



User Guide Incell Studio

1. Abstract

This document describes how to use the various functions in Incell Studio, the configuration software for the Incell SP48 battery.

2. Contents

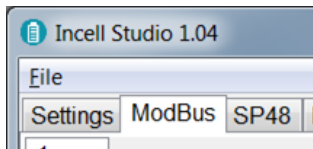
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3. Revisions

Version	Version change	Author
0	First version	Johan Wallström



4. Overview



The functions in Incell Studio is divided under tabs called "areas".

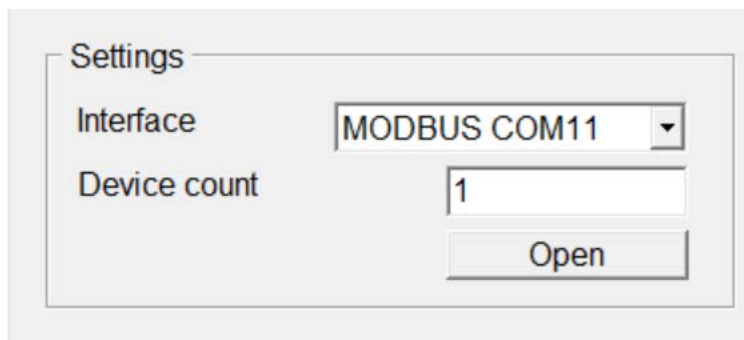
In the Settings area are general communication port settings, and functions for logging real time data to a local CSV-file.

In the SP48 area is individual or aggregate battery data displayed in a convenient format.

Under the Modbus area, individual resources are available, separated into multiple tabs and sub tabs. For example, choose tab 'Battery', followed by sub tab '1' to access the battery data for the first battery in the pack.

5. Settings

5.1. Setting up a comm port



Selecting the correct parameters for the communication port is the first step needed to connect to the system.

5.1.1. Choose interface

An SP48 may connect through a Modbus cable using an FTDI USB to RS485 RJ45 serial adapter. Alternatively, a Peak PCAN adapter with a PCAN DSUB to RJ45 cable may be used.

5.1.2. Choose device count

This setting is only applicable for SP48 using the ModBus interface. Set it to the number of batteries that are connected in the pack. For other devices, set it to 1.

6. Reading real time data

An alternative view of SP48 battery data is available under the SP48 area. This allows an easier overview, while still allowing both individual batteries and aggregated data to be viewed. This area is available both when

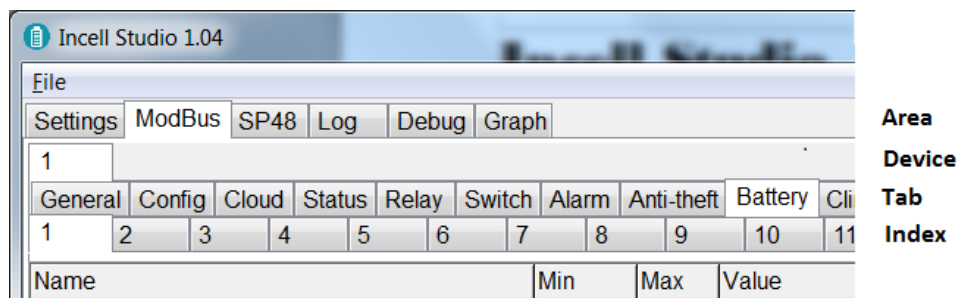
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connected directly to SP48 and through the PBM, since the PBM itself is collecting and forwarding battery data.

7. Modbus area

While connecting using Modbus RS485 or Modbus TCP/IP, the Modbus tab gives access to real time data. The data is read with a few seconds interval.



Data may be read from multiple devices if connected to a pack of SP48 batteries via Modbus. Otherwise, only one device will be available.

The "Tabs" organize Modbus data in categories. Where necessary, an additional "Index" is visible, making it possible to select sub items of the category, for example if multiple batteries are connected.

If connection is lost, all data fields become blank after 15 seconds.

Any resource with min/max values are writeable by the user. Enter a new value and hit 'Enter' to confirm it. Notice that entering a value and stopping the editing without pressing enter will not write the new value.

Some values are shown in text, but still entered in digits. Refer to min/max values for the acceptable range, and the complete ModBus documentation for a list of the meaning of each number. For example, under the Relay tab, it is possible to choose Yes or No for the Invert value. If the text 'Yes' is shown, entering the value '0' and pressing enter will change the text to 'No'.