



WeCo Monitoring Quick Guide 1.3

Tools needed for Low Voltage Firmware Upgrade

4K4

5K3

- PC windows Windows 10
- WeCo Monitor Software 1.30-5
- Net frame 3.5 or superior
- USB 232 Converter with screw terminal WeCo 232-Usb Converter
- Latest driver and firmware available for the USB-RS22
- Cable RJ 45 232 (included in the battery kit)
- Latest firmware for WeCo 4K4 Available (enquiries: service@weco.uk.com)
- Latest firmware (A/B) for WeCo 5K3 LV Available (enquiries: service@weco.uk.com)
- For 5K3 it's important to select the appropriate FW according with the Protocol list of this manual

WECCO



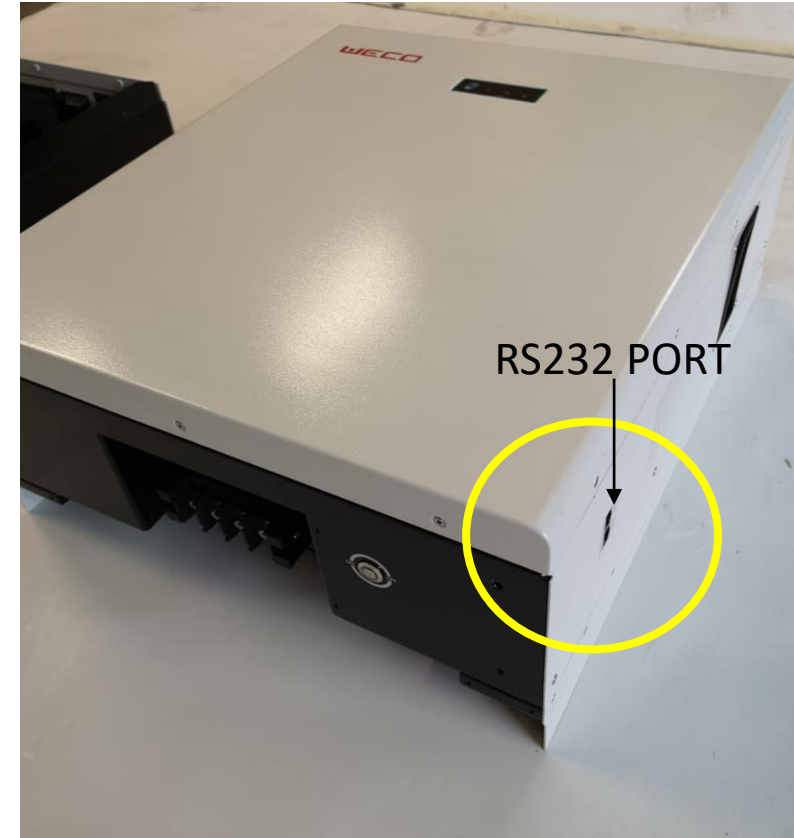
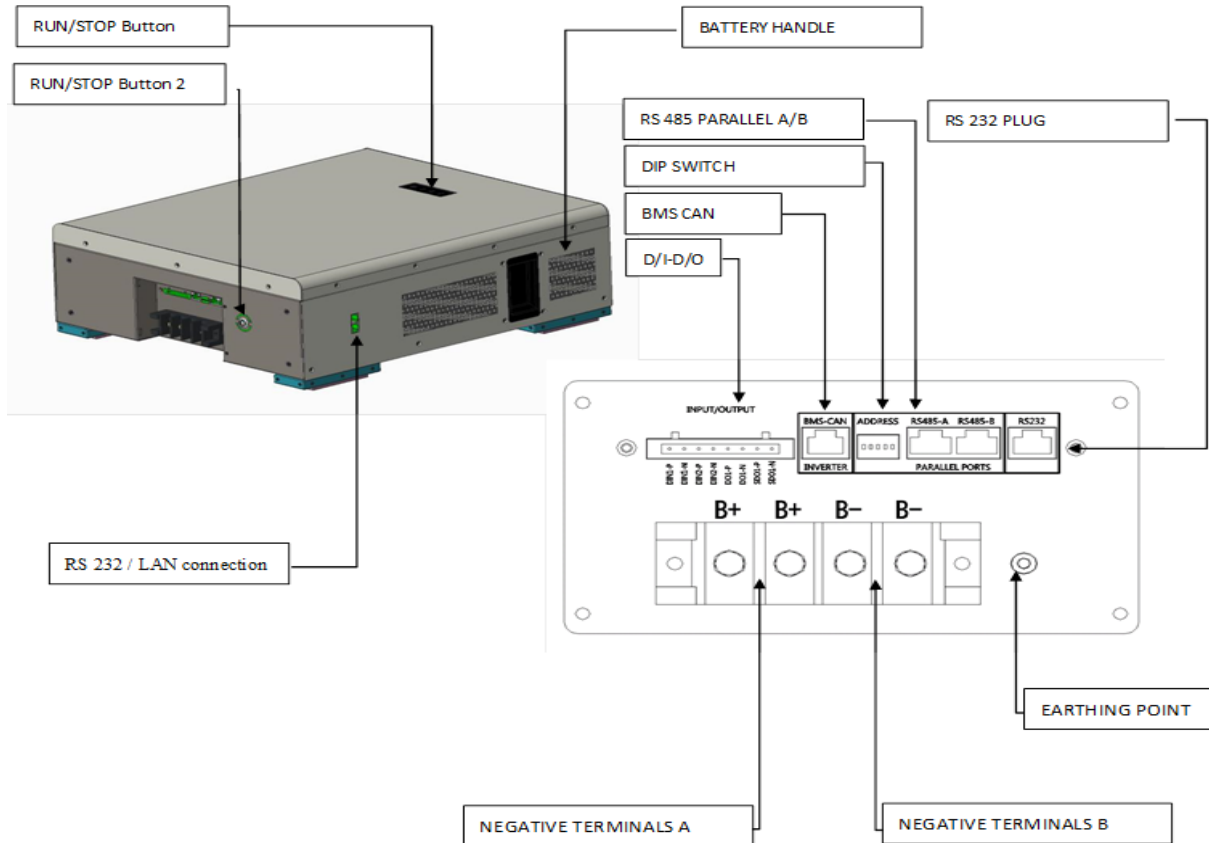
USER FREE ACCESS



