



SERIES



**OWNER'S
MANUAL**

TABLE OF CONTENTS

GETTING STARTED 4-10

What's Included	4
Unpacking Your Battery	5
R-Series Base and Lid Kit	6
Wiring Compartment Guide	6
Safety and Environment.	7
Battery Identification & Labels	8
LCD Guide.	9
LCD Navigation	10

INSTALLATION 12-17

Stacking Batteries	13
Battery Spacing & Clearances	13
Cabling & Paralleling Batteries	14
Connecting Inverters or Other Solar Equipment . .	16

CONFIGURATION 20-26

Networking Batteries Together	20
Inverter Compatibility	21
Communication With Inverters	22
Closed-Loop Installation (48V)	23
Closed-Loop Comm with Sol-Ark	24
Closed-Loop Comm with Other Inverters	27
Rapid Shutdown.	27

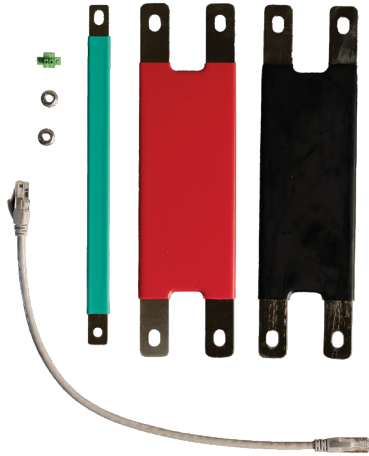
USAGE & TROUBLESHOOTING 28-30

GENERAL SPECIFICATIONS 32-36

**GETTING
STARTED**

WHAT'S INCLUDED

- Battery
- Busbars
- Paralleling Network Cable
- Manual
- Hardware



TOOLS NEEDED

The following tools are recommended for opening and installing your battery bank:

- Crescent wrench or open end wrenches
- Torque wrench
- Utility knife
- Straight screwdriver

CAUTION

Always use caution when working with tools, especially tools with sharp edges!

UNPACKING YOUR BATTERY

Batteries may be packed with Styrofoam and/or cardboard. Before heading to a job site, confirm how many batteries are in the crate, as quantities and crate sizes are subject to change without notice.

CAUTION

Battery should **only** be unpacked by qualified battery installers.

Do not penetrate, dump, or otherwise damage the battery box prior to the removal of the battery. Abusing the battery in this manner will void the warranty.

Do not store the battery in extreme temperature environments or in direct sunlight.

Do not touch the + or – terminals. High voltage may cause injury or death.

Open hasps around the perimeter of the case to open the top of the box. R-Series batteries can be removed from the box via heavy duty handles. The handles are detachable after installation.

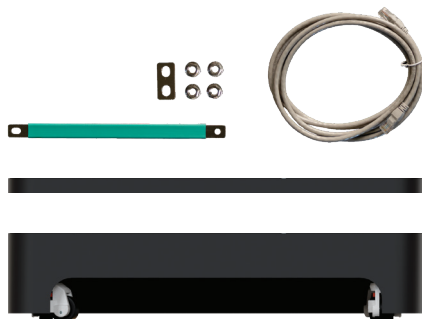


R-SERIES BASE AND LID KIT

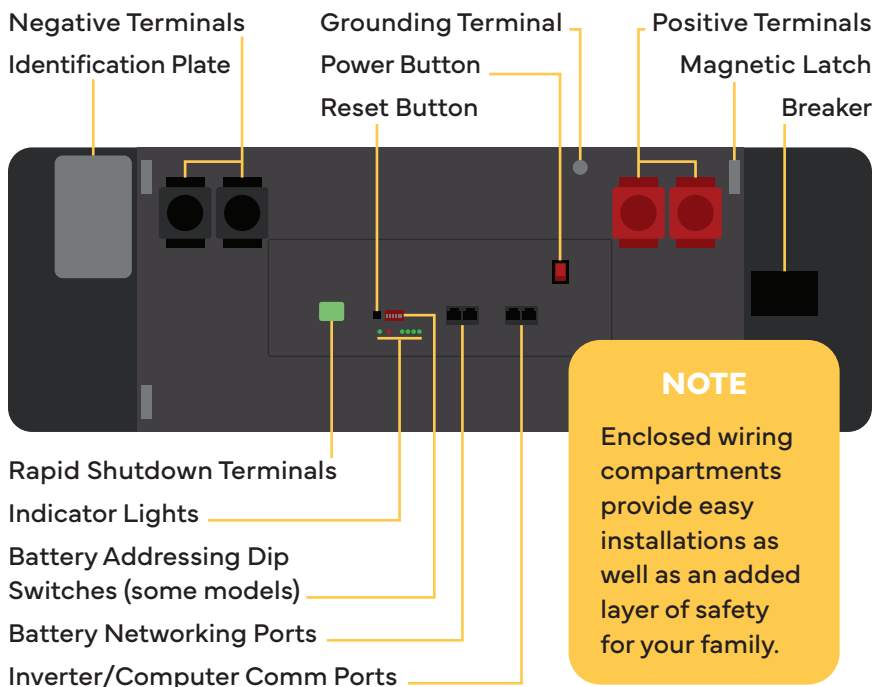
R-Series batteries are designed to use the R-Series base and lid kit (see picture). The R-Series base and lid kit is purchased separately. Up to 4 batteries can be used with each base and lid kit.

What's included:

- Base unit with casters
- Lid
- Grounding busbars
- Ethernet cable (for stack-to-stack networking or CANBUS communication with inverters)
- Installed cable grommets



WIRING COMPARTMENT GUIDE



NOTE

Enclosed wiring compartments provide easy installations as well as an added layer of safety for your family.

