lunar energy



Lunar Bridge Installation Manual

Revision History

Revision	Description of Change	Effective Date
1	Initial Release	12/26/2023
2	Compliance Updates	4/25/2024
3	Update to Figure 4 Terminal Drawing	09/19/2024
4	Update to 200 A Max OCPD Rating, Optional Load Tray Removal, Rogowski Coil (CTs) Installation	04/02/2025
5	Updated Bridge PN, add compatible breakers	12/11/2025

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Legal Information

A. Contact

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B. Legal Statement

For complete legal information, including copyrights, trademarks, licensing, terms of use, warranties, and customer privacy policy, visit www.lunarenergy.com.

C. Documentation

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D. Specifications

All specifications contained in this document are accurate at the time of publication. Lunar Energy reserves the right to make product modifications at any time without advance notice. For the latest product information, visit www.lunarenergy.com.

E. Copyright

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A. Trademarks

lunar energy	Lunar Energy Lunar Battery Lunar Bridge Lunar Maximizer Lunar Maximizer Hub

All other trademarks in this document are the property of their respective owners. The unauthorized use of any trademark displayed in this document or on the product is strictly prohibited.

B. Electronics and Battery Disposal

Waste electrical products should not be disposed of with household waste. Proper disposal of electronic equipment is required. Refer to local codes for disposal requirements.

Contact Lunar Energy for further guidance to identify how to properly decommission, dispose, recycle, and/or return hardware to Lunar Energy.

C. Warranty Information

The warranty for Lunar products depends on a reliable internet connection, which allows the system to receive regular over-the-air firmware updates. If a Lunar product is disconnected from the internet for an extended period, its warranty may be limited to five years. Refer to www.lunarenergy.com/warranty for more information.

Important Safety Instructions

SAVE THESE INSTRUCTIONS

This installation document provides instructions for storing, transporting, installing, commissioning and decommissioning the Lunar Battery. These instructions are for qualified installers and service technicians only.

Follow these instructions during installation, maintenance, and operation of the equipment. This section contains safety information that must be observed at all times when working on or using the equipment.

ATTENTION

Read this entire document before installing the equipment. Failure to follow the warnings or instructions in this document can result in electric shock, serious injury, or loss of life, or can damage the equipment, potentially rendering it inoperable.

Lunar Energy assumes no liability for injury or property damage due to installation or service attempted by unqualified individuals, or due to a failure of installers or service technicians to properly follow safety, installation and service instructions.

A. Intended Use

The product is a microgrid interconnect device for a solar photovoltaic and battery energy storage system. It is used in the Lunar Energy System along with a hybrid inverter and accessory components.

The product is intended for residential use in 120/240-volt split-phase, 3-wire electrical distribution systems in the North America region. Additional requirements are outlined in this Installation Manual. The equipment includes an integrated PCBA Module assembly for monitoring current and voltage within the Lunar Bridge panelboard and is intended for use as part of Power Control System (PCS) with the Lunar Inverter.

The product must be operated with third-party accessory components that are outlined in this document and approved by the electrical standards applicable in the jurisdiction of installation.

B. Safety and Advisory Symbols

The following symbols are used in this document to indicate important information:

	**WARNING**: Indicates a hazardous situation where failure to follow instructions or use proper materials may result in **serious injury, loss of life, or destruction of equipment**. Use caution and do not proceed until the indicated conditions or required procedures are fully understood and met.
	**CAUTION**: Indicates a hazardous situation where failure to follow instructions or use proper materials may result in **minor injury or damage to equipment**. Do not proceed until the indicated conditions or required procedures are fully understood and met.
	**NOTE:** Indicates an important step or additional information that highlights best practices or procedures. To avoid damage to equipment and achieve optimum results, follow the instructions carefully.

Les symboles suivants sont utilisés dans ce document pour indiquer des informations importantes:

	**AVERTISSEMENT:** Indique une situation dangereuse dans laquelle le non-respect des instructions ou l'utilisation de matériaux inappropriés peut entraîner **des blessures graves, la mort ou la destruction de l'équipement**. Soyez prudent et ne continuez pas tant que les conditions indiquées ou les procédures requises ne sont pas entièrement comprises et respectées.
	ATTENTION: Indique une situation dangereuse dans laquelle le non-respect des instructions ou l'utilisation de matériaux inappropriés peut entraîner **des blessures légères ou des dommages matériels**. Ne continuez pas tant que les conditions indiquées ou les procédures requises ne sont pas entièrement comprises et respectées.
	**NOTE:** Indique une étape importante ou des informations supplémentaires qui **mettent en évidence les meilleures pratiques ou procédures**. Pour éviter d'endommager l'équipement et obtenir des résultats optimaux, suivez attentivement les instructions.

C. Documentation

⚠ **WARNING:** Follow all safety precautions in the owner's manual, installation manual, and other documents included with the equipment.
⚠ **WARNING**: Read all instructions and cautionary markings in this document and on the equipment before installing the equipment. Failure to follow any of the instructions or warnings in this document may result in electric shock, serious injury, or loss of life.
⚠ **AVERTISSEMENT**: Suivez toutes les précautions de sécurité contenues dans le manuel du propriétaire, le manuel d'installation et les autres documents fournis avec l'équipement.
⚠ **AVERTISSEMENT**: Lisez toutes les instructions et mises en garde contenues dans ce document et sur l'équipement avant installation. Le non-respect des instructions ou des avertissements de ce document peut entraîner un choc électrique, des blessures graves, voire la mort.

D. Service Contact Information

For assistance with installation, service, or repairs, you can reach Lunar Energy Installer Support between 8 AM and 7 PM (PST) through the following methods:

- Telephone: 650-535-1969
- Email: installersupport@lunarenergy.com
- Lunar Installation App (live-chat, phone or email)

When reaching out to Lunar Energy Installer Support for service or parts inquiries, please have the product model and serial number, readily available.

E. Safety Rules and General Information

All installations must conform to the laws, regulations, codes and standards applicable in the jurisdiction of installation. Before starting an installation, consult a local building or electrical inspector for local codes, permit and inspection requirements.

Jurisdiction	Code
United States	National Electrical Code (ANSI/NFPA 70)
Canada	Canadian Electrical Code (CSA Z462, CSA C22.1, Part 1)

⚠ **WARNING**: Only qualified electrical personnel should install, troubleshoot, service, or replace the equipment.

⚠ **WARNING**: Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices.

⚠ **WARNING**: Turn off all power supplying this equipment before working on or inside the equipment. Always use a properly-rated voltage sensing device to confirm power is off. Replace all devices, covers, and doors before turning on power to the equipment.

⚠ **WARNING**: To protect the equipment and its components from damage when transporting, handle with care. To help prevent damage, leave all equipment in its shipping packaging until it is ready to be installed.

⚠ **WARNING**: Inspect the equipment for damage before installing. Do not install the equipment if it has been damaged in any way.

⚠ **WARNING**: Do not attempt to open, disassemble, repair, tamper with, or modify the equipment. The equipment contains no user-serviceable or field-replaceable parts. Contact the installer who installed the equipment for any repairs.

⚠ **WARNING**: Do not insert foreign objects into any part of the equipment.

⚠ **WARNING**: Do not expose the equipment or any of its components to direct flame.

⚠ **WARNING**: This product is not intended to be used in a critical life support application. Failure to adhere to this warning could result in loss of life or serious injury.

⚠ **WARNING**: Prop 65 Warning for California Residents: This product may contain chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.

⚠ **CAUTION**: Do not use parts or accessories other than those specified for use with the equipment.

⚠ **CAUTION**: Do not paint any part of the equipment, including any internal or external components or covers.

⚠ **CAUTION**: Do not use solvents to clean the equipment, or expose the equipment to flammable or harsh chemicals or vapors. Do not allow petroleum-based paints, solvents, or sprays to contact nonmetallic parts of the equipment.

⚠ **AVERTISSEMENT**: Seul un électricien qualifié doit installer, dépanner, entretenir ou remplacer l'équipement.

⚠ **AVERTISSEMENT**: Appliquez les équipements de protection individuelle (EPI) appropriés et suivez les procédures de sécurité électrique.

⚠ **AVERTISSEMENT**: Coupez toute alimentation électrique alimentant cet équipement avant de travailler sur ou à l'intérieur de l'équipement. Utilisez toujours un dispositif de détection de tension correctement calibré pour confirmer que l'alimentation est coupée. Remplacez tous les appareils, capots et portes avant de mettre l'équipement sous tension.

⚠ **AVERTISSEMENT**: Pour protéger l'équipement et ses composants contre les dommages liés au transport, manipulez avec précaution. Pour éviter tout dommage, laissez l'équipement dans son emballage d'origine jusqu'à ce qu'il soit prêt à être installé.

⚠ **AVERTISSEMENT**: Inspectez l'équipement pour déceler tout dommage avant installation. N'installez pas l'équipement s'il a été endommagé de quelque manière que ce soit.

⚠ **AVERTISSEMENT**: N'essayez pas d'ouvrir, de démonter, de réparer, de falsifier ou de modifier l'équipement. L'équipement ne contient aucune pièce réparable par l'utilisateur. Contactez l'installateur qui a installé l'équipement pour toute réparation.

⚠ **AVERTISSEMENT**: N'insérez aucun objet étranger dans l'équipement.

⚠ **AVERTISSEMENT**: N'exposez pas l'équipement ou l'un de ses composants à une source de chaleur directe.

⚠ **AVERTISSEMENT**: Ce produit n'est pas destiné à être utilisé dans une application critique de survie. Le non-respect de cet avertissement pourrait entraîner la mort ou des blessures graves.

⚠ **AVERTISSEMENT**: Avertissement Prop 65 pour les résidents de Californie : ce produit peut contenir des produits chimiques connus par l'État de Californie pour provoquer le cancer, des malformations congénitales et d'autres problèmes de reproduction.

⚠ **ATTENTION**: Ne pas utiliser de pièces ou accessoires autres que ceux spécifiés pour être utilisés avec l'équipement.

⚠ **ATTENTION**: Ne peignez aucune partie de l'équipement, y compris les composants ou couvercles internes ou externes.

⚠ **ATTENTION**: N'utilisez pas de solvants pour nettoyer l'équipement et n'exposez pas l'équipement à des produits chimiques ou des vapeurs inflammables ou agressifs. Ne laissez pas les peintures, solvants ou sprays à base de pétrole entrer en contact avec les parties non métalliques de l'équipement.

F. Storage, Installation, and Use

⚠ **WARNING**: Do not store the equipment for more than six (6) months, or permit the electrical feed to the equipment to be disconnected for more than six (6) months, without placing the equipment into a storage condition as approved by Lunar Energy.

⚠ **WARNING**: These service instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that specified in the operating instructions unless you are qualified to do so.

⚠ **WARNING**: Before making any connections, verify that the circuit breaker(s) are in the off position. Double check all wiring before applying power.

⚠ **WARNING**: Before making any connections, verify that the inverter rotary disconnect switch is in the OFF position.

⚠ **WARNING**: Ensure that all wiring is correct and that none of the wires are pinched or damaged.

⚠ **WARNING**: Do not connect this equipment to an electrical system with other power production sources unless directed to do so in these installation instructions.

⚠ **WARNING**: Only use approved devices, fasteners, and wiring as outlined in these instructions.

⚠ **WARNING**: Ensure that the equipment is properly grounded before applying power.

⚠ **WARNING**: Always de-energize the equipment before servicing. It is best practice to de-energize the equipment before disconnecting it.

⚠ **WARNING**: Only perform service on the equipment as detailed in these instructions, or under the instruction of Lunar Energy.

⚠ **WARNING**: Ensure that power coming from any connected equipment is de-energized before servicing or installing.

⚠ **WARNING**: Do not install the equipment or any of its components near heating equipment.

⚠ **WARNING**: Do not immerse the equipment or any of its components in water or other fluids.

⚠ **WARNING**: Do not open or disassemble the equipment, or any of its components, outside of what is instructed in this manual.

⚠ **WARNING**: Do not inflict mechanical damage (such as dropping, deforming, impacting, cutting, or penetrating with a sharp object) on the equipment or otherwise modify it.

⚠ **WARNING**: Do not heat the equipment. Keep it away from sources of ignition and operate it only

within the permissible temperature range.

⚠ **WARNING**: Do not short-circuit the equipment.

⚠ **WARNING**: Do not use equipment in a manner not specified by the manufacturer. Doing so may cause injury or loss of life, or damage to equipment.

⚠ **WARNING**: Do not use equipment if it is defective, appears to be damaged, or fails to operate.

⚠ **WARNING**: Risk of electric shock and fire. Use only with PV modules with a maximum system voltage rating of 600V or higher.

⚠ **WARNING**: When a ground fault is indicated, normally ungrounded conductors may be grounded.

⚠ **CAUTION**: Ensure that all wire connections are tightened to the factory-specified torque value.

✓ **NOTE**: The equipment is intended to operate with a connection to the Internet. Failure to maintain an Internet connection may affect the warranty.

✓ **NOTE**: The Lunar Battery will not operate as intended unless installed with the Lunar Bridge, Lunar Maximizers, and Lunar Maximizer Hub.

⚠ **AVERTISSEMENT**: Ne stockez pas l'équipement pendant plus de six (6) mois, et ne permettez pas que l'alimentation électrique de l'équipement soit déconnectée pendant plus de six (6) mois, sans placer l'équipement dans un état de stockage approuvé par Lunar Energy.

⚠ **AVERTISSEMENT**: Avant d'effectuer des connexions, vérifiez que le(s) disjoncteur(s) est (sont) en position d'arrêt. Vérifiez à nouveau tout le câblage avant de mettre sous tension.

⚠ **AVERTISSEMENT**: Avant d'effectuer des connexions, vérifiez que le sectionneur rotatif de l'onduleur est en position OFF.

⚠ **AVERTISSEMENT**: Assurez-vous que tout le câblage est correct et qu'aucun fil n'est pincé ou endommagé.

⚠ **AVERTISSEMENT**: Ne connectez pas cet équipement à un système électrique avec d'autres sources de production d'énergie, sauf indication contraire dans ces instructions d'installation.

⚠ **AVERTISSEMENT**: Utilisez uniquement des appareils, des fixations et un câblage approuvés, comme indiqué dans ces instructions.

⚠ **AVERTISSEMENT**: Assurez-vous que l'équipement est correctement relié à la terre avant de mettre sous tension.

⚠ **AVERTISSEMENT**: Mettez toujours l’équipement hors tension avant de procéder à l’entretien. Il est recommandé de mettre l'équipement hors tension avant de le débrancher.

⚠ **AVERTISSEMENT**: N'effectuez l'entretien de l'équipement que comme détaillé dans ces instructions ou sous les instructions d’une personne qualifiée par Lunar Energy.

⚠ **AVERTISSEMENT**: Assurez-vous que l’alimentation provenant de tout équipement connecté est hors tension avant l’entretien ou l’installation.

⚠ **AVERTISSEMENT**: N'installez pas l'équipement ou l'un de ses composants à proximité d'un équipement de chauffage.

⚠ **AVERTISSEMENT**: Ne plongez pas l'équipement ou l'un de ses composants dans l'eau ou autres liquides.

⚠ **AVERTISSEMENT**: N'ouvrez pas et ne démontez pas l'équipement, ou l'un de ses composants, en dehors de ce qui est indiqué dans ce manuel.

⚠ **AVERTISSEMENT**: N'infligez pas de dommages mécaniques (tels que chute, déformation, impact, coupure ou pénétration avec un objet pointu) à l'équipement Ne modifiez pas l'équipement de quelque manière que ce soit.

⚠ **AVERTISSEMENT**: Ne chauffez pas l’équipement. Tenez-le à l'écart des sources de chaleur et faites-le fonctionner uniquement dans la plage de température autorisée.

⚠ **AVERTISSEMENT**: Ne court-circuitez pas l'équipement.

⚠ **AVERTISSEMENT**: N'utilisez pas l'équipement d'une manière non spécifiée par le fabricant. Cela pourrait provoquer des blessures, voire la mort, ou endommager l'équipement.

⚠ **AVERTISSEMENT**: N'utilisez pas l'équipement s'il est défectueux, s'il semble endommagé ou s'il ne fonctionne pas.

⚠ **AVERTISSEMENT**: Risque de choc électrique et d'incendie. Utiliser uniquement avec des modules PhotoVoltaïques avec une tension nominale maximale du système de 600 V ou plus.

⚠ **ATTENTION**: Assurez-vous que toutes les connexions filaires sont serrées au couple spécifié en usine.

✓ **NOTE**: L'équipement est destiné à fonctionner avec une connexion à Internet. Le fait de ne pas maintenir une connexion Internet peut affecter la garantie.

✓ **NOTE**: La batterie Lunar ne fonctionnera pas comme prévu à moins d'être installée avec le Lunar Bridge, les Lunar Maximizers et le Lunar Maximizer Hub.

G. Environmental Conditions

⚠ **WARNING**: Do not expose the equipment to ambient temperatures outside of the storage and operating conditions outlined in this document.

⚠ **WARNING**: The equipment is certified for indoor and outdoor installation. However, the equipment should be installed in a location that prevents damage from flooding, directed water flow, or pressurized water. Ensure that no water sources are above or near the equipment, including downspouts or large sprinklers.

⚠ **CAUTION**: To ensure proper ventilation, do not allow debris to accumulate on or around the equipment.

⚠ **AVERTISSEMENT**: N'exposez pas l'équipement à des températures en dehors des conditions de stockage et de fonctionnement décrites dans ce document.

⚠ **AVERTISSEMENT**: L'équipement est certifié pour une installation intérieure et extérieure. Cependant, l'équipement doit être installé dans un endroit qui évite les dommages dus aux inondations. Assurez-vous qu'aucune source d'eau ne se trouve au-dessus ou à proximité de l'équipement, y compris les descentes pluviales, les arroseurs ou les robinets.

⚠ **ATTENTION**: Pour garantir une ventilation adéquate, ne laissez pas les débris s’accumuler sur ou autour de l’équipement.

H. Warning Symbols

These symbols used in labels on the product indicate important safety information:

	**CAUTION**: Indicates caution is necessary when operating the device or the control near the symbol.
	**RISK OF ELECTRIC SHOCK**: Indicates components that present risk of electric shock.
	**GROUNDING TERMINAL**: Indicates location of grounding connection on the equipment.
	**REFER TO INSTRUCTIONS**: Indicates that the user should refer to operating or installation instructions before proceeding.
O	**OFF**: Indicates the OFF position
I	**ON**: Indicates the ON position

Ces symboles utilisés sur les étiquettes du produit indiquent des informations de sécurité importantes:

	**ATTENTION**: Indique qu'une ATTENTION est nécessaire lors de l'utilisation de l'appareil ou de la commande à proximité du symbole.
	**RISQUE DE CHOC ELECTRIQUE**: Indique les composants présentant un risque de choc électrique.
	**BORNE DE MISE À LA TERRE**: Indique l'emplacement de la connexion à la terre sur l'équipement.
	**RÉFÉREZ-VOUS AUX INSTRUCTIONS**: Indique que l'utilisateur doit se référer aux instructions d'utilisation ou d'installation avant de procéder.

O	**HORS TENSION** : Indique la position HORS TENSION
I	**EN MARCHE** : Indique la position EN MARCHE

I. Qualified Personnel

This manual and the procedures described within are intended for use by qualified installers and service technicians only. Qualified personnel must have the following skills and experience:

- Knowledge of the principles and operation of on-grid and off-grid (backup) electrical systems.
- Knowledge of the risks associated with installing and using electrical devices and acceptable mitigation methods.
- Knowledge of installation of electrical devices.
- Knowledge of and adherence to all applicable safety precautions and best practices.

Regulatory Statements

A. Compliance Summary

The product is listed to the applicable product standards shown in the following table for the indicated jurisdictions.

North America	
Certifications	Bridge: UL 1741, UL 67, UL 869A Rogowski Coils: UL 2808
Emissions	FCC Part 15 Class B

B. Compliance Statements

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

   (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

   This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation if this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

   - Reorient or relocate the receiving antenna.
   - Increase the separation between the equipment and receiver.
   - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
   - Consult the dealer or an experienced radio/TV technician for help.

⚠ **CAUTION**: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure Information:
This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

2. **ISED Notice:**
   This device complies with Innovation, Science and Economic Development Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
   this device may not cause interference, and this device must accept any interference, including interference that may cause undesired operation of the device.

   Le présent appareil est conforme aux CNR Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: l'appareil ne doit pas produire de brouillage, et l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en.

   This Class B digital apparatus complies with Canadian ICES-003.

   Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

   ISED Radiation Exposure Statement

   This device complies with RSS-102 radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the ISED radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

   Cet appareil est conforme aux limites d'exposition aux rayonnements de la CNR-102 définies pour un environnement non contrôlé. Afin d'éviter la possibilité de dépasser les limites d'exposition aux fréquences radio de la CNR-102, la proximité humaine à l'antenne ne doit pas être inférieure à 20 cm (8 pouces) pendant le fonctionnement normal.

3. **Signage:**
   Where NFPA 855 signage is required, the installer shall provide it.

Lunar Bridge Specifications

System	
Part Number	90-001221, 90-06801A
Nominal Voltage	120/240 Va.c.
Nominal Frequency	60 Hz
Current Rating	200 A
Busbar Rating	200 A
Off-Grid Switchover Time	< 0.03s
Overcurrent Protective Device	Up to 200 A
Number of Panelboard Spaces	20 Spaces / 40 Circuits
Overvoltage Category	IV
Measurement Category	CAT III
Current Sensor Accuracy	Integral: +/- 0.2% External (Rogowski Coil): +/-5%
Warranty	12.5 Years

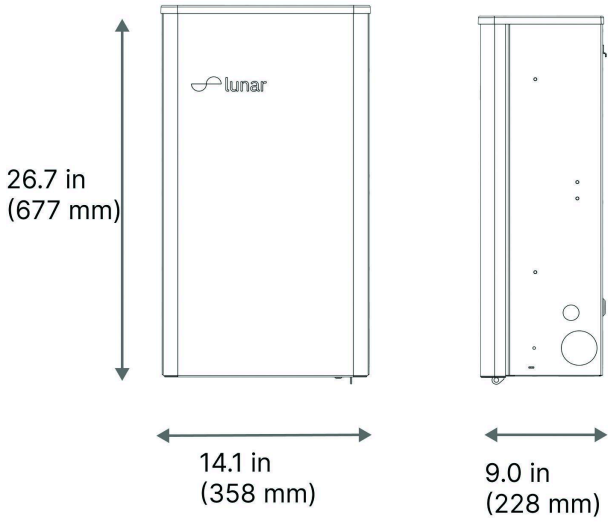
Environmental

Operating Temperature*	–40°F (–40°C) to 140°F (60°C)
Storage Temperature	–40°F (–40°C) to 140°F (60°C)
Environment	Indoor and outdoor
Ingress Rating	Type 3R
Humidity	100%
Mains Voltage Fluctuations	±10 %
Pollution Degree	2
Maximum Elevation	9,843 ft (3000m)

* Refer to installed breaker ratings for overload protection temperature ratings. Separate overload protection shall be provided as required by the National Electrical Code (ANSI/NFPA 70) or the Canadian Electrical Code (CSA Z462, CSA C22.1) if ambient temperature is below 32°F (0°C).

Mechanical Specifications

Dimension (L x W x D)	26.7” x 14.1” x 9” (677 mm x 358 mm x 228 mm)
Mass	44 lbs (20 kg)
Mounting	Wall or semi-flush mount



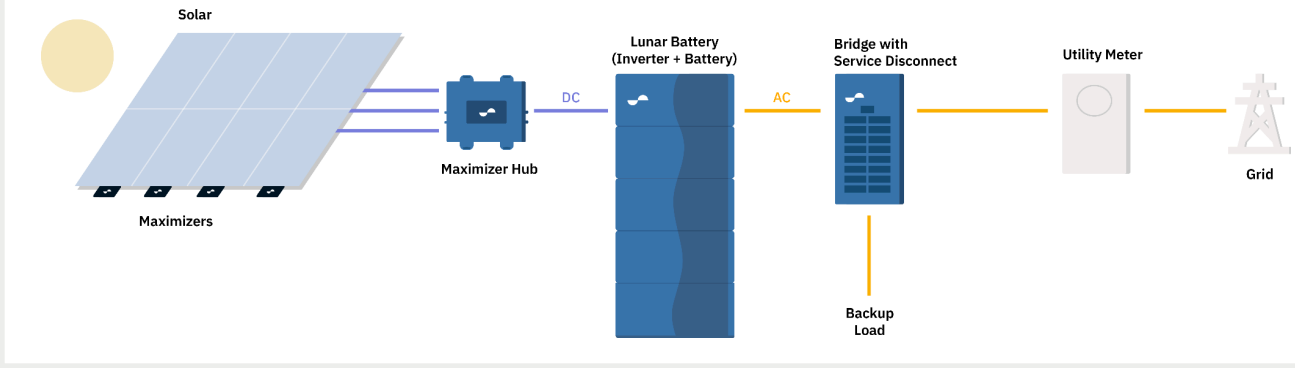
System Overview

The Lunar Bridge is a component of the Lunar Energy integrated solar battery and energy storage system. The system consists of a smart hybrid inverter, a modular battery system, a microgrid interconnect device, and module-level power electronics that allow control of solar generation, energy storage, and loads.

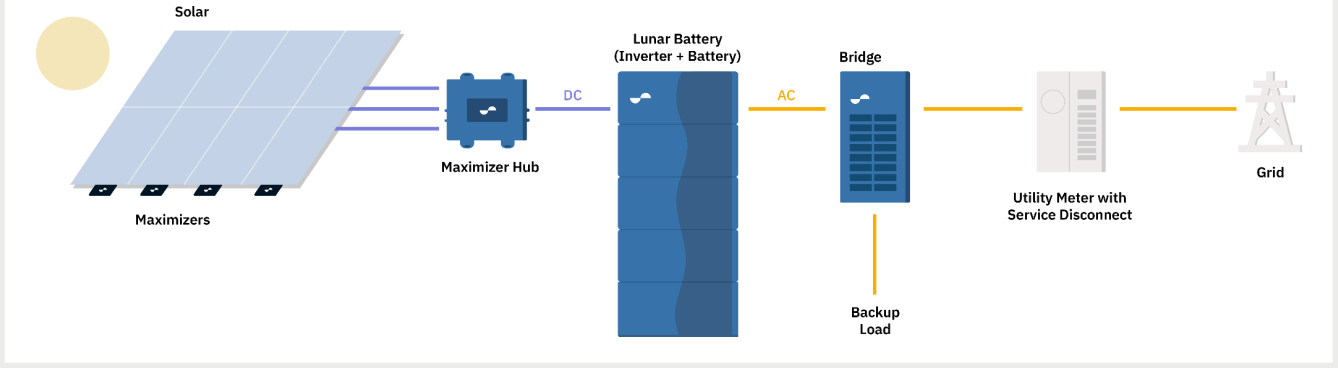
This section outlines how the Lunar Bridge interacts with the rest of the Lunar Energy system.

A. System Diagrams

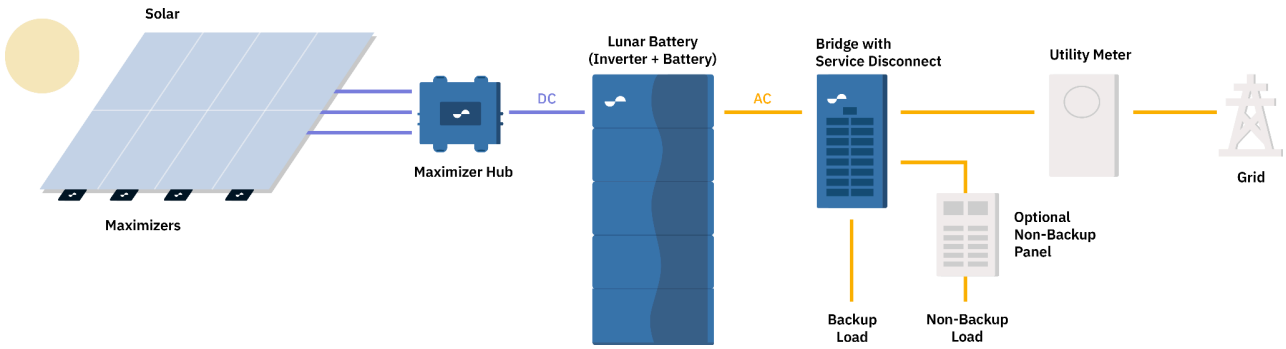
Whole Home: Lunar System with Service Disconnect at Lunar Bridge



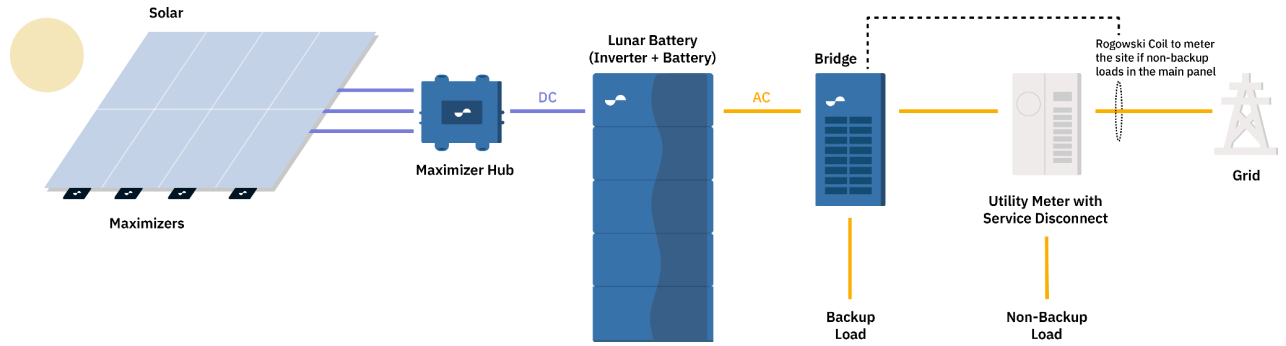
Whole Home: Lunar System with Service Disconnect at Utility Meter



Partial Home: Lunar System with Service Disconnect at Lunar Bridge



Partial Home: Lunar System with Service Disconnect at Utility Meter



B. Lunar Bridge Internal Components

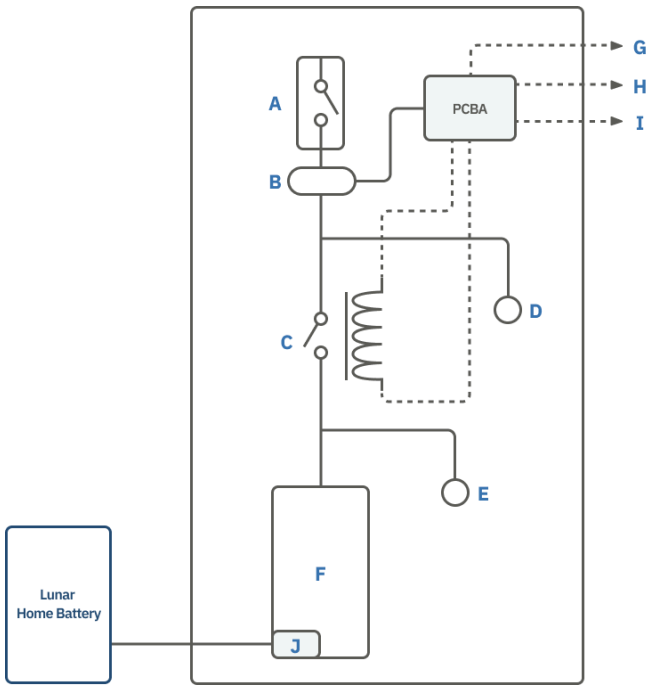


Figure 3. Lunar Energy Bridge internal component diagram.

Lunar Bridge Internal Components	
A	Grid supply input or optional field-installed Main Breaker
B	Factory-installed current transformers (CTs)
C	Relay, relay drive, and voltage sense on both load and supply side of relay
D	Wire terminals for non-backup subpanels
E	Wire terminals for backup subpanels
F	20-space/40-circuit load tray busbar for backup breakers
G	Optional field-installed Rogowski Coils
H	13 V DC power from Lunar Battery
I	Lunar Battery output breaker with Lunar Energy Hold Down or Eaton BRHDK125 hold down kit Breaker must be located in the bottom 2 rows of the load tray (left or right).

C. Bridge Configurations

The Lunar Bridge allows two types of configurations:

1. As a main panel - used as service entrance equipment with service disconnect, with main bonding jumper installed (neutral-ground bond), and with terminal lug insulating covers.
2. As a sub-panel - not used as service entrance equipment and without a main bonding jumper (neutral-ground bond).

> ⚠ **WARNING**: Ensure the grounded conductor is properly connected to the installation grounding conductor at the service disconnect.

D. Battery to Bridge Connections

The Lunar Bridge connects to the Lunar Battery via the following connections:

Low voltage connections:
The cable is a 4-wire configuration, comprising a 13V+ power circuit, a signal ground, and two wires for the CAN Hi and CAN Low communication circuit.

High voltage connections:
The Lunar Battery AC circuit and its overcurrent protection must be installed on the backup side, which is the load side of the relay within the Lunar Bridge. For simplicity, the easiest installation method is usually to place the ESS breaker directly inside the Lunar Bridge. Alternatively, the ESS breaker can be installed in a subpanel that connects to the Lunar Bridge.

E. Bridge Connections and Interfaces

The Lunar Bridge includes the following connections:

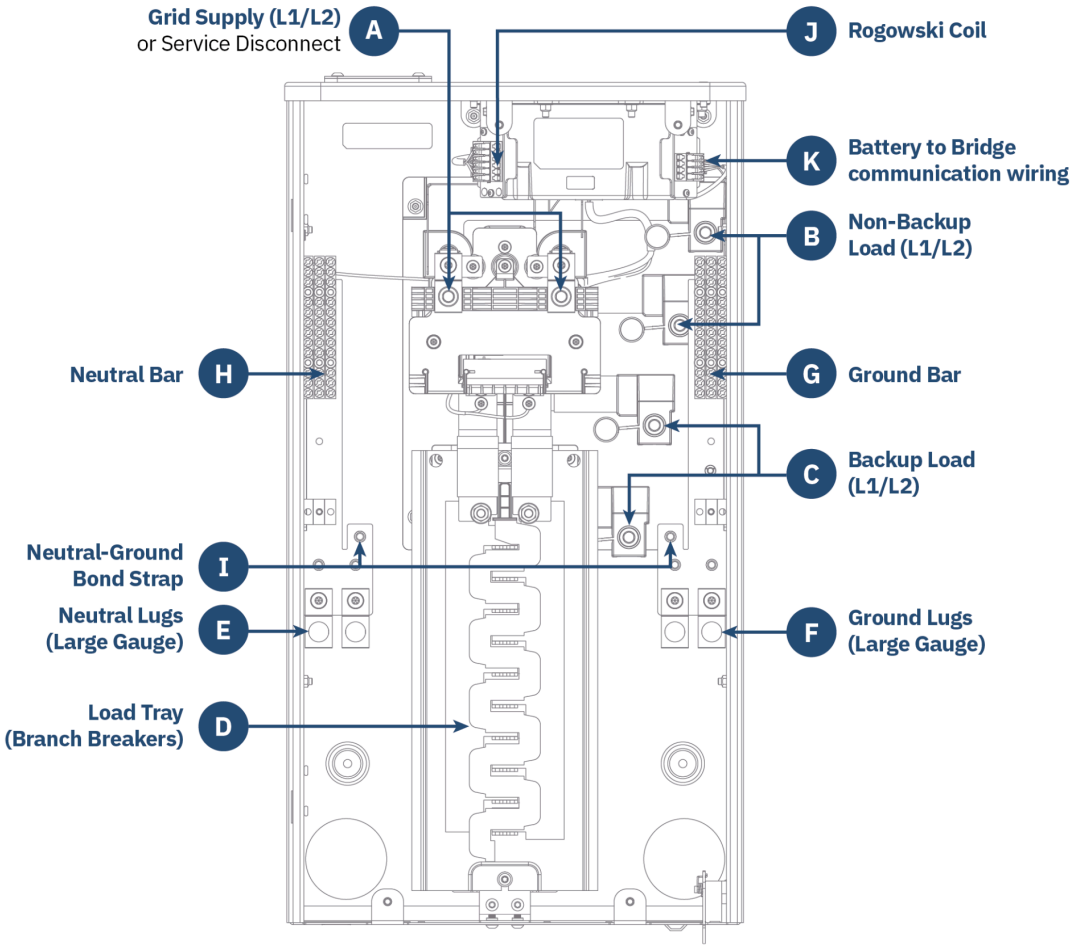


Figure 4: Lunar Bridge Connections and Interfaces

Terminal	Wire Gauge	Wire Strip	Tool	Torque
A, B, C, E, F	6 AWG -250 kcmil	1 in	5/16” hex	250 in-lbs (28 N-m)
G, H	4-14 AWG	0.312 in	1/8” hex	10-14 AWG: 20 in-lbs 8 AWG: 25 in-lbs 4-6 AWG: 30 in-lbs
J	12-22 AWG, Shielded	0.4 in	Toolless	Lever arm
D	See breaker. Compatible with Eaton BRHDK125 and Lunar breaker hold down kit			

	(10-005080) where required		
E, F	Optional: Replace factory terminal with ILSCO PB2300 2-port terminal. Reuse M6 fastener holding existing terminal lug.	T25 or T27	115 in-lb (13 N-m)
G,H	Optional: Install ILSCO NBAS-012-2-A for additional terminations. Use (2x) M5 x 14, Steel, Zn-Ni plated bolt to fasten terminal bar	T25	35 in-lb (4 N-m)
A	Optional: Install Service Disconnect (1x) Center mounting screw (2x) M6 Side electrical screws Reuse Bridge fasteners or use fasteners provided with Square D QOM2XXXVH main breaker	T25 (Lunar) T27 (Lunar) Flat (SQD)	(1x) T25 Center Screw: 30 in-lb (3 N-m) (2x) T27 Side Screws: 75 in-lb (9 N-m) for T27
I	Optional: Install only with Service Disconnect (2x) M6 screws provided with Bridge	T25 or T27	115 in-lb (13 N-m)
Wire type: Use minimum 75°C rated Cu/Al conductors			

Site Requirements

A. Location

The Lunar Bridge can be installed either indoors or outdoors, as long as the installation meets local access requirements. For outdoor installations, the chosen location must adhere to the system's environmental specifications, including requirements for temperature, moisture, and ingress protection. These specifications are detailed in the ***Lunar Bridge Specification, Environmental Specifications***.

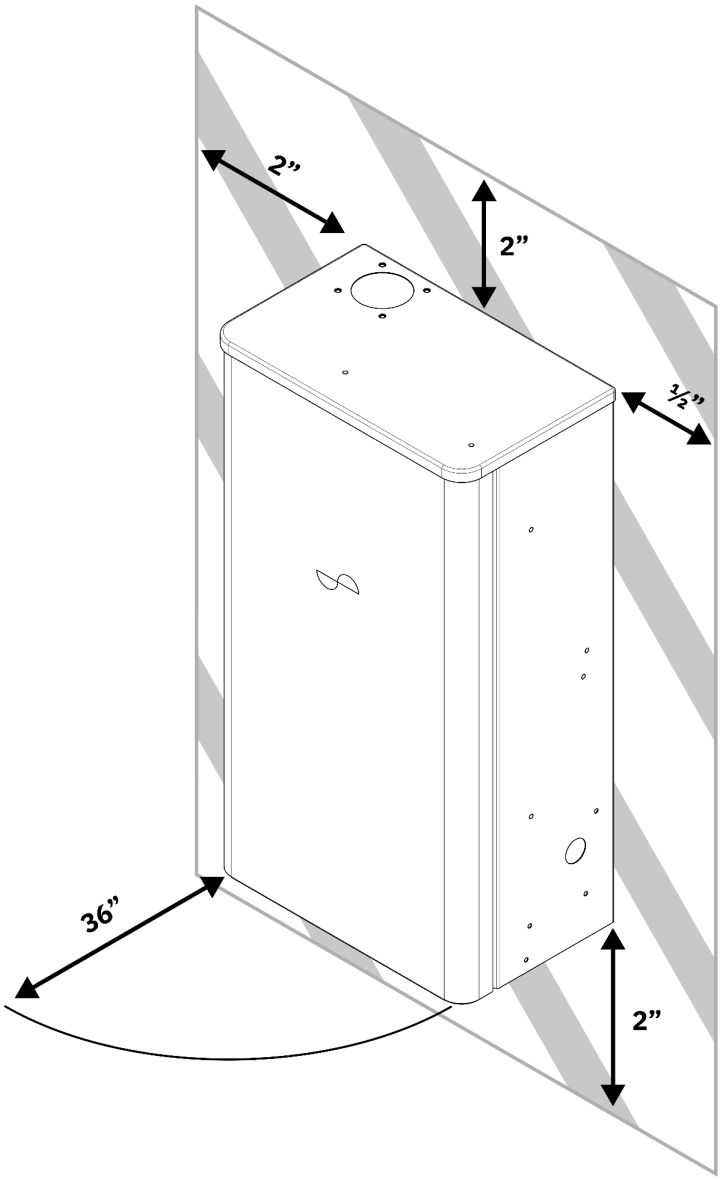
B. Mounting Options

The Lunar Bridge can be installed in two ways: either surface-mounted or semi-flush mounted on a wall. The chosen installation method must comply with the site location requirements, fastener requirements, product clearance requirements, and all applicable local codes and regulations.

⚠ **WARNING**: Do not install the product without anchoring it to a suitable wall capable of supporting the system.

C. Clearances

The installation location must provide adequate minimum distances between the enclosure and any architectural features or obstructions. These distances are necessary to ensure sufficient space for installation, operation, and servicing. Additionally, the location must comply with all local codes governing access to equipment doors, panels, and controls. Use the table below as a reference when planning the installation location for the Bridge.



Clearances for installation of Bridge	
Minimum Wall Space	28.7 in x 16.1 in wide (72.7 x 40.8 cm)
Minimum Clearance on Left Side	2 in (5cm) for 90° door open 8.3 in (21cm) for 180° door open
Minimum Clearance on Right Side	0.5 in (1.25cm)
Minimum Clearance Above	2 in (5cm)
Minimum Clearance Below	2 in (5cm)
Minimum Space in Front of Bridge	Abide by local code required clearances.
Maximum Height above ground/floor	73.5 inches (187cm)
Maximum Deviation from Level	Side-to-side: +/– 5° Back-to-front: +/– 5°

D. The Bridge location relative to the Lunar Battery

Depending on the architectural details of the installation site, the Bridge enclosure can be fastened above, adjacent to, or located separately from the Lunar Battery.

Mounting the Bridge above the Lunar Battery

When installing the Bridge above the Lunar Battery, refer to the figure below to identify the required minimum distance between the Bridge mounting bracket and the Inverter bracket. This spacing is critical to ensure proper installation and compliance with system requirements.

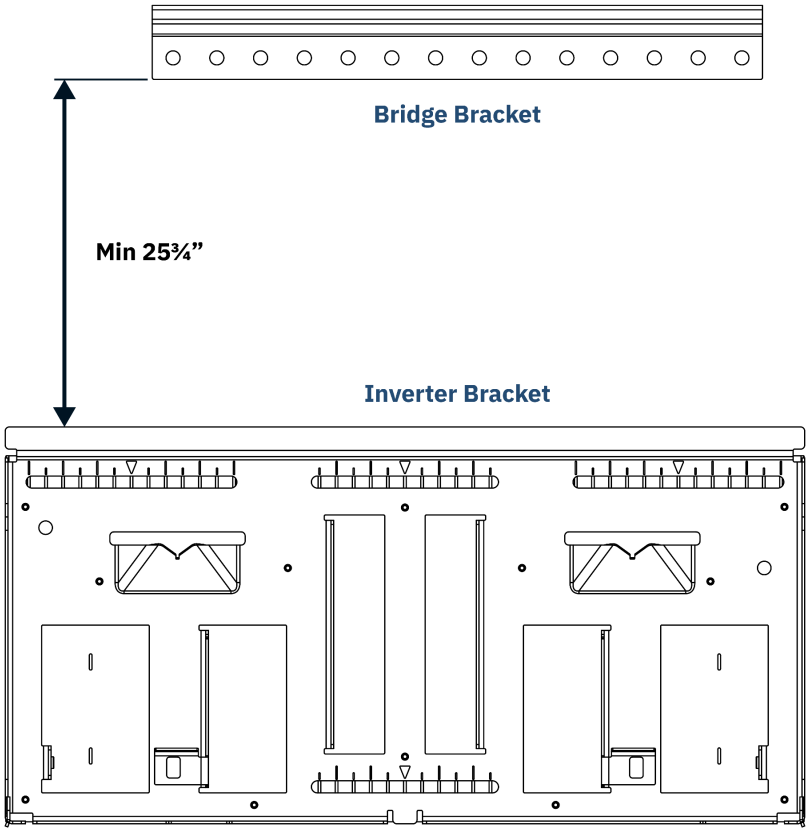


Figure 5: Minimum bracket requirement spacing for mounting the Bridge above the Battery.

E. Maximum Distance between System Components

The Lunar Bridge supports the following distances between Lunar system components and between the Lunar system and the home electrical systems. Wire selection must meet local codes and is in some cases also based on the distance of the cable run.

Refer to the table below when planning the install locations of system components.

Maximum Wire Lengths between System Components		
Wiring Distance	**Wire Gauge (AWG)**	**Maximum Wire Length**
Inverter to Bridge Communication	Cat5e, Cat6, Cat6a, 14 - 22 AWG (shielded, twisted or un-twisted)	95 ft (29.5 m)

Tools and Materials

A. Tools

The following tools are the minimum required for the installation of the Bridge. Depending on the specific installation conditions, additional standard construction tools may also be necessary.

- Ensure you use personal protective equipment (PPE) rated for electrical installations, including safety glasses, insulated gloves, and protective footwear, to ensure safety during the installation process.
- Conduit bending, cutting, and reaming tools.
- A 1/2" - 2” trade size knockout punch tool kit.
- Drill with up to 1/4" diameter drill bits.
- Torque screwdriver up to 45 in-lbs with 1/8" hex, 4mm hex, T25, T27, Square Robinson #2, & 5mm flat head bits.
- Torque wrench up to 250 in-lbs with 5/16” hex bits.
- Wire stripper/cutter for 250 kcmil - 22 AWG wires.
- Multimeter.

B. Materials

The following materials may be required for the installation of the Bridge. Depending on the specific installation conditions, additional standard materials and consumables may also be necessary.

- Anchoring fasteners (refer to the ***Anchoring Details*** section)
- UL 514B electrical conduit, fittings, and adapters (½” - 2” trade size)
- Minimum 600V rated copper (Cu) cable for power connections (14 AWG to 250 kcmil)
- Minimum 600V rated 4-conductor shielded copper (Cu) cable for communication connections (24 AWG - 18 AWG)
- (Optional) Main breaker when used as a main panel (Refer to the Compatible Circuit Breakers section)
- (Optional) Branch breakers (Refer to the ***Compatible Circuit Breakers*** section)
- (Optional) NEMA Type 4X A-series 2-inch conduit hub
- (Optional) Eaton breaker hold-down kit (Refer to relevant section for details)
- (Optional) Lunar-supplied Rogowski Coils
- (Optional) Ilsco NBAS-012-2-A terminal bar for additional small gauge neutral and ground terminations
- (Optional) Ilsco PB2300 for additional large gauge neutral and ground terminals

C. Compatible Circuit Breakers

The following circuit breakers are compatible with the Lunar Bridge. Ensure that the selected circuit breakers meet the specific requirements of your installation and comply with local electrical codes.

The Bridge panelboard has a maximum short-circuit current rating of 22kA RMS symmetrical. However, the actual rating will vary based on the specific combination of main and branch breakers installed in the panelboard.*

For 22kA Short Circuit Current Rating:

- Main Breaker: Square D QOM2200.
- Compatible Breakers: Eaton BQ250250, BQC250250, BR2125, BR2100H, BRN120AF, BRN120DF, BRN260GF.

For 10kA Short Circuit Current Rating:

- Main Breaker: Square D QOM2200 or none.
- Compatible Breakers: Eaton BD5050, BJ2200, BRL220CAF, BRN130GF, DNPL1515, SBR215WGF or BRS feed through lugs.

*The maximum amperage size for each compatible breaker model is provided. Breakers with smaller amperage sizes for both main and branch configurations are also compatible, maintaining the specified short-circuit current rating (SCCR).

Compatible Circuit Breaker Models			
Type / Location	**Quantity**	**Manufacturer and Model**	**Rating**
Main Breaker / Service Disconnect	1	Square D QOM2XXXVH	100 A - 200 A
Branch breakers / Load tray	20 spaces 40 circuits	Eaton BD, BR, BQ,BJ, BQC, BRN, BRL, BRCAF, DNPL, GFTCB, BRH, SBR, or equivalent, or BRS feed through lugs	15 A - 200 A

D. Eaton AbleEdge Smart Breakers

Eaton AbleEdge Smart Breakers, when paired with the Lunar System, offer a flexible and intuitive approach to load management. Installed inside the Lunar Bridge, they communicate via a dedicated Wi-Fi network, allowing smart management of loads during off-grid events, and monitoring and control of individual loads remotely through the Lunar App. The breakers' power and energy data also enable advanced home energy insights.

Installation Requirements

Only install Eaton AbleEdge Smart Breakers sourced directly from Lunar Energy or an authorized electrical supply warehouse. They are available in 30A, 40A, 50A, 60A sizes at launch, with 15A and 20A sizes following. They come in 2-pole configurations with AFCI and GFCI protection. The datasheet for Eaton AbleEdge Smart Breakers can be found [here].

At this time smart breakers can only be installed inside the Lunar Bridge. Future guidance will be provided on communication distances for breakers outside the Bridge, and for sites with a Meter Socket Adapter (MSA) instead of a Bridge.

The Lunar System supports up to 8x smart breakers in total, at this time.

Wire terminations are detailed below. It is critical that the load neutral (if present) be terminated directly on the breaker (not on the neutral terminal bar). The neutral pigtail from the breaker should terminate on the neutral terminal bar.

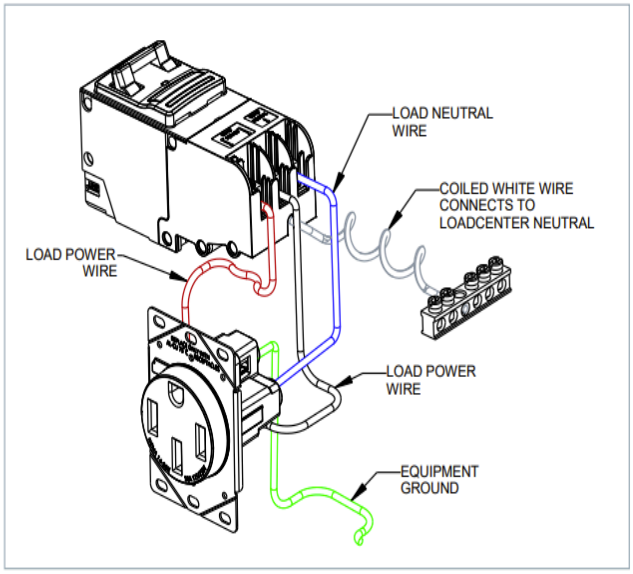


Figure 1. Wiring Diagram

Prepare for Installation

A. Transport and Unpack the Bridge

What components come in the box:

- Bridge assembly.
- Bridge dead front.
- Bridge exterior door.
- Bridge wall mount bracket.
- Neutral-Ground bond strap (main bonding jumper).
- Service Disconnect label.
- 2x M6 / T27 bolts for fastening optional main breaker supply lugs.
- Lunar Breaker hold down kit.

Open the box and review the parts list to ensure all contents are complete. Inspect the contents for any visible damage. If any parts are missing or damaged, do not install the component and contact Lunar Support at salesops@lunarenergy.com to arrange for replacements or returns.

⚠ **WARNING**: If a component is damaged in any way, do not install the component. Contact Lunar Energy Customer Service for assistance.

Bridge Enclosure Fastener & Torque Value		
Required Tool	**Attachments**	**Torque Value (in-lbs)**
T25 Torx bit	Deadfront panel; 4 provided screws	44 in-lbs (4 N*m) (for re-installation)

Mount the Bridge Bracket & Bridge

A. Anchoring Details

Table: Anchoring requirements of wall bracket for walls with 2 x 4 wooden studs

Anchoring Requirements of Wall Brackets with 2 x 4 Wooden Studs		
	# Wall Studs (2 x 4)	**Mininum # of Screws**
Surface Mount	Minimum 1 stud (center or off-center	1x fastener, minimum 1/4-inch diameter through wall bracket into stud, embedded minimum of 2 inches 1x fastener through wall bracket into wall material, with anchor that supports minimum 30 pounds
Semi-Flush Mount	2 adjacent studs spaced 14.5 inches apart (16 inches on center)	4 fasteners, two on each side of enclosure, #8 gauge, embedded minimum of 1 inch

✓ **NOTE**: The anchoring details that follow are minimum guidelines based on structural engineering standards. Refer to local building codes for requirements specific to the location.