RESTRICTED ACCESS

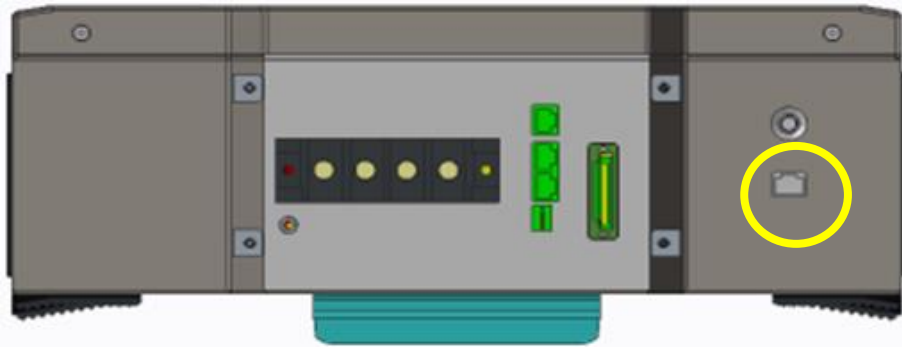
PASSWORD:

The battery has 2 RS 232 Ports, one on the side one in the connection HUB
Never use the two ports at the same time



The battery has 1 Operator Port on the upper part of the module, next to the RUN button

