring requires an optional interface connected to a PC or Mac (USB). Monitoring is performed by Putty (free software). The interface is offered as an option and connects with a Micro USB - USB cable.

The main reason for manually monitoring cell voltages is to determine if the cells are in balance. Note that it is almost impossible to perform such monitoring manually due to readings are only true for a very limited time when the battery is fully charged. Read more in appendix 14.6.

The BMS control alerts via LED and high-yielding buzzer. In the event that cells are not balanced, balancing will start, indicated by the cell balancing LED. If large imbalance occurs, high voltage LED will alert and IDA balancing will be triggered. After the initial balancing is performed; the cell balancing LED confirms when the cells are balanced by long-flashing (require that the battery is fully charged).