EG4® LIFEPOWER4 48V V2 SERVER RACK

CONNECTIONS OVERVIEW & PARALLELING GUIDE

VERSION 1.1.1 | INFORMATION SUBJECT TO CHANGE WITHOUT NOTICE.
MODEL #: SR-48-100-LP4-IN-02

TABLE OF CONTENTS

1. TECHNICAL SPECIFICATIONS

MODULE OPERATING PARAMETERS			
PARAMETER	**BMS**	**RECOMMENDED SYSTEM SETTING**	
VOLTAGE	51.2V	-	
CAPACITY	100Ah	-	
CHARGING VOLTAGE (BULK/ABSORB)	56.8V	-	
LOW DC CUTOFF/SOC CUTOFF	44.8V	48V ± 0.2V* | 20%**	
CHARGING CURRENT	100A (Max. continuous)	30A	
DISCHARGING CURRENT	100A (Max. continuous)	-	
MAXIMUM CONTINUOUS DISCHARGE RATE	5.12kW	-	
NAMEPLATE ENERGY CAPACITY	5.12kWh	-	
BMS PARAMETERS			
CHARGE	**SPEC**	**DELAY**	**RECOVERY**
CELL VOLTAGE PROTECTION	3.8V	1s	3.45V
MODULE VOLTAGE PROTECTION	60.0V	1s	55.2V
OVER CHARGING CURRENT 1	>102A	20s	-
OVER CHARGING CURRENT 2	≥120A	3s	-
TEMPERATURE PROTECTION	<23°F or >158°F <-5°C or >70°C	1s	<32°F or >140°F >0°C or 60°C
DISCHARGE			
CELL VOLTAGE PROTECTION	2.3V	1s	3.1V
MODULE VOLTAGE PROTECTION	44.8V	1s	48.0V
OVER CHARGING CURRENT 1	>102A	30s	60s
OVER CHARGING CURRENT 2	>150A	3s	60s
SHORT-CIRCUIT	>300A	<0.1ms	-
TEMPERATURE PROTECTION	<-4°F or >167°F <-20°C or >75°C	1s	>14°F or <149°F >-10°C or <65°C
PCB TEMP PROTECTION	>221°F (>105°C)	1s	<176°F (<80°C)

GENERAL SPECIFICATIONS			
PARAMETER	**SPEC**	**TYPE**	**CONDITION**
CELL BALANCE	120mA	Passive Balance	Cell Voltage Difference >40mV
TEMPERATURE ACCURACY	3%	Cycle Measurement	Measuring Range 40°F – 212°F (-40°C – 100°C)
VOLTAGE ACCURACY	0.5%	Cycle Measurement	For Cells/Module
CURRENT ACCURACY	3%	Cycle Measurement	Measurement Range +/-200A
SOC	5%	-	Integral Calculation
POWER CONSUMPTION (SLEEP & OFF MODE)	<300uA	-	Storage/Transport/ Standby
POWER CONSUMPTION (OPERATING)	<25mA	-	Charging/Discharging
COMMUNICATION PORTS	RS485/CAN	-	Customizable
MAXIMUM MODULES IN SERIES			1
MAXIMUM MODULES IN PARALLEL			64
E-STOP FUNCTION			Yes
DIMENSION (H×W×D)			6.1 in × 19 in × 17.4 in (155 mm × 442 mm × 470 mm)
WEIGHT			99.6 lbs. (45.2 kg)
ENVIRONMENTAL PARAMETERS			
CHARGING RANGE			32°F – 113°F (0°C to 45°C)
DISCHARGING RANGE			-4°F – 122°F (-20°C – 50°C)
STORAGE RANGE			-4°F – 122°F (-20°C – 50°C)
INGRESS PROTECTION			IP20
STANDARDS AND CERTIFICATIONS			
MODULE			UL 1973 ETL Recognized Component Certification UL9540A (Passed) UL9540 listed with 18kPV-12LV

**When running the battery in open-loop communications, note that battery SOC% and battery voltage do not directly correlate.*

***EG4 recommends this value be set no lower than 20% to maintain the recommended 80% depth of discharge*.

2. BATTERY SAFETY

2.1 SAFETY INSTRUCTIONS

Before any work begins, carefully read all safety instructions, and always observe them when working on or with the battery. The installation must follow all applicable national or local standards and regulations. Consult with the local AHJ to obtain the proper permits and permissions before installation.

Incorrect installation may cause:

- *Injury or death to the installer, operator or third party*
- *Damage to the battery or other attached equipment*

2.2 IMPORTANT SAFETY NOTIFICATIONS

DANGER: ***Hazardous Voltage Circuits!***
AVERTISSEMENT! ***Circuits à tension élevée!***

There are various safety concerns that must be carefully observed before, during, and after the installation, as well as during future operation and maintenance. The following are important safety notifications for the installer and any end users of this product under normal operating conditions.