OPERATOR PORT 5K3 2019

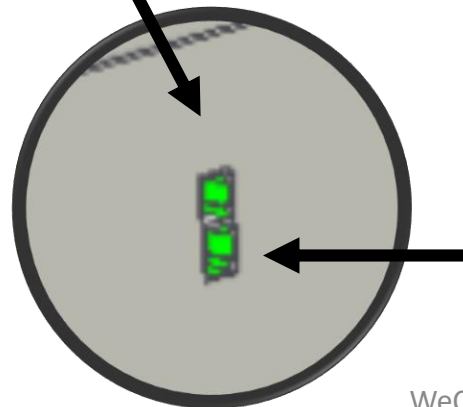
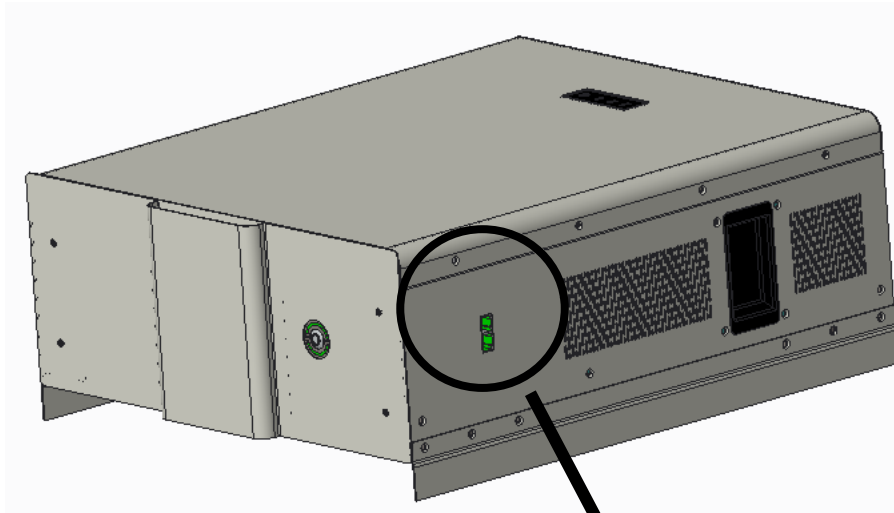


5K3 Model 2020

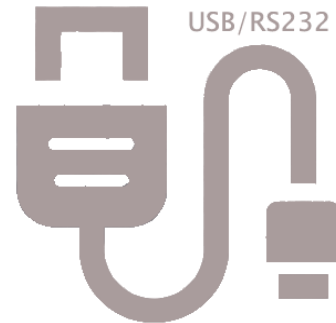
Operator Port is located on the side



The Upgrade method is the same for both model 4K4 and 5K3
4K4 picture is used for reference only



RS 232
CONNECTION



RS 232/USB serial converter

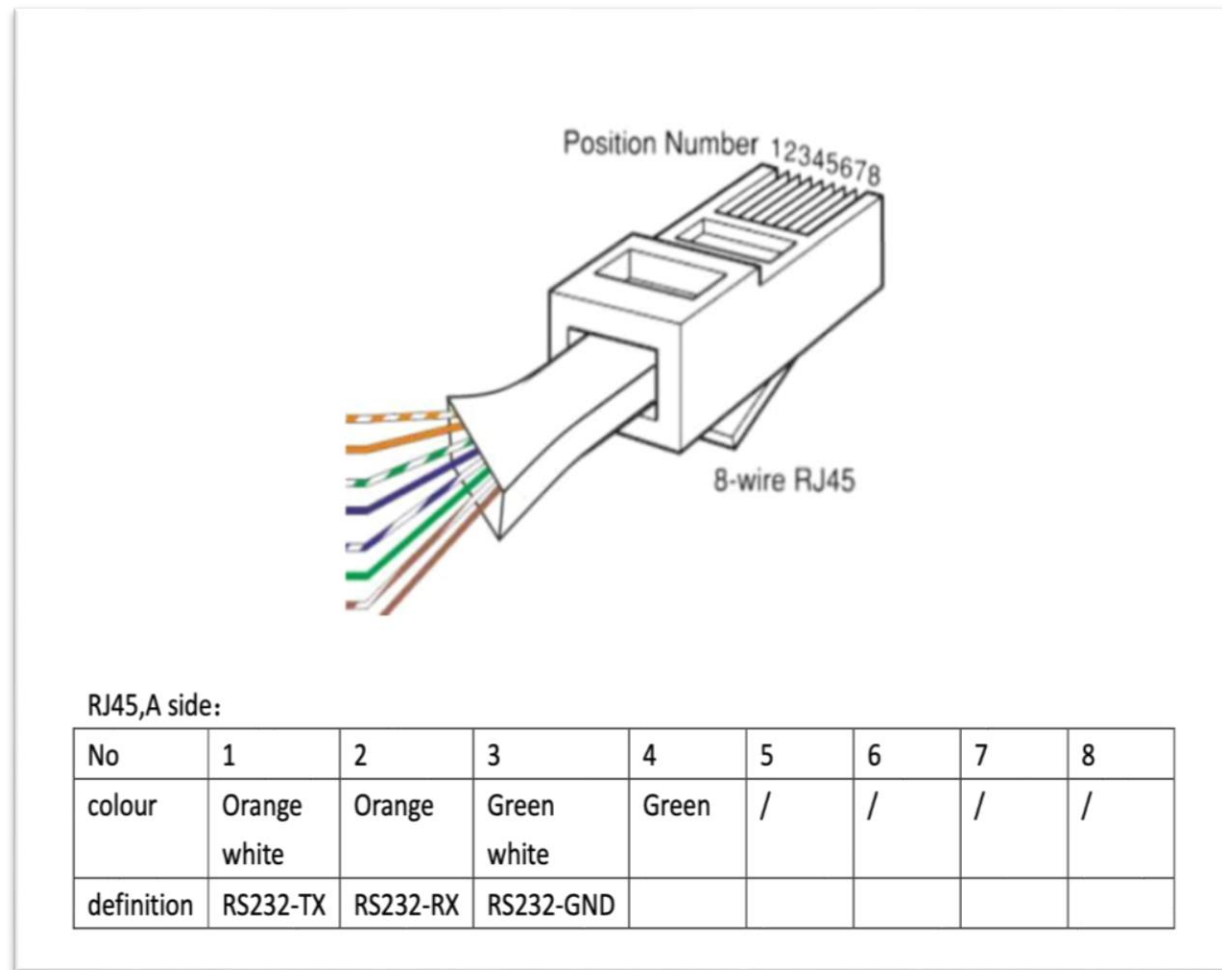


1. Standard USB/rs232 Converter (WeCo 232 USB Adapter)
2. Screw Terminal DB9 TX RX GND to be connected with the USB-RS232 Converter
3. Connect the RJ 45 rs 232 Cable provided with the battery
4. Plug the USB terminal of the converter into the PC port
5. From Windows Menu, search for DEVICE MANAGER
6. From DEVICE MANAGER search for the COM/LPT
7. Identify the COM number of the converter by removing and insert the USB plug
8. Select it and search any new driver for the converter by following the instructions in the specific section of the Windows Menu
9. Open the ZIP file WeCo Monitor.
10. Drag/drop the folder- WeCo_Monitor into the desktop.
11. Open the folder and select > WeCo_Monitor.exe (open it)

WECO

WeCo_Monitor.exe

SERIAL CONVERTER RS 232/USB PIN OUT





Select the WeCo monitor File

The screenshot shows a Windows File Explorer window titled "WECCO_FES_V1.26". The address bar shows the path "Windows Software > WECCO_FES_V1.26". The left sidebar shows "Quick access" and "This PC" sections. The main pane displays a list of files and folders:

Name	Date modified	Type	Size
DIP	22/11/2019 10:20	File folder	
en-US	22/11/2019 10:20	File folder	
language	22/11/2019 10:20	File folder	
Logo	22/11/2019 10:20	File folder	
OLP-FES-DATA-LOGS	23/11/2019 05:45	File folder	
zh-CHS	22/11/2019 10:20	File folder	
WECCO WeCo_Monitor	22/11/2019 10:03	Application	861 KB

The "WECCO WeCo_Monitor" file is highlighted with a yellow border, and an orange arrow points to it from the bottom left.

Software Access -USER FREE-





COM selection and Program Start-up

The screenshot shows the WECCO-FES-Tools V1.26 interface. At the top, there is a menu bar with options: Overview, Module Debug, ParallelOverview, Balance, Setting, DO_Setting, Production setting, and Production Test. The main area features the WECCO logo and three primary status indicators: Status Of Charge (---%), Status (---), and Instant Power (---kW). Below these are several data panels: Charging Time (---), Discharging Time (---), Standby Time (---); Battery Voltage (---), Current (---), Cell Delta Voltage (---); Charge Energy (---), Discharge Energy (---), Energy Cycles (---); Inverter protocol (---), BMS Version (---), Firmware Version (---); and Modules Connected (---), Modules Delta SOC (---), Modules Delta Temp (---). At the bottom, there are buttons for 'Search New Firmware' and 'Load Firmware'. A 'COM Port' dropdown menu is open, showing a 'CONNECT' button. The 'Status' indicator below the 'CONNECT' button is highlighted with a red bar.