SAFETY & ENVIRONMENT

CAUTION

Do not short-circuit + and – terminals.

Do not reverse polarity when connecting charging/discharging equipment.

Do not install battery in an environment that is less than 32 degrees Fahrenheit or more than 120 degrees Fahrenheit. Rubix Lithium batteries should **only be installed** in dry, climate-controlled areas.

Washhouses, damp basements, dirty engine rooms, etc., are **not suitable environments** for lithium batteries.

Do not connect batteries in series. Only parallel connections are permitted.

Rubix R-Series batteries should **only be paralleled** with other Rubix R-Series batteries of the same model number. Do not parallel with other sizes, voltages or brands.

Batteries store electricity. **Only** qualified installers should work with Rubix batteries.

Always follow NEC guidelines to determine proper procedures, techniques, applicable accessories, and sizing.

Never puncture, drop, or shake Rubix batteries.

Never open a Rubix battery cover without the express permission of Rubix LLC or one of its authorized representatives.

Do not use Rubix batteries in mobile or marine applications without the express permission of Rubix LLC or one of its authorized representatives. Rubix batteries are designed and built to be used with solar and/or backup energy storage systems only.

Do not orient Rubix R-Series batteries in any position other than the intended horizontal position. Always use the Rubix R-Series base unit to install batteries. Do not exceed the maximum stack height as outlined elsewhere in this manual.

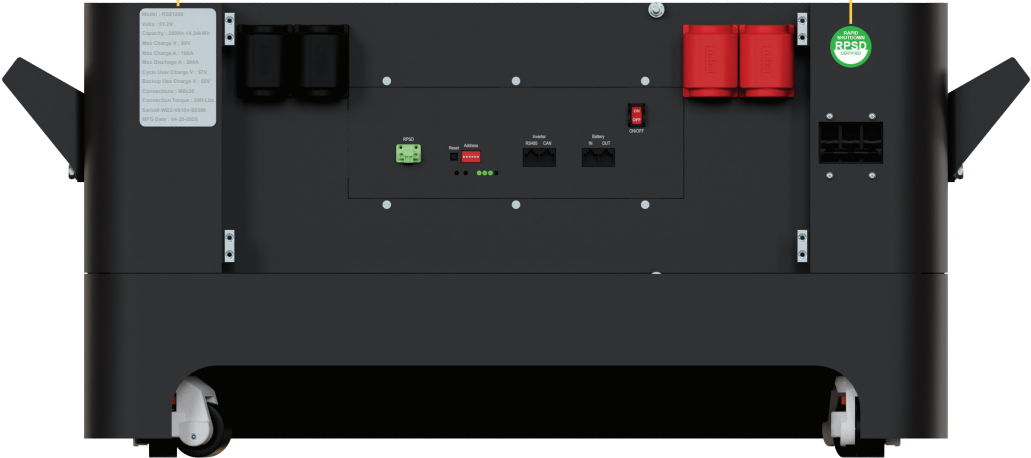
Do not install or assemble/stack your batteries on uneven or sloped terrain.

BATTERY IDENTIFICATION & LABELS



Battery Series ID & Battery Voltage ID
Info Plate

Rapid Shutdown Sticker



Model	Model : RS51280
Voltage (@20%)	Volts : 51.2V
Capacity	Capacity : 280Ah-14.34kWh
Charge/Discharge Specs	Max Charge V : 57.6V
	Max Charge A : 180A
	Max Discharge A : 200A
	Cycle Use Charge V : 57V
	Backup Use Charge V : 55V
Terminal/Torquing	Connections : M8x20
	Connection Torque : 20ft-Lbs
Manufacturer Info	Serial#:WB2-V0104-S0360
	MFG Date : 04-20-2025

LCD GUIDE

The R-Series LCD has an automatic dimming option. Upon startup, the LCD will remain in bright mode and remain in this mode for five minutes unless touched.

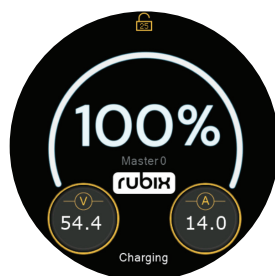
If the LCD is not touched for five minutes, it will go into dim mode. To switch to bright mode, simply touch anywhere on the LCD.

To turn off the LCD, press and hold anywhere on the screen for around 3 seconds. The LCD will power down. This will not turn off the battery. The battery will continue to function (charge/discharge) normally regardless of the LCD status.

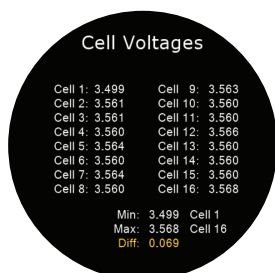
Any time that the battery is turned on, touching the LCD will return it to bright mode.



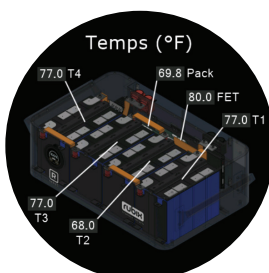
Welcome



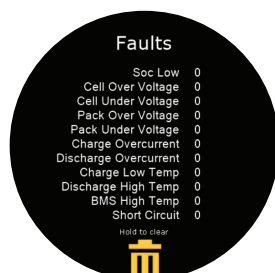
Home



Voltages



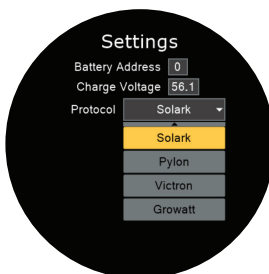
Cell Temperatures



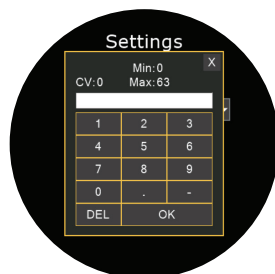
Faults



Info

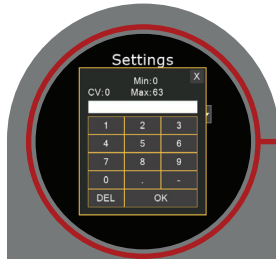


Inverter Protocol

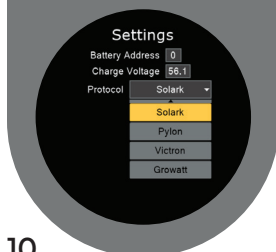
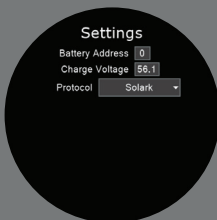


Charge Voltage
(closed loop comm only)

LCD NAVIGATION

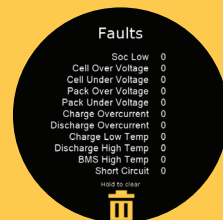
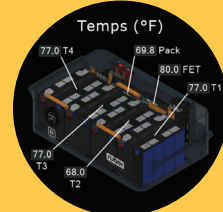
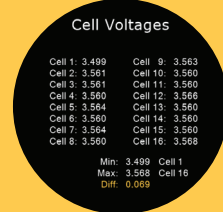
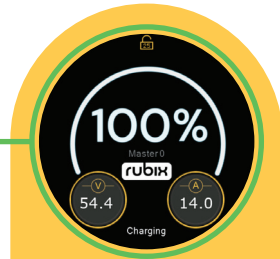


If a password is required to enter the settings menu, use 7777. Once the password has been entered, the battery address, charge voltage and inverter protocol can be configured.



When a battery is turned on for the first time, you will be met by the Welcome screen. From the Welcome screen, the gear icon opens the settings. The home icon takes you to the home screen.

Swiping left from the home screen loops you through the pages shown on the right, eventually returning to the home screen. Regardless of the page you're on, **swiping down** will always return you to the home screen.



INSTALLATION

INSTALLATION CHEAT SHEET

The proper sequence of an installation is as follows:

- Unpacking
- Stacking
- Paralleling
- Connecting inverter/solar equipment cables
- Networking
- Configuring settings
- Initial startup sequence



STACKING BATTERIES

Rubix R-Series batteries are designed to stack on top of each other. Follow this sequence to stack your batteries.

1. Position the base unit in the proximity of the battery bank's long term position.
2. Lock all 4 casters on the base unit using the swivels that raise or lower the brake pads.
3. Stack the first battery onto the base unit.
4. Stack additional batteries on top of the first battery, ensuring that the slots on the bottom of the battery slide over the posts of the battery below it. Properly installed, there should be no gap between stacked batteries.
5. Once the batteries are stacked and all networking and cabling is completed, unlock the casters and move the batteries to their correct and permanent position. Relock the casters so that the batteries will not move when accidentally bumped or pushed.

BATTERY SPACING AND CLEARANCES

Rubix Battery recommends the following clearances for all battery installations.

- Minimum spacing between batteries and wall: **1 inch**
- Minimum spacing between parallel battery stacks: **1 inch**
- Minimum spacing between top of battery stack and solar equipment on wall: **6 inches**
- Minimum spacing between battery banks and exposed water sources: **4 feet**
- No exposed water lines may be above the batteries. Condensation WILL drip onto the batteries and cause damage.

CABLING & PARALLELING BATTERIES

CAUTION

Do not connect Rubix batteries in series to create a higher pack voltage!

1. Open the wiring compartment cover by pulling firmly on the handle (see photo). The cover is held in place with magnets.
2. Use the included busbars to parallel all batteries in the stack. Batteries should be torqued to a maximum of 18 ft-lbs. Ensure that there are no washers between busbars or between busbars and battery terminals. Washers do not conduct current as well as busbar and terminal surfaces!
3. After all busbars are installed, install inverter cables on the busbar connections. Cables can be brought in through the base unit and/or through the lid. Both the base and lid have 4 entry holes that are closed with a rubber punch-in. Use a knife to cut a small slit in the middle of the rubber punch-in and then push your cable through. The rubber is flexible enough to accommodate most common cable sizes while still keeping the rest of the hole



closed. It is not necessary that all cables are the same length as long as they are sized per NEC guidelines.

4. When paralleling multiple stacks, observe the following guidelines:
 - Maintain 1 inch or more between paralleled stacks.
 - Size paralleling (stack to stack) cables per NEC guidelines.
 - Ensure that paralleling cables are sufficiently protected from sharp edges.

NOTE

Busbar tip: Layer busbars in a manner which allows for easy removal of individual busbars (see illustration).



Busbars can
be removed
individually



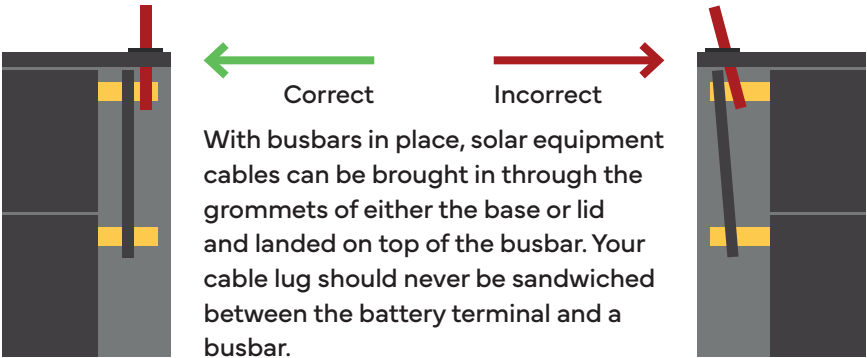
Busbars
cannot be
removed
individually

Each battery includes a green grounding busbar. Batteries should be grounded together and connected to the system's earth ground. See photo.

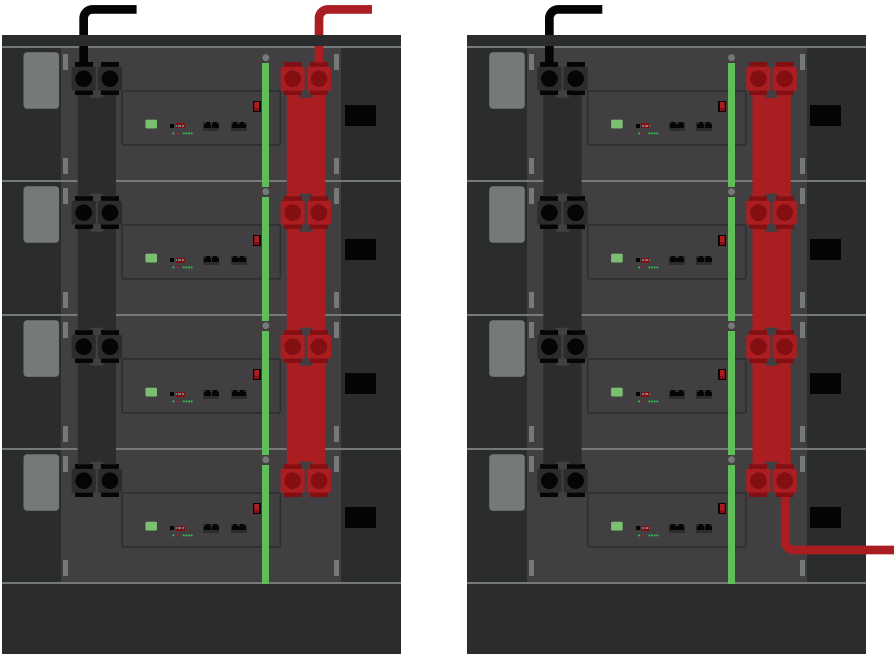
Grounding attachment points



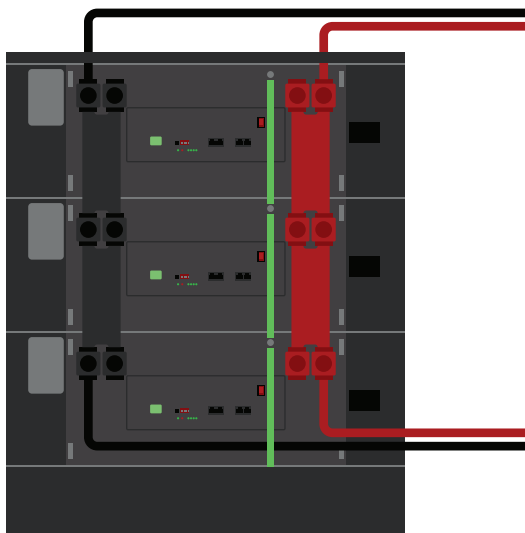
CONNECTING INVERTERS OR OTHER SOLAR EQUIPMENT



A single set of cables coming from an inverter may be placed on the same battery or installed at diagonally opposite ends of the stack.

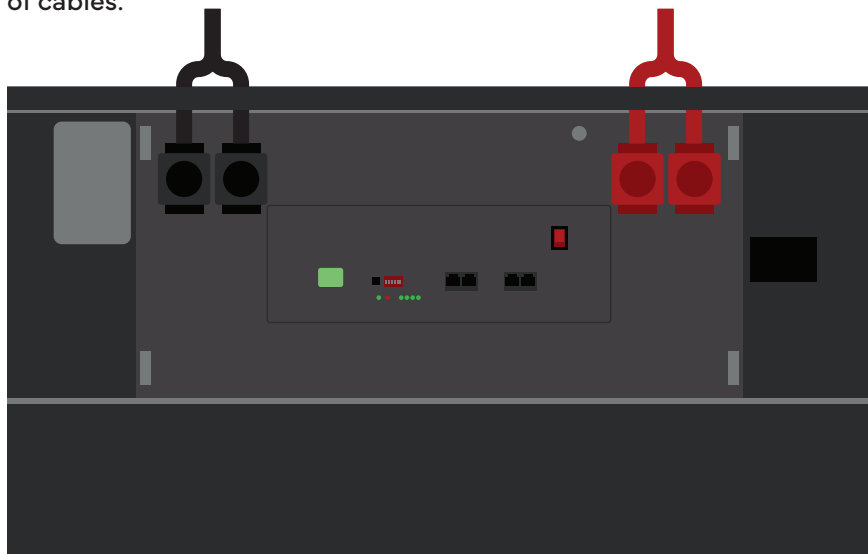


If there is more than one inverter or piece of solar equipment connected to the battery bank, **and** the maximum charge or discharge current exceeds 200A, cables should be placed on separate batteries.



SINGLE BATTERY

If your battery bank contains only one battery, care should be taken to prevent overloading a single terminal. Individual terminals, when used without busbars, are rated at a maximum of 150A. If the maximum expected charge or discharge exceeds 150A, be sure to use both + and both – terminals. This is best accomplished by running two sets of cables.



CONFIGURATION

NETWORKING BATTERIES TOGETHER

When DC cabling and grounding are completed, install the included network cables from battery to battery. Starting with the battery you prefer to be 'master,' daisy chain from the 'out' port to the 'in' port of the next battery as shown.

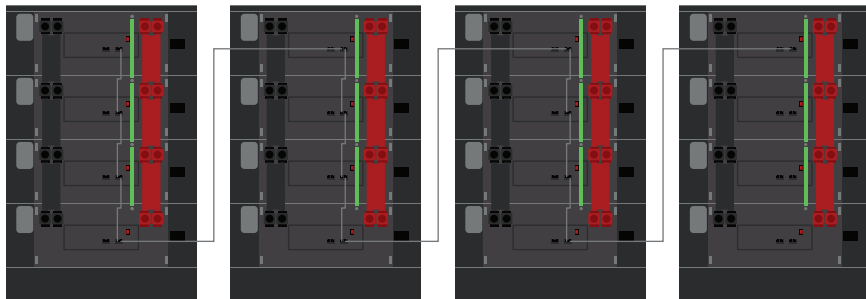
NOTE

For smaller systems, setting the bottom battery of the stack as 'master' can simplify the process of adding another battery down the road.



When daisy-chaining multiple stacks of batteries, the long cable that is included with the base and lid kit may be used to network two stacks as shown below.

Up to 32 R-Series batteries can be networked together. If your system requires more than 32 batteries, please contact us for more information.

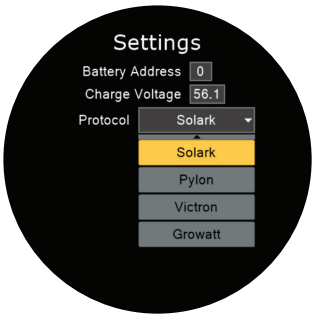


Once cable connections are complete, set a unique address for each battery, beginning with 0 for the master as shown.

To set the address, ensure that the battery breakers are still in the off position, then turn on the battery on/off switch in the wiring compartment. Navigate to the Settings screen on the LCD.

With the master battery set to 0, set the next battery in the sequence to 1, the next to 2, and so on.

See page 10 for LCD navigation.



INVERTER COMPATIBILITY

The following inverters are compatible with Rubix batteries. Please note that this is not a comprehensive or exclusive list. If your favorite inverter is not on this list, please call us to discuss compatibility. Any inverter that can operate within the parameters outlined in Rubix’s spec sheets is considered compatible.

- Sol-Ark
- Schneider Electric
- Megarevo
- MidNite Solar
- Deye
- EG4
- Victron Energy
- Outback Power
- SRNE Solar
- Magnum Energy

This list does not denote closed loop communication compatibility with inverters. Systems that do not include active communication between the battery pack and the inverter are generally called ‘open loop systems.’ The term ‘Open Loop’ simply denotes that there is no communication between the battery bank and the inverter(s). Open loop can be used even with inverters that support closed loop communication.

COMMUNICATION WITH INVERTERS

TIPS FOR INSTALLING OPEN LOOP SYSTEMS

1. Ensure that all charging and discharging parameters are programmed on your inverter, charge controller, or other equipment related to the system.
2. Double check that charging and discharging currents are limited as needed for systems with smaller battery banks.

Rubix batteries can be installed with or without closed loop communication with inverters. Systems that do not include active communication between the battery bank and the inverter are generally called 'open loop systems.'

NOTE

In many applications, open loop outperforms closed loop system functionality. Please follow the list below to determine which option works best for you.

Rubix batteries support the following brands and protocols for closed-loop communication.

- Sol-Ark: see pages 24-25
- Pylontech-based protocols: see page 26

The following types of systems may be good applications for a closed-loop communication setup.

- Rubix-approved communication partner or protocol
- Installations performed by individuals with little brand experience
- Time of use and/or peak shave applications
- Code/jurisdiction requirement

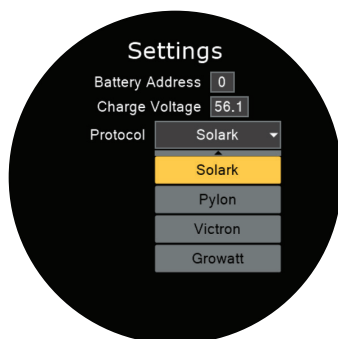
The following types of systems may be good applications for an open-loop communication setup.

- Non-approved communication partner or protocol
- Systems with voltage-based generator auto-start
- Off-grid, solar-charged systems
- 24V systems

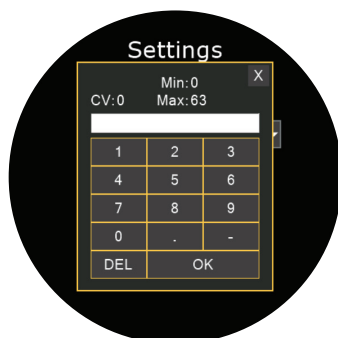
CLOSED-LOOP INSTALLATION (48V)

Closed-loop communication with inverters is accomplished through CANBUS. The following steps outline this process:

1. From the homescreen on the LCD, navigate to Settings (see page 10).
2. Select the appropriate inverter protocol for your installation.
3. Program the charging voltage for your system. Rubix batteries have a unique feature called *closed loop comm plus* that allows flexible charge voltages when batteries are communicating with inverters. The maximum range is 55.0V–57.6V. The default setting is 56.0V.
4. Many inverters only allow a single voltage value in closed loop communication. This means EQ, Absorb, and Float will all show the same value. This creates challenges when trying to find a happy medium of fully charging batteries yet not ‘floating’ at a high voltage. We recommend the following:
 - 24/7 GRID CONNECTION AND/OR BACKUP ONLY: Set the communicating voltage to 56.0V +/- 0.2V.
 - SOLAR, GEN, OR OTHER CHARGING SOURCES THAT ONLY PERIODICALLY FULLY CHARGE THE BATTERY BANK: Set the communication voltage to 56.4V–57.0V.
5. Use the network cable that’s included with the lid and base kit to connect the master battery (address 00) to the inverter’s CANBUS port.



Step 2: inverter protocol



Step 3: charging voltage

CAUTION

This setting WILL NOT set or limit charge voltages in open loop applications! Open loop applications require that settings be made on your charging/discharging equipment, not on the batteries.

CLOSED-LOOP COMM WITH SOL-ARK

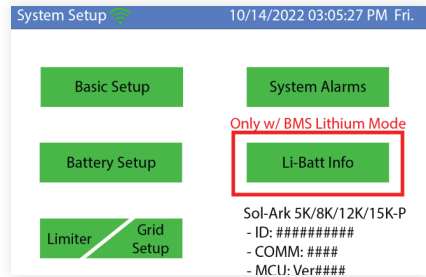
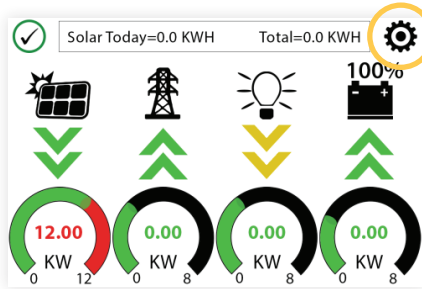
When communicating with a Sol-Ark inverter, follow this sequence:

1. Connect the CANBUS cable from the master battery's CANBUS port to the Sol-Ark CANBUS port.
2. Navigate to Sol-Ark's Batt Setup page. Check BMS Lithium Batt, set to 00 and check the Activate Battery checkbox.
3. The battery will auto-populate the following on the Sol-Ark inverter:
 - SOC %
 - Battery capacity
 - Charge voltages
 - Max charge current
 - Max discharge current

The battery will NOT auto-populate the following on the Sol-Ark inverter:

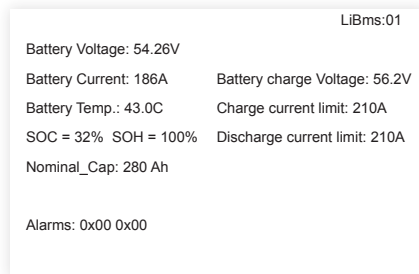
- AC coupling
- Peak shaving
- Auto start settings
- Low battery shutdown and restart
- Reference the chart on the next page to confirm which settings need to be programmed manually.

Setting	Required Value
1 - Batt Capacity	(auto populated)
2 - Max A Charge	(auto populated)
3 - Max A Discharge	(auto populated)
4 - BMS Lithium Batt	check and set value to 00
5 - Activate Battery	check
6 - Start % (recommended minimum)	20%
7 - A (Amps)	take into account gen & grid limitations
8 - Gen Charge	check if charging with a generator
9 - Grid Charge	check if charging with grid
10 - Float, Absorb, Equalization	(auto populated) value can be adjusted on battery
11 - Days (auto equalization)	set to 0
12 - Hours (equalization duration)	set to 0
13 - Shutdown (recommended minimum)	10%
14 - Low Battery (recommended minimum)	5% higher than shutdown value
15 - Restart (recommended minimum)	1% higher than Low Battery value
16 - Battery Empty	47 V
17 - BMS Err. Stop	recommended to leave unchecked
18 - Batt Resistance	(auto populated)
19 - Batt Charge Efficiency	(auto populated)



After completing all connections, programming, and settings, check that the closed loop communication setup is successful by pressing the gear icon from the home

screen and then selecting the Li-Batt Info button. When closed loop communication is properly configured, the following screen will appear.



This screen shows the total battery bank values that are being communicated to the inverter.

This includes:

- SOC
- Total capacity
- Charge voltage (max)
- Charge current limit
- Discharge current limit

CLOSED-LOOP COMM WITH OTHER INVERTERS

Rubix batteries support closed-loop comm with the standard Pylontech protocol. Many inverters utilize a Pylontech-based closed-loop communication platform. This includes brands such as EG4, Growatt, SRNE, and Victron.

Some manufacturers have modified or expanded upon the Pylontech protocol. This may result in limited function and/or not all data being transmitted. Please call Rubix for more information if you have a Pylontech-modified application.

RAPID SHUTDOWN

Rubix R-Series batteries are equipped with a Rapid Shutdown feature.

To use Rapid Shutdown:

1. Connect the two pins of the RPSD port to activate rapid shutdown and turn off output power. This is most easily achieved by connecting a 2-conductor, 16-20 AWG insulated wire to a switch. When the switch is activated and the two wires are connected, RPSD is activated. A connecting plug that fits the RPSD socket is included with each battery. Rubix recommends that each battery in the bank is daisy-chained to the master battery's RPSD terminals. There should be no more than two wires per RPSD terminal (2 to each port/



1 Rapid shutdown terminals

terminal of the battery's 2-port RPSD connector).

2. There may be up to a 15 second delay on RPSD to prevent any nuisance shut downs.
3. After any RPSD event, the batteries may need to be power-cycled to restart.

USAGE & TROUBLESHOOTING

SYSTEM FAULT CODES

Code	Explanation	Suggested Action
SOC Low	Battery is discharged to a low level.	Connect to a charging source.
Cell OVP	An individual cell is overcharged to the point where the battery has to shut down.	Double check your charge voltage settings. If they are correct, contact tech support.
Cell UVP	An individual cell is discharged critically low and requires the battery to be shut off.	If the battery holds less than 20%, recharge. If over 20% or the fault occurs repeatedly, contact tech support.
Pack OVP	The battery is exposed to an excessively high voltage.	Check charge voltage settings.
Pack UVP	Battery is discharged to a low level.	Connect to a charging source.
Charge OCP	The charging current exceeds the maximum allowable amperage.	Check charge current (amps) settings. If there are multiple batteries in the bank, check that the other batteries are accepting a charge.
Discharge OCP	The discharging current exceeds the maximum allowable amperage.	Ensure that your battery bank is large enough to handle your loads. Check that other batteries in the bank are operational and sharing the load.
Charge UTP	The battery is too cold to accept a charge.	Battery needs to warm up. If issue reoccurs, contact tech support.
Discharge OTP	The battery is too hot to allow discharge.	Battery needs to cool down. If the issue reoccurs, contact tech support.
BMS OTP	The BMS has overheated from excessive charging or discharging.	Battery needs to cool down. If the issue reoccurs, contact tech support.
Short Circuit	The BMS has detected a short circuit or an unusually heavy surge.	Check cabling and wiring. Ensure that loads (with heavy surge) do not exceed battery surge capabilities.

TROUBLESHOOTING UNUSUAL EVENTS

Why does the SOC% vary from battery to battery?

Ensure that the batteries are networked together as outlined in the networking section of this document.

Charge batteries until voltage reaches 56.0V or higher. This will recalibrate the batteries. Recalibration charges tolerate a charge of up to 57.6V (for 48V batteries) or 28.8V (for 24V batteries).

Why does the LCD not light up?

Let's start with the basics—ensure that the red switch in the wiring compartment is turned on. Ensure that sufficient voltage is present.

My battery discharged until it shut off and now it won't turn on again.

If your battery bank discharges until the voltage drops below the BMS cutoff level, the battery will shut off to protect itself. Leaving protection mode requires applying voltage to the battery terminals. This voltage should be between 24 and 27V (24V models) or between 48 and 54V (48V models). Many times this can only be achieved with a special power supply or by jumping from another battery, as most inverters will not begin charging because they don't sense the presence of a battery.

I warmed up a very cold battery, but it still won't accept a charge.

Check the internal temperatures on the LCD if necessary. Allow your battery to reach 40°F and try again.

I'm struggling with closed loop comm. Any tips?

Closed loop comm can be frustrating. Ensure that the following are correct:

- The master battery address is set to 0.
- The proper protocol is selected on the LCD.
- The inverter's closed loop comm is activated.
- Ensure that you are using a high quality, straight-through pinout ethernet cable.

GOOD PRACTICES FOR GOOD PERFORMANCE

Observing the following easy practices will enhance your battery bank's smooth performance.

Charging: It's not absolutely crucial to do so, but ensuring a full charge of 28-28.8V (24V batteries) and 56-57.6V (48V batteries) at least once per month will improve your SOC% monitoring experience, as this serves to automatically recalibrate your BMS internal percentage tracking.

Discharging: Try not to discharge lower than 15% and/or 25V (for 24V batteries) or 50V (for 48V batteries) to avoid nuisance battery/inverter shutoffs. On the other hand, it is fully acceptable to discharge down to 20% on every charge/discharge cycle. You don't have to worry about damaging your battery should you over-discharge; the battery will self-protect.

LCD: If you don't routinely check your battery status on the LCD, leave the LCD off. If you monitor it on a regular basis, leave it on.

Environment: Rubix R-Series batteries can tolerate a wide temperature range and only the extremes should be avoided. Avoid temperatures below 32°F and greater than 110°F. Also, avoid damp areas or washdown zones.

Batteries and children: We love our children, and we like our batteries, but the two don't tend to mix very well. While the most sensitive settings are password-protected, unqualified individuals should not operate the LCD.

Handles: Once the batteries have been installed, the handles can be removed and stored elsewhere to save space.

GENERAL SPECIFICATIONS

24V/560AH

RRS25560

Energy Rating	25.6V 560Ah (14.336kWh)
Energy Scalability	32 × Parallel (457kWh)

Charging/Discharging

Max Continuous Discharge Power	200A (5.12kW)
Recommended Discharge Power	180A (5.12kW)
Inverter Start-Up Capability	PWM Technology Start-Up
Max Continuous Charging Power	200A (5.12kW)
Peak Charging Power (30 min)	240A (6.4kW)
Recommended Absorb Volts	28.4V
Max Absorb Volts (Solar Only)	28.8V
Absorb Done Amps (per Battery)	4% of capacity
Absorb Done Time	10 min
Float Voltage	27.2V
Temp Comp—mV Degrees Celsius	0
Max Recommended Discharge	25.5V (20%)
Inverter Low Battery Cutout	24V
Peukert Exponent	1.04

Installation Requirements

Ventilation Required	No
Minimum Environment Temp	32 °F
Maximum Environment Temp	120 °F
IP Rating	IP50
Outdoor Rated	No
Installation Position	Horizontal with Base Unit Only
Maximum Batteries per Stack	4

Terminal Specs

M8 Stainless Steel	Bolt-On
Max Terminal Torque	18 ft-lbs

Cycle Life Rating

RRS25560

Rated Cycle Life (100% DoD)	3,000 Cycles
Rated Cycle Life (80% DoD)	4,500 Cycles
Rated Cycle Life (50% DoD)	7,000 Cycles
Retained Capacity at End of Cycle Life	80%

Safety Features

Breaker Current Rating	300A
BMS Low Voltage Disconnect	41 +/-1V
BMS High Voltage Disconnect	59 +/-1V
BMS Low Temp Charging Disconnect	32 °F
BMS Low Discharging Disconnect	0 °F
Low Volts Cutout Wakeup	22V
High Volts Cutout Wakeup	27.5V
BMS High Temp Disconnect	135 °F
Pressure Vented Cells	Yes
Rapid Shut Down Function (RPSD)	Yes

Certifications

Cell Certification	UL 1973
Transport	UN 38.3

Internal Components

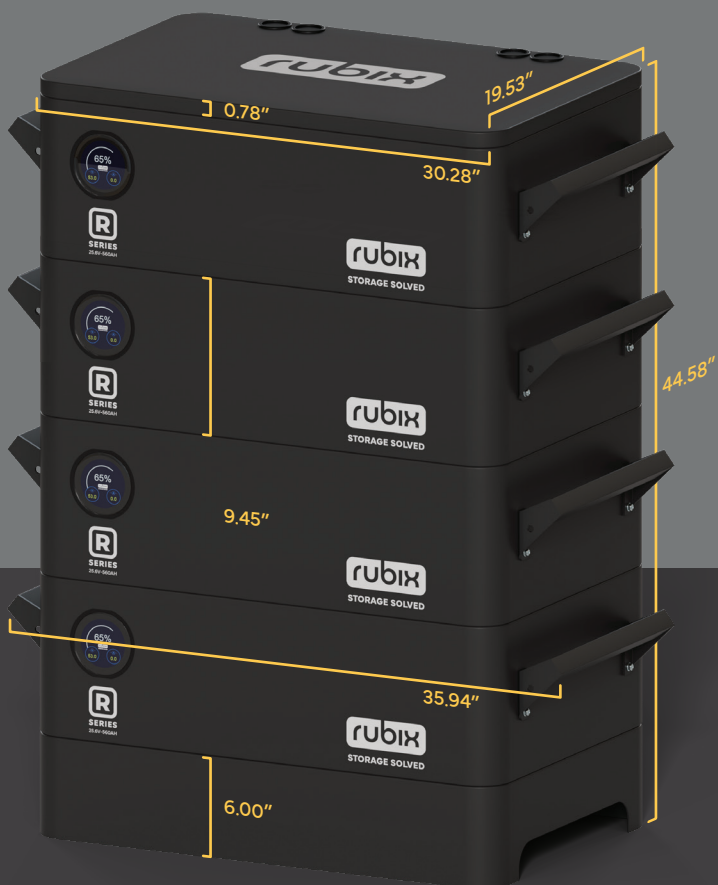
Cell Chemistry	LiFePO4
Cell Format	Prismatic
Balancing Type	Active
Max Balancing Current	2A
Cell Connection	Welded Busbar

Touchscreen LCD Features

State-of-Charge	Fault Logging
Charging/Discharging Current	Pack Voltage
Individual Cell Voltage	

Dimensions & Spacing

Minimum Spacing between Batteries and Wall	1 inch
Minimum Spacing between Parallel Battery Stacks	1 inch
Minimum Spacing between Top of Battery Stack and Solar Equipment on Wall	6 inches
Minimum Spacing between Battery Bank and Water Sources/Conductors	4 feet



Weight

Battery Weight	271 lb
Base Weight	66.6 lb
Lid Weight	20.8 lb

48V/280AH

RRS51280

Energy Rating	51.2V 280Ah (14.336kWh)
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Energy Scalability	32 × Parallel (457kWh)
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Charging/Discharging

Max Continuous Discharge Power	200A (10.24kW)
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Recommended Discharge Power	180A (9.216kW)
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Inverter Start-Up Capability	PWM Technology Start-Up
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Max Continuous Charging Power	180A (9.216kW)
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Peak Charging Power (30 min)	200A (10.24kW)
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Recommended Absorb Volts	56.8V
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Max Absorb Volts (Solar Only)	57.6V
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Absorb Done Amps (per Battery)	4% of capacity
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Absorb Done Time	10 min
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Float Voltage	54.4V
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Temp Comp—mV Degrees Celsius	0
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Max Recommended Discharge	51V (20%)
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Inverter Low Battery Cutout	48V
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Peukert Exponent	1.04
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Installation Requirements

Ventilation Required	No
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Minimum Environment Temp	32 °F
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Maximum Environment Temp	120 °F
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IP Rating	IP50
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Outdoor Rated	No
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Installation Position	Horizontal with Base Unit Only
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Maximum Batteries per Stack	4
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Terminal Specs

M8 Stainless Steel	Bolt-On
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Max Terminal Torque	18 ft-lbs
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Cycle Life Rating

RRS51280

Rated Cycle Life (100% DoD)	3,000 Cycles
Rated Cycle Life (80% DoD)	4,500 Cycles
Rated Cycle Life (50% DoD)	7,000 Cycles
Retained Capacity at End of Cycle Life	80%

Safety Features

Breaker Current Rating	250A
BMS Low Voltage Disconnect	41 +/-1V
BMS High Voltage Disconnect	59 +/-1V
BMS Low Temp Charging Disconnect	32 °F
BMS Low Discharging Disconnect	0 °F
Low Volts Cutout Wakeup	44V
High Volts Cutout Wakeup	55V
BMS High Temp Disconnect	135 °F
Pressure Vented Cells	Yes
Rapid Shut Down Function (RPSD)	Yes

Certifications

Cell Certification	UL 1973
Transport	UN 38.3

Internal Components

Cell Chemistry	LiFePO4
Cell Format	Prismatic
Balancing Type	Impactiv
Max Balancing Current	2A
Cell Connection	Welded Busbar

Touchscreen LCD Features

State-of-Charge	Fault Logging
Charging/Discharging Current	Pack Voltage
Individual Cell Voltage	Closed Loop Comm Plus

**FROM ALL
OF US IN
THE RUBIX
FAMILY ...**



**THANK YOU FOR
CHOOSING RUBIX!**



SUPPORT

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