1. **Do not disassemble the battery.** Contact the distributor for any issues that need repair for more information and proper handling instructions. Incorrect servicing or re-assembly may result in a risk of electric shock or fire and void the warranty.
2. **Never short-circuit DC inputs.** Short-circuiting the battery may result in a risk of electric shock or fire and can lead to severe injury or death and/or permanent damage to the unit and/or any connected equipment.
3. **Use caution when working with metal tools on or around batteries and systems. Risk** of electrical arcs and/or short circuiting of equipment can lead to severe injury or death and equipment damage.
4. **Beware of high battery current.** Please ensure that the battery module breakers and/or on/off switches are in the “open” or “off” position before installing or working on the battery. Use a voltmeter to confirm there is no voltage present to avoid electric shock.
5. **Do not make any connections or disconnections to the system while the batteries are operating.** Damage to system components or risk of electrical shock may occur if working with energized batteries.
6. Make sure the battery and rack are properly grounded.
7. An installer should make sure to be well protected by reasonable and professional insulative equipment [e.g., personal protective equipment (PPE)].
8. Before installing, operating, or maintaining the system, it is important to inspect all existing wiring to ensure it meets the appropriate specifications and conditions for use.
9. Ensure that the battery and system component connections are secure and proper to prevent damage or injuries caused by improper installation.

WARNING: *TO REDUCE THE RISK OF INJURY, READ ALL INSTRUCTIONS!*

All work on this product (system design, installation, operation, setting, configuration, and maintenance) must be carried out by qualified personnel. To reduce the risk of electric shock, do not perform any servicing other than those specified in the operating instructions unless qualified to do so.

1. Read all instructions before commencing installation. For electrical work, follow all local and national wiring standards, regulations, and these installation instructions. All wiring should be in accordance with the National Electrical Code (NEC), ANSI/NFPA 70.
2. The battery and system can connect with the utility grid only if the utility provider permits. Consult with the local AHJ before installing this product for any additional regulations and requirements for the area.
3. All warning labels and nameplates on this battery should be clearly visible and must not be removed or covered.
4. The installer should consider the safety of future users when choosing the battery's correct position and location as specified in this manual.
5. Please keep children away from touching or misusing the battery and relevant systems.

The battery is designed to stop charging when reaching the low threshold of 32°F. If charging current is observed when the internal battery temperature is below 32°F, disconnect battery immediately and consult manufacturer.

DISCLAIMER

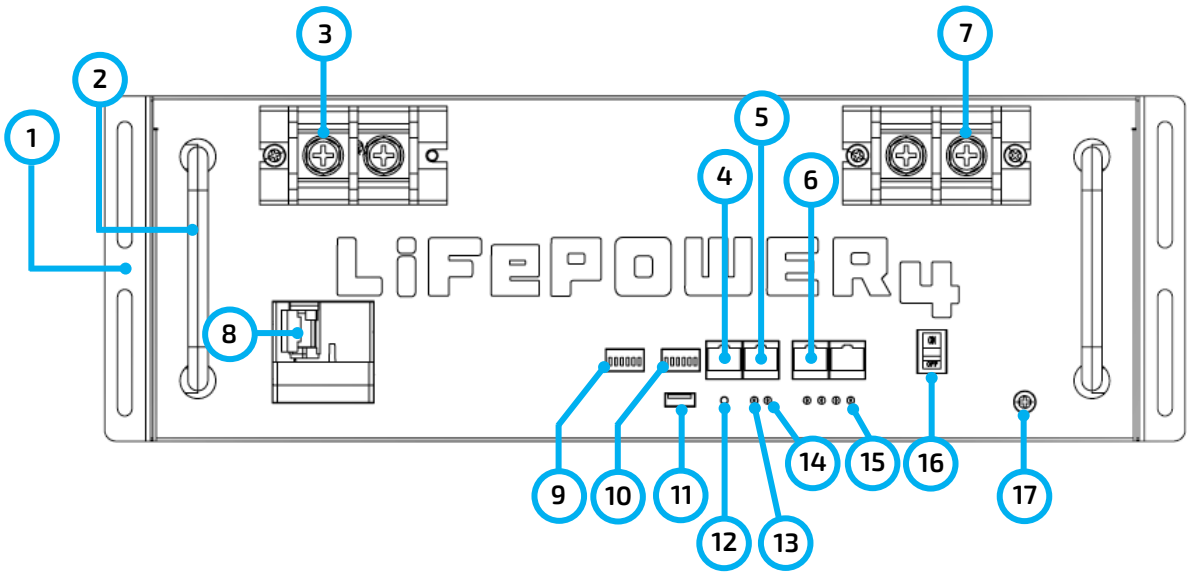
EG4 reserves the right to make changes to the material herein at any time without notice.
Please refer to www.eg4electronics.com for the most updated version of our manuals/spec sheets.

⚠ **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov

3. INSTALLING THE BATTERY

When installing multiple batteries or adding a battery to an existing rack, please ensure each battery is charged individually to 100% before paralleling them together. This step is crucial to optimize battery performance and ensure proper operation.

3.1 BATTERY DIAGRAM



NO.	ITEM	DESCRIPTION	REMARKS
1	Rack mount ear	For battery rack mounting	Secures the battery to the rack
2	Handle	For carrying/handling battery	-
3	Positive terminal	M8 bolt (x2)	-
4	CAN	CAN communication interface	Pin 4 – CAN_H Pin 5 – CAN_L
5	RS485	RS485 communication interface	Pin 1 & Pin 8 – RS485_B Pin 2 & Pin 7 – RS485_A
6	Battery Communications	Parallel battery communication port	Used for closed-loop communication
7	Negative terminal	M8 bolt (x2)	-
8	Breaker	Circuit breaker	DC Output
9	Protocol DIP Switch	Select inverter protocol	6 position DIP switch
10	Battery ID DIP Switch	ID for battery arrangement	6 position DIP switch, can support 64 in parallel
11	USB Port	Reserved	-
12	Reset	Emergency Reset	-
13	ALM	Alarm LED Display	-
14	RUN	Run LED Display	-
15	SOC	State Of Charge Display	LEDs indicate charge level
16	ON/OFF Switch	Turn BMS on/off	-
17	GND	Ground connection for safety	-

3.2 PRE-WIRE STEPS AND WIRING

The battery will come with 1 set of 4 AWG power cables. Please refer to the inverter documentation that the battery will be connected to for torque specs and wire sizing needs for specific use cases.

NOTE:

Where ambient temperature is above 86°F (30°C), cable size must be increased according to NEC 310. **The 4 AWG cable included in the package is intended only for the connection from the module to an EG4 battery rack busbar.**

CAUTION:

The battery can charge/discharge up to 100A before the BMS shuts off the pack. Ensure the inverter is configured to handle this high of a current and size all wires accordingly! Refer to an NEC approved ampacity chart or consult with the installer or a solar electrician for more information.

DANGER:

No connections should be made until the proper polarity of the cables have been confirmed between the battery and inverter!

3.3 MULTIMETER TESTING AND WIRING

Follow the steps outlined below to both test the inputs and wire the battery pack to the system. Refer to the system's user manual for specific torque values. If using non-EG4 inverters, please refer to the appropriate manufacturer user manual and/or spec sheet.

1. Ensure all circuit breakers in the system are open (off). Using a multimeter, check for voltage at all available disconnects and lines. Once no voltage is confirmed, proceed to the next step.
2. Connect the included set of 4 AWG to the battery's positive and negative terminals, respectively.
3. If applicable, route the battery power cables through the conduit box to the inverter ***before making any connections!***
4. Ensure proper polarity of cables. Once confirmed, proceed to the next step.
5. Install the positive battery cable to the inverter's positive battery terminals following proper torque values.
6. Install the negative battery cable to the inverter's negative battery terminals following proper torque values.

NOTE:

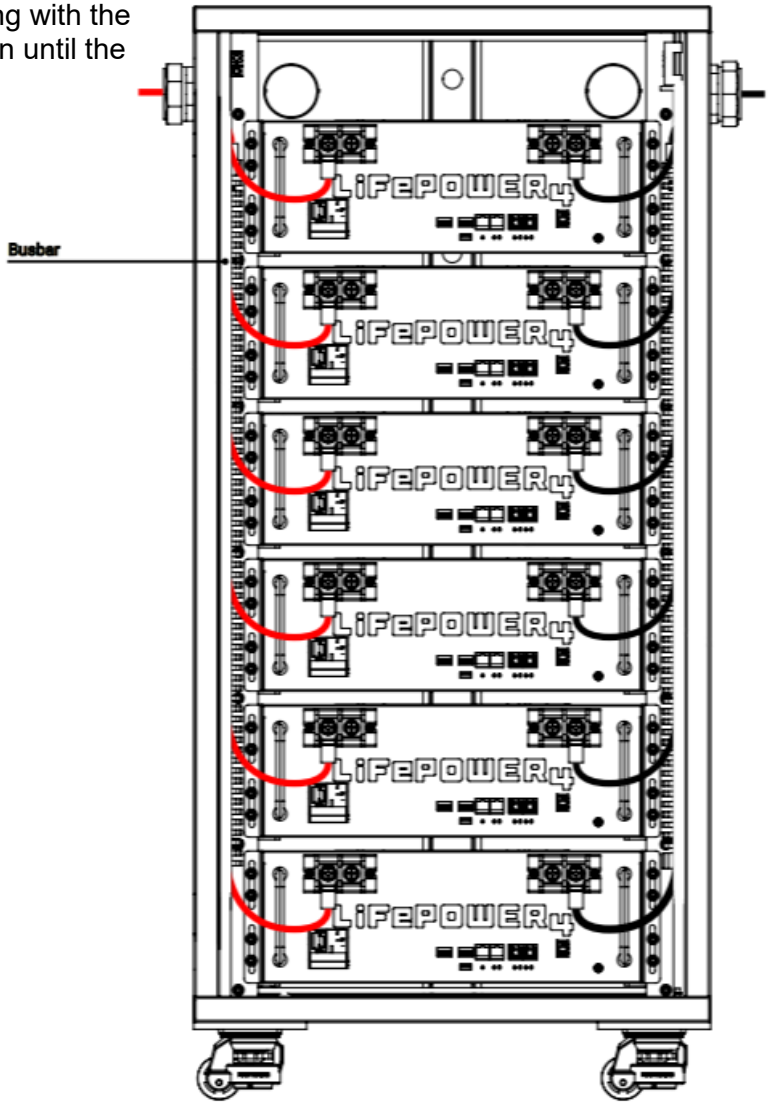
If installing the battery pack with the optional conduit box, secure the conduit fittings to the enclosure using the counter nuts after step 2.

4. EXAMPLE CONNECTION CONFIGURATIONS

NOTE:

The image below represents 6 EG4® LifePower4 V2 batteries with an EG4 Welded Indoor Cabinet. When installing multiple batteries or adding a battery to an existing rack, please ensure each battery is charged individually to 100% before paralleling them together. This step is crucial to optimize battery performance and ensure proper operation.

1. Insert the battery into the rack slot, beginning with the bottom slot and progressing upward. Slide in until the battery is firmly seated in the rack.
2. **Use the included 4 AWG power cable to connect each battery to the busbar.**
3. **DO NOT** finger tighten the battery or busbar terminal bolts. The battery bolts require a certain torque [60 in-lbs. (6.8Nm)] to ensure they do not loosen during operation. Failure to properly tighten the terminal bolts can result in serious damage and will void the warranty.
4. Clearly identify the location of the batteries positive and negative terminals—red to the positive terminal and black to the negative terminal. Then connect to the inverters positive and negative terminals.



Grounding

Attach a grounding wire from the rack/cabinet to an equipment grounding conductor, then terminate the EGC at a grounding electrode.

WARNING:

Do not ground rack/cabinet or door to negative or positive bus bars!

In this image, there are 6 LifePower4 V2 100Ah batteries wired in parallel. This battery bank still maintains the appropriate 48V needed for a system. However, the amp hour rating of this bank has increased to 600Ah. In addition, the potential output amperage of the rack increases.

NOTE:

Use the included battery cables and/or size the battery cables appropriately! Refer to an NEC approved ampacity chart for specifications.

NOTE:

EG4 recommends using a **properly sized** (amp rated) busbar to parallel batteries together. Paralleling via the battery terminals will cause inconsistent charging and discharging issues in the bank.

4.1 ADDITIONAL CONFIGURATIONS WITH EG4 BATTERY MODELS

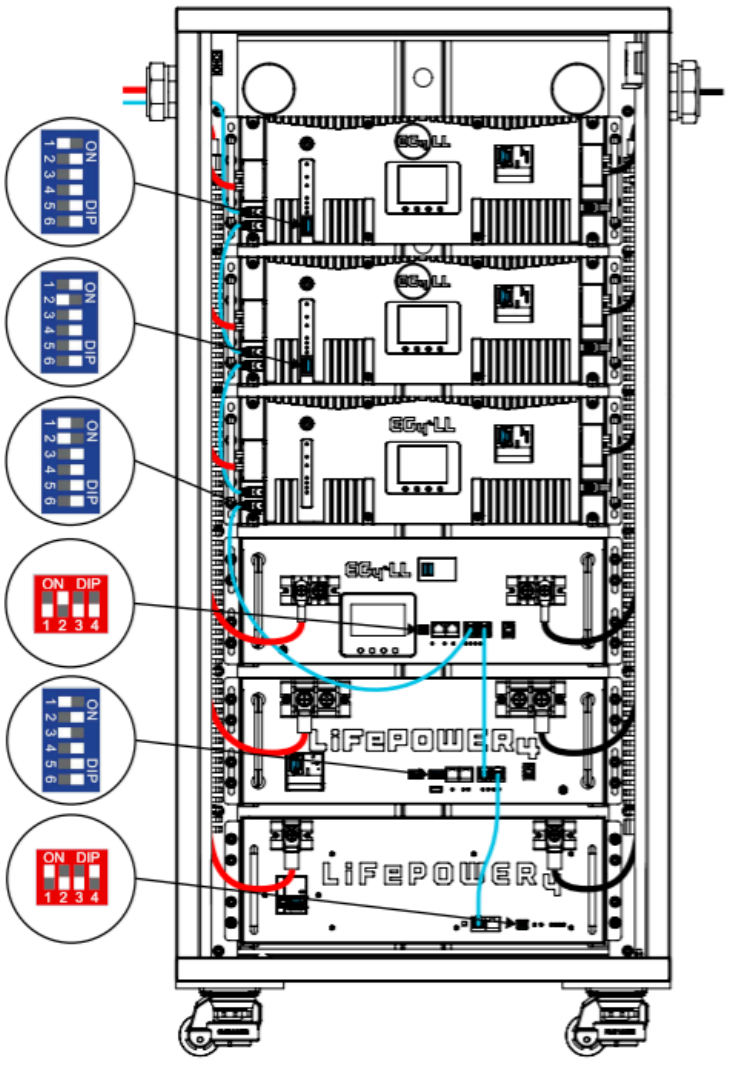
EG4® LifePower4 batteries can communicate with all EG4 48V server rack modules.

NOTE:
When installing multiple batteries or adding a battery to an existing rack, please ensure each battery is charged individually to 100% before paralleling them together. This step is crucial to optimize battery performance and ensure proper operation.

If communicating multiple EG4 batteries together, the *Multipack firmware* will need to be used via an RS485 Update. For the example below, all batteries will need to be updated **EXCEPT** the EG4 LifePower V2.

RSD will be disabled on the battery models that has this feature when using the multipack firmware.

Please visit https://eg4electronics.com/resources/downloads for the *Multipack firmware*.



1. **Always use the newest model of LL** at the top of the rack as this will need to be the battery that communicates with the system. This battery is also known as the master and will need to have ID number 1.
2. When installing the batteries, ensure that the same models are grouped together in the bank. This allows for communication to flow between the batteries consistently.
3. After installing the batteries into the rack, refer to the DIP Switch ID table to assign the address code of the bank in numerical order, beginning with the master and progressing among the different models.

The image on the left shows a bank with the following EG4 modules:

1. ***LL-S (6 DIP) [ID-1]:***
   Requires Multipack Firmware.
2. ***LL-V2 (6 DIP) [ID-2]:***
   Requires Multipack Firmware.
3. ***LL-V2 (4 DIP) [ID-3]:***
   Requires Multipack Firmware.
4. ***LL-V1 [ID-4]:***
   Requires Multipack Firmware.
5. ***LifePower4 V2 [ID-5]:***
   No firmware update needed. Set the Inverter Protocol dipswitch set to the “Simplified Link Protocol.” See Section 6.
6. ***LifePower4 [ID-6]:***
   Requires latest firmware.

NOTE: If utilizing an external E-Stop switch on the LifePower4 V2 battery, the following pinout information stays relevant to the function. Once the E-Stop engages, all batteries in the bank will initiate the stop function.

PARALLEL CABLES NEEDED

To successfully communicate between each model of battery, a standard Cat5e (or higher) cable will need to be connected between each battery.

BATTERY-TO-BATTERY CABLE PINOUT

The pins utilized for battery-to-battery communication are as follows:

LL-V1/LifePower4	
Pin	**Description**
7	RS485-B
8	RS485-A

LL-S/LL-V2 (4&6 DIP)	
Pin	**Description**
7	RS485-B
8	RS485-A

The battery will only send a transmit/receive signal over these two pins. Ensure the battery-to-battery communication cable is only utilizing pins 7 & 8.

NOTE: When using LL-V1 and LifePower4 V1 batteries in communications with the LifePower4 V2, ensure the communications cable between the LL-V2 and all older model batteries down are pinned to this standard. If there are extra pins populated, the LifePower4 V2 will trip its breaker if it receives a signal from pins 3 or 6 along with all other batteries in this parallel configuration.

FIRMWARE UPDATES

Visit https://eg4electronics.com/resources/downloads to get the latest version of the software. The file can be located on the downloads page underneath the product in question.
Once the file has been downloaded, unzip the file. Once the file is unzipped, refer to the included "Connection guide for BMS Tools V1.0.pdf" for an extensive walkthrough to set up BMS Tools.
If confirmation of the port numbers for battery to PC communications is needed, please consult the following section.

UPDATE CABLES NEEDED

Each battery requires the same RS485 cable to apply the firmware updates. Please refer to the table below for the pinout description.
Ensure all batteries' firmware matches the numbers listed below for seamless communication.

Pin	Description
1	RS485-B
2	RS485-A

MULTIPACK FIRMWARE VERSIONS NEEDED

Listed below are the multipack firmware version numbers that need to be used for each battery type:

1. EG4 LL V2/S (ID:6) 51.2V 100ah: Z02T12
2. EG4 LL V2 (ID:4) 51.2V 100ah: Z01T16
3. EG4 LL V1 51.2V 100ah: V15P15
4. LifePower4 51.2V 100ah: V3.37 or V2.16

5. BATTERY COMMUNICATIONS

Each EG4® battery is designed with the end-user in mind, displaying as much information as possible in the simplest manner. EG4 Electronics includes the option of connecting the battery to PC software to monitor the module status. This allows the user to see and understand exactly what the battery is doing as well as troubleshoot if problems arise.

When a single battery is used, it will communicate directly with the system via the RS485 ***or*** *CAN port. The battery will connect via a properly pinned battery communications cable (included).*

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.

NOTE:

The short communication cable that connects from battery to battery is a standard CAT5 cable. If the battery to inverter CAT5 cable is not long enough to span the distance from inverter to master battery, please refer to the Communication Cable Pinout Table in Section 5.2.

5.1 MULTIPLE BATTERIES IN PARALLEL

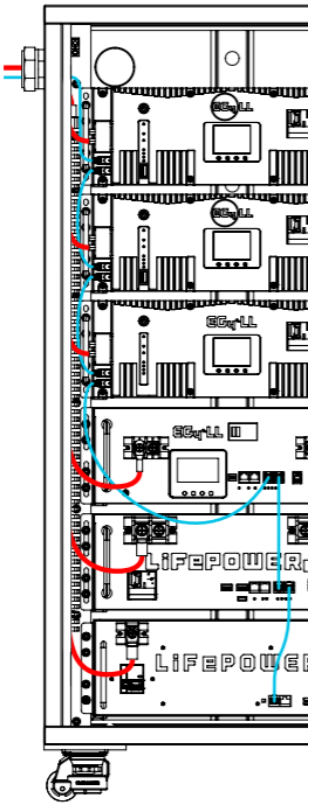
1. Ensure all battery breakers are off and the BMS switch is in the OFF position.

2. Set the address code of each battery according to the DIP Switch ID Table *(See Section 5.2: DIP Switch ID Table),* making sure there are no duplicate addresses.

3. Establish communication between the batteries via the *"Battery-Comm"* ports. Starting with the bottom battery and working all the way to the top battery.
(*See Section 5.1 for more information)*

4. The battery with DIP Switch ID 1 (referred to as the host) connects to the system via communication cable using the RS485 or CAN port. *(See image to the right)*

5. Power on each battery breaker and BMS ON switch one at a time beginning with the host battery.



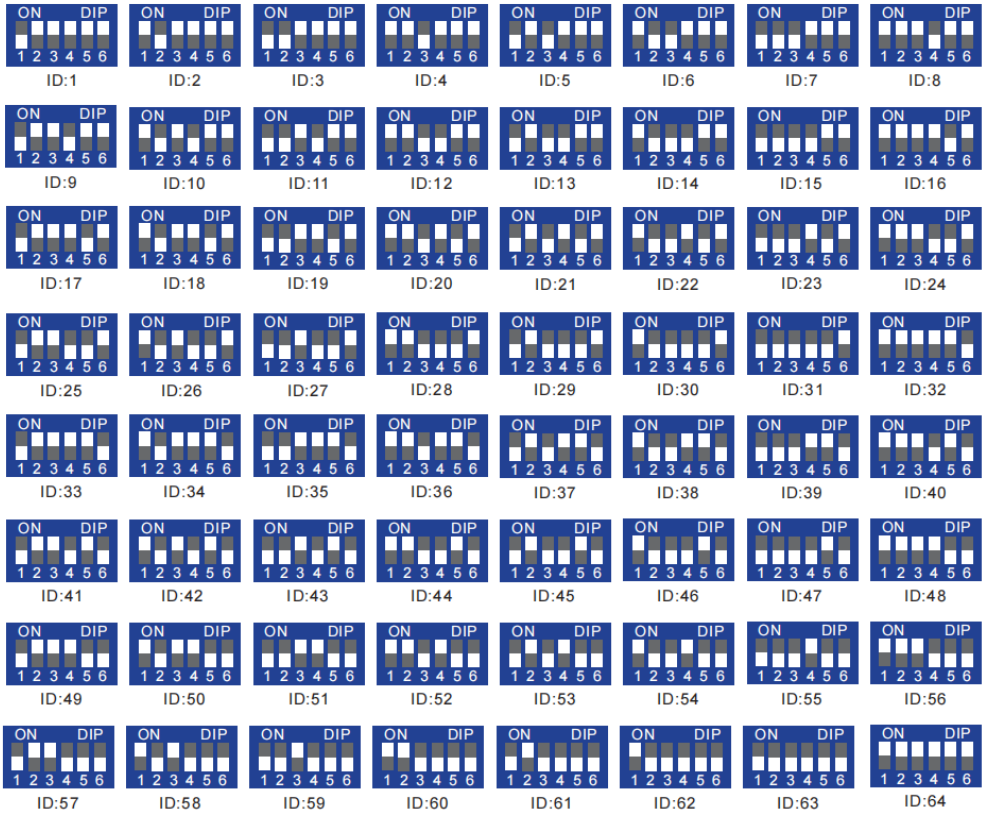
5.2 COMMUNICATION CABLE PINOUT AND DIP SWITCH ID TABLES

EG4® LL-S batteries interface with an inverter by designating a “Host” battery (DIP switch ID No. 1). The ID code range is 1–64 and the communication mode can support up to 64 modules in parallel.

PIN	DESCRIPTION
1	RS485-B
2	RS485-A
3	CAN Ground (optional)
4	CAN High
5	CAN Low

***Pinouts are for battery side; please refer to the system manual for pinout configuration on system end.**

DIP switch ID table – 6 Pin



REMINDER:

When paralleling multiple batteries, all DIP switch settings **must** be different from each other. This allows all equipment to see each battery in the bank separately. EG4 recommends addressing the batteries in ascending order.

5.3 PROTOCOL CHANGE/SELECTION PROCEDURE

REMINDER:

Only the host battery (Address 1) needs the inverter protocol to be set to communicate with the inverter.

NOTE:

The inverter protocol ID is used for establishing closed-loop communications with supported inverters. The inverters listed in chart 5.4 are capable of closed-loop communications with the battery. All other inverters will not support closed-loop communications with LifePower4 V2 batteries.

1. Power off all battery DC breakers and BMS power buttons. Ensure that the voltage between positive and negative busbars is 0V.
2. Change the inverter protocol selection to match the model of inverter. (*See Section 6 for more information*).
3. Power cycle the host battery, and the BMS will correspond to the protocol selected.

NOTE:

When using RS485 firmware version Z02T03 and RS232 firmware version S02T14 on the 48V 100Ah EG4 LifePower4 V2, an RS485 communication error will be experienced when communicating with the EG4 3000EHV, EG4 6000EX and EG4 6500EX.

EG4 3000EHV faults:

- None, but will NOT output 120V AC.

EG4 6000EX faults:

- F60-BMS Disable Charge/Discharge
- F69-BMS Stopped Charge
- F71-BMS Stopped Discharge

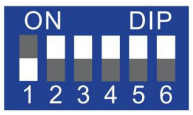
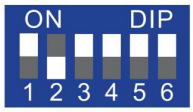
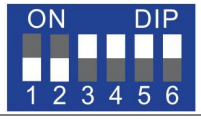
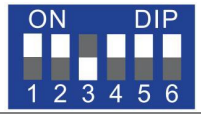
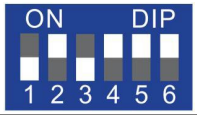
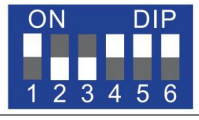
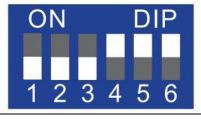
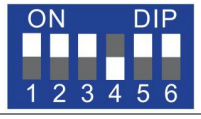
EG4 6500EX faults:

- F60-BMS Disable Charge/Discharge

To resolve this issue, set the EG4 3000EHV, EG4 6000EX, EG4 6500EX to the USER mode to clear the miscommunication faults that will occur.

6. PROTOCOL SELECT

6.1 PROTOCOL ID DIP SWITCH

CODE	DIP SWITCH POSITION	BRAND	COMMUNICATIONS
1		EG4/Lux	CAN
2		Growatt	CAN
3		Sol-Ark	CAN
4		Deye	CAN
5		Megarevo	CAN
6		Victron	CAN
7		Luxpower	CAN
8		SMA	CAN
Note: Protocol DIP switch 6 will be used to allow battery communication to the other batteries depending on which battery version you have.			
9		Complete LINK protocol	In the “ON” position, this allows the battery to communicate with the Indoor and Outdoor WallMount and version 2 LL’s and original batteries with the Multipack firmware.
10		Simplified LINK protocol	In the “OFF” position, this allows the battery to communicate with version 1 LL’s and original LifePower4 with the Multipack firmware.

NOTE: The Complete Link Protocol and the Simplified Link Protocol will **ONLY** work with CAN communication, not RS485.

6.2 RS485 PROTOCOL AUTODETECTION

NOTE:
When using RS485 communications, the battery will auto detect the inverter protocol being used.

CODE	DIP SWITCH POSITION	BRAND	COMMUNICATIONS
64		EG4	RS485
64		Growatt	RS485
64		Schneider	RS485

Note: Confirm that the RS485 cable being used is pinned correctly in respect to the inverter being used.

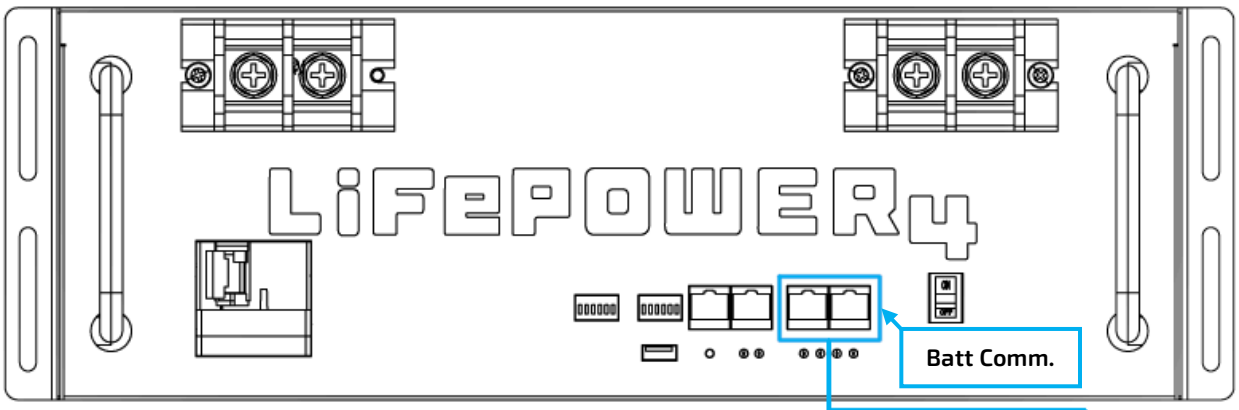
PIN	DESCRIPTION
1	RS485-B
2	RS485-A

NOTE: BMS ON/OFF switch will have to be powered off and back on for the address changes to take effect and reengage.

7. EMERGENCY STOP (RSD, ESS DISCONNECT)

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.



The optional E-Stop Switch disconnect can be used to shut down all batteries and inverters (if equipped) with the push of a button.

When paralleling multiple batteries, the E-Stop Switch only needs to have connections made with the master battery.

This integrated safety feature ties directly into the battery communication system via an open Battery-Comm port using a standard Cat-5/6 ethernet cable.

Pins 3 & 6 are used to communicate the emergency stop information to the batteries once the stop button is pressed.

If the inverter is equipped with rapid shut down (RSD) capabilities, the emergency stop feature can be used to initiate this function, eliminating the need for an external RSD switch. Check with the local AHJ and NEC code for compliance.

To inverter, RSD Initiator, or ESS Disconnect (inverter recommended if compatible with inverter's RSD system) Normally Open (NO) or Normally Closed (NC) contacts depending on inverter.

8. EG4 10-YEAR LIMITED WARRANTY

Congratulations on your purchase. EG4 Electronics offers a 10-year Full Parts Replacement or Full Product Replacement Prorated Warranty from the date of battery (EG4 LifePower4 v2*1) purchase. Your warranty must be registered within the first year of purchase or provide proof of purchase from an EG4 authorized distributor to remain valid. If you choose not to register or cannot provide proof of purchase, your warranty may be invalidated. This limited warranty is to the original purchaser of the product and is one time transferable only if the product remains installed in the original installation location. All parts exchanges, including BMS, are covered during the warranty period. If a full replacement warranty is needed, the warranty is prorated 1/10th per year after the first year at the current retail pricing. Replacement shipping charges may incur on a case-by-case basis. Outside of the continental US, replacement shipping charges may apply.

Product that is not purchased through an EG4 approved vendor is not covered under this warranty. A list of approved vendors can be found on our website. Reselling or removing the product from the original installation site will void the warranty.

Warranty Exclusions - EG4 Electronics has no obligation under this limited warranty for products subjected to the following conditions (including but not limited to):

- Damages incurred during installation/reinstallation or removal
- Poor workmanship performed by an individual, installer, or a firm
- Damages caused by mishandling the product or inappropriate environmental exposure
- Damages caused by improper maintenance or operating outside the specified operating conditions
- Tampering, altering, and/or disassembly of the product
- Using product in applications other than what the manufacturer intended
- Lightning, fire, flood, earthquake, terrorism, riots, or acts of God
- Any product with a serial number that has been altered, defaced, or removed
- Any unauthorized firmware updates/upgrades/patches
- Damages incurred from a voltage or current spikes due to open-loop lithium battery communications

EG4 product warranty is a **limited warranty** – EG4 limits its liability in the event of a product defect to repair or replacement in accordance with the terms of this limited warranty. EG4 is not responsible for any additional or indirect damages that may arise from the malfunctioning of the product. These damages could be incidental or consequential, including without limitation, any liability for the loss of revenue, profits, or time. EG4 shall not be liable for any direct or indirect loss of life, including but not limited to bodily injury, illness, or death arising from the misuse or mishandling of the product, whether caused by negligence or otherwise.

Return Policy and Warranty Claims Procedure: Contact your original place of purchase.

CHANGELOG

Version 1.1.2

- Added communication error in Section 5.3

Version 1.1.1

- Modified SOC cutoff row to also show Voltage cut-off

Version 1.1

- Modified spec sheet to show 20% recommended battery cut-off
- Added RS485 Protocol Autodetection Section 6.2

Version 1.0

- First version release

CONTACT US

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