SELECT THE COM AND PRESS
CONNECT

RED BAR BECOME GREEN IF THE
CONNECTION IS STABLE



FIRMWARE SUFFIX FOR THE TWO LV MODELS

Equalizer FW /BMS

FW nomenclature

4K4 V 3.xx

5K3 V 6.xx

Search the latest firmware

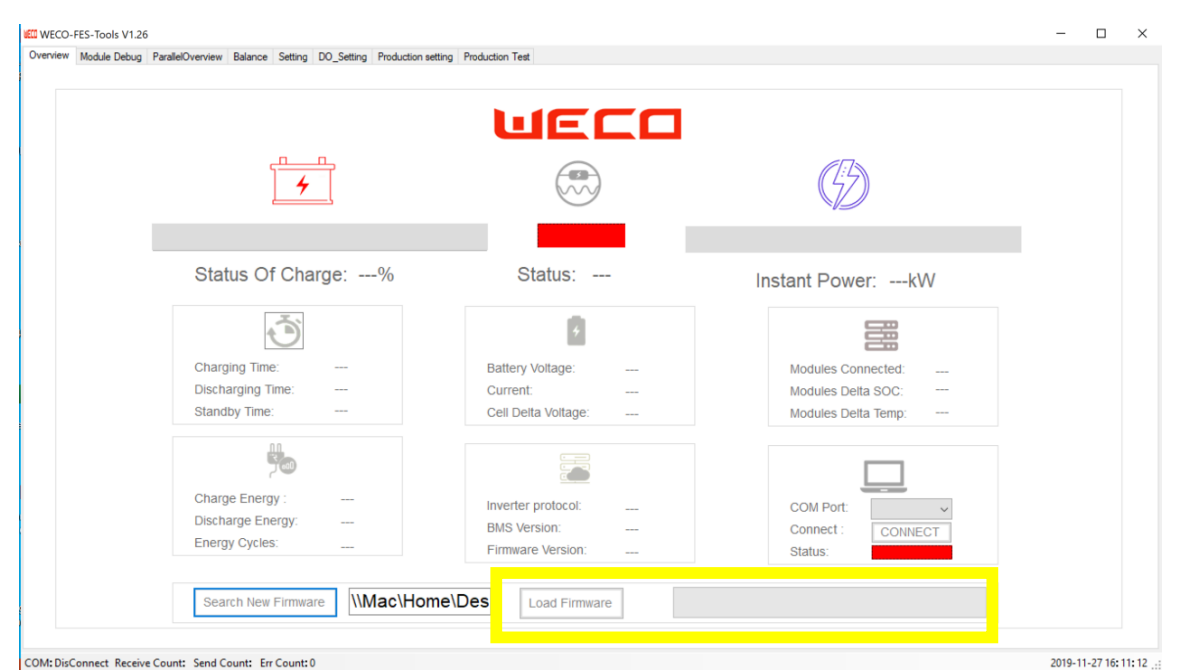
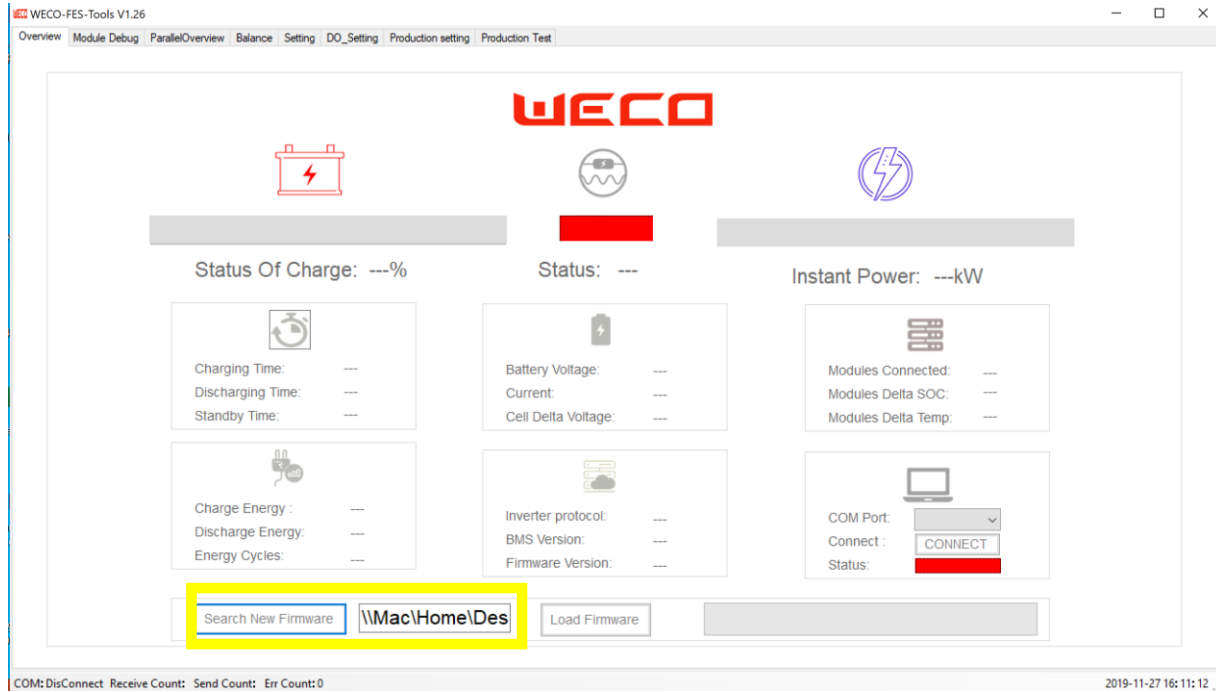
The screenshot shows the WECCO-FES-Tools V1.26 software interface on the left and a Windows File Explorer window on the right. The software interface has a 'Search New Firmware' button at the bottom left, highlighted with an orange arrow. A green arrow points from the 'Firmware' folder in the File Explorer to the 'Firmware Version' field in the software. The File Explorer window shows a list of files in the 'Firmware' folder, with the file 'OLP_S_FES_16P0354.hex' highlighted in a yellow box. A text box at the bottom right of the File Explorer window contains the text 'SELECT THE LATEST FIRMWARE RELEASED BY WECCO'.

PRESS THE BUTTON TO ACCESS TO THE FIRMWARE FOLDER

Name	Date modified	Type	Size
OLP_S_FES_16P0354.hex	27/11/2019 16:00	HEX File	157 KB
OLP_S_FES_16P0353.hex	27/11/2019 16:00	HEX File	157 KB
OLP_S_FES_16P0349.hex	27/11/2019 16:00	HEX File	157 KB
OLP_S_FES_16P0344.hex	27/11/2019 16:00	HEX File	157 KB
OLP_S_FES_16P0343.hex	27/11/2019 16:00	HEX File	157 KB
OLP_S_FES_16P0339.hex	27/11/2019 16:00	HEX File	157 KB
OLP_S_FES_16P0333.hex	27/11/2019 16:00	HEX File	157 KB

SELECT THE LATEST FIRMWARE RELEASED BY WECCO

Upload the firmware
Press load firmware to upgrade



MAKE SURE THE FIRMWARE HAS
BEEN UPLOADED

PRESS LOAD AND WAIT FOR THE
UPLOADING PROCESS

LV Battery Parallel Overview

WECO WECO-FES-Tools V1.26

Overview ParallelOverview

Parallel Data

Parallel Number: 5

Master

SOC: 0

Voltage(V): 0

Current(A): 0

Power(kW): 0

Capacity(AH): 0

Max Cell(V): 0

Min Cell(V): 0

Max TEMP(°C): 0

Min TEMP(°C): 0

ON DIP

Slave1 online:

Slave1

SOC: 0

Voltage(V): 0

Current(A): 0

Power(kW): 0

Capacity(AH): 0

Max Cell(V): 0

Min Cell(V): 0

Max TEMP(°C): 0

Min TEMP(°C): 0

Slave1 COM:

ON DIP

Slave2 online:

Slave2

SOC: 0

Voltage(V): 0

Current(A): 0

Power(kW): 0

Capacity(AH): 0

Max Cell(V): 0

Min Cell(V): 0

Max TEMP(°C): 0

Min TEMP(°C): 0

Slave2 COM:

ON DIP

Slave3 online:

Slave3

SOC: 0

Voltage(V): 0

Current(A): 0

Power(kW): 0

Capacity(AH): 0

Max Cell(V): 0

Min Cell(V): 0

Max TEMP(°C): 0

Min TEMP(°C): 0

Slave3 COM:

ON DIP

Slave4 online:

Slave4

SOC: 0

Voltage(V): 0

Current(A): 0

Power(kW): 0

Capacity(AH): 0

Max Cell(V): 0

Min Cell(V): 0

Max TEMP(°C): 0

Min TEMP(°C): 0

Slave4 COM:

ON DIP

System Summary

DELTA SOC%: 0

DELTA Vdc: 0

ACTUAL POWER: 0

TOTAL CURRENT: 0

TOTAL VOLTAGE: 0

RUNNING TIME: 0

CHARGE TIME: 0

DISCHARGE TIME: 0



AUTHORIZED OPERATORS SECTION

UNITS IN PARALLEL

CHANGE INVERTER PROTOCOL

SET THE DRY CONTACTS

SINGLE CELL EQUALIZER

OPERATOR ONLY



MASTER OPERATOR LEVEL 4 ONLY

WECCO-FES-Tools V1.24

Overview | Battery Monitor | ParallelOverview | Balance | Setting | DO_Setting | Operator Setting1 | Operator Setting2 | Production setting | Production Test

Setting

Setting	Setting Value	label559	Current Value
Auto Exit Sleep Interval Time :	--	Set	--- H
Auto Exit Sleep Duration :	--	Set	---
Contactors Keep Close Time Ever Cell Voltage Low when battery start:	--	Set	--- S
Charge Current Limit when TEMP Very Low:	--	Set	--- A
Max Charge Current Send To Inverter	--	Set	--- A
Max Discharge Current Send To Inverter	--	Set	--- A

Just for Test

Temperature Sensor 1: -- Check To Set Set --- °C

Temperature Sensor 2: -- Check To Set Set --- °C

Temperature Sensor 3: -- Check To Set Set --- °C

Attention: Must Check the box and set will effective
If not Check the box and set will into normal

COM: Disconnect Receive Count: Send Count: Err Count: 0

WECCO-FES-Tools V1.24

Overview | Battery Monitor | ParallelOverview | Balance | Setting | DO_Setting | Operator Setting1 | Operator Setting2 | Production setting | Production Test

Setting

Setting	Setting Value	label588	Current Value	Setting Value	Current Value
Battery Voltage High Cutoff:	--	Set	--- V	Charge TEMP High Cutoff:	--- °C
Battery Voltage High Cutoff Time:	--		--- S	Charge TEMP High Recovery:	--- °C
Battery Voltage High Recovery:	--	Set	--- V	Charge TEMP High Cutoff Time:	--- S
Battery Voltage High Recovery Time:	--		--- S	Charge TEMP Low Cutoff:	--- °C
Battery Voltage Low Cutoff:	--	Set	--- V	Charge TEMP Low Recovery:	--- °C
Battery Voltage Low Cutoff Time:	--		--- S	Charge TEMP Low Cutoff Time:	--- S
Cell Voltage High Cutoff:	--	Set	--- V	Discharge Current High Limit Level1:	--- A
Cell Voltage High Cutoff Time:	--		--- S	Discharge Current High Time Level1:	--- S
Cell Voltage High Recovery:	--	Set	--- V	Discharge Current High Recovery Time Level1:	--- S
Cell Voltage High Recovery Time:	--		--- S	Discharge Current High Limit Level2:	--- A
Cell Voltage Low Cutoff:	--	Set	--- V	Discharge Current High Time Level2:	--- S
Cell Voltage Low Cutoff Time:	--		--- S	Discharge Current High Recovery Time Level2:	--- S
Discharge TEMP High Cutoff:	--	Set	--- °C	Charge Current High Limit:	--- A
Discharge TEMP High Recovery:	--		--- °C	Charge Current High Time:	--- S
Discharge TEMP High Cutoff Time:	--	Set	--- S	Charge Current High Recovery Time:	--- S
Discharge TEMP Low Cutoff:	--		--- °C		
Discharge TEMP Low Recovery:	--	Set	--- °C		
Discharge TEMP Low Cutoff Time:	--		--- S		

COM: Disconnect Receive Count: Send Count: Err Count: 0

WECCO-FES-Tools V1.24

Overview | Battery Monitor | ParallelOverview | Balance | Setting | DO_Setting | Operator Setting1 | Operator Setting2 | Production setting | Production Test

Parameter Configuration Table

FileName: Import Export Set

Battery Management System Parameter List

Production Set

0A Calibration: 0A Set

Current Calibration: 5A Set

Battery Balance: Enable Set

GainValue: Set

RunTime Clear: Set

BatteryCycle Clear: Set

Energy and Time count Clear: Set

Product Serial Number:

Set

Restore BMS Default Parameters: Set

DataSave 1

COM: Disconnect Receive Count: Send Count: Err Count: 0