# DEVICE MONITORING & SETTINGS GUIDE

### EG4® WALLMOUNT INDOOR 280AH LITHIUM BATTERY



The purpose of this document is to educate the end-user on the process of preparing the battery for wiring the power connections and paralleling connections.



# EG4 ELECTRONICS

### **1. FRONT PANEL INDICATOR LIGHTS**

### 1.1 RUN/ALM LIGHTS

The WallMount Indoor 280Ah lithium battery features 2 LED status indicator lights on the front panel of the unit. Their functions are listed below:



**ALM** – The ALM light indicates a static, red color and powers on when a fault occurs. Please refer to the Troubleshooting & Maintenance Guide for more information on specific faults and required actions.

**RUN** – The RUN light will indicate a solid, green color when the battery is in an idle state. When the battery is either charging or discharging, the light will indicate a blinking, green color.

Light Description	Indication	Color	Indication Description
ALM	Static	Red	A fault has occurred
	Static	Green	Battery is in the idle state
RUN	RUN Blinking Green	Green	Battery is charging/discharging

### 1.2 SOC INDICATOR LIGHTS

The unit also features a ring of LED lights surrounding the EG4 logo that indicates the SOC (state of charge) of the unit. The table below provides detailed logic of the LED lights.

SOC Level	Number of LEDs	Color
0%-15%	1 (lower quadrant)	Red
16%-25%	1 (lower quadrant)	Green
26%-50%	2 (lower, left quadrants)	Green
51%-75%	3 (lower, left, right quadrants)	Green
76%-100%	4 (all 4 quadrants)	Green

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### 2. BMS COMMUNICATIONS

**WARNING:** Make sure to install the communication cables into their respective ports! Improper installation may lead to component damage! EG4 recommends double checking all points of connection before introducing power to the system to mitigate any potential issues.

EG4 batteries interface with compatible inverters by designating a "Master" battery (DIP switch ID No. 1).

The battery will connect directly to the inverter via an RS485 battery communications cable or a standard CAT 5, 5e, or 6 cable for closed loop communications with supported EG4 and non-EG4 inverters using CAN bus protocol.

The PC software "BMS TOOLS" provides real-time battery analysis and diagnostics. The battery cannot communicate with the software and a closed loop inverter simultaneously.

Scan the QR code for a white sheet walking through the BMS Tools setup process.



- 1. Power off all battery DC breakers and BMS power buttons.
- The inverter protocol can only be changed with the master battery temporarily set to address 64 (all switches ON). After the DIP switch is changed, restart the BMS using the BMS power button for the settings to take effect. (See image)
- On the master battery, press the Settings button (shown below/left), which will take you to the next screen (shown below/right), where you will select either CAN or RS485 protocol.

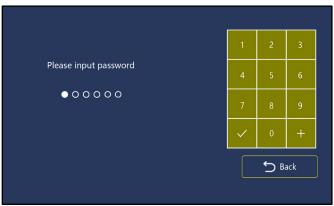
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1234

ID:64

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4. Selecting CAN or RS485 will take you to a password screen. The default password for each section is "123456".



- 5. Select the corresponding CAN protocol (P01-EG4/LUX) for the system if using EG4 inverters, (See table below).
- 6. Change the master DIP switch address back to address 1 for inverter communications & power cycle the BMS. (See image)

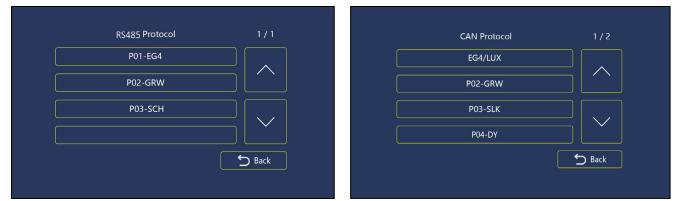


The tables below show compatibility lists depending on the type of communication protocol used for closed-loop communications between battery and inverter.

CLOSED LOOP COMMS. WITH EG4 INVERTERS		
MODEL	PROTOCOL SELECTION	
18kPV/6000XP	CAN – P01	

CAN PROTOCOL LIST		
PROTOCOL #	MANUFACTURER	
P01-EG4/LUX	EG4/LUX	
P02-GRW	Growatt	
P03-SLK	Sol-Ark	
P04-DY	Deye	
P05-MGR	Megarevo	
P06-VCT	Victron	
P07-LUX	Luxpower	
P08-SMA	SMA	

RS485 PROTOCOL LIST		
PROTOCOL #	MANUFACTURER	
P01-EG4	EG4	
P02-GRW	Growatt	
P03-SCH	Schneider	





**NOTE:** Closed loop communications using RS485 protocols require a specific pinout on the comms cable from battery to inverter. Refer to the table below for EG4 specifics.

# CHANGELOG

#### Version 1.1.3

• Replaced images with updated logo

#### Version 1.1.2

• Section 9.1 edited to reflect new process for accessing communication protocol lists

#### Version 1.1.1

• Added changelog

#### Version 1.1

• Added warning for users to be sure to connect communication cables into their proper ports

#### Version 1.0.0

• First iteration of the completed white sheet



# CONTACT US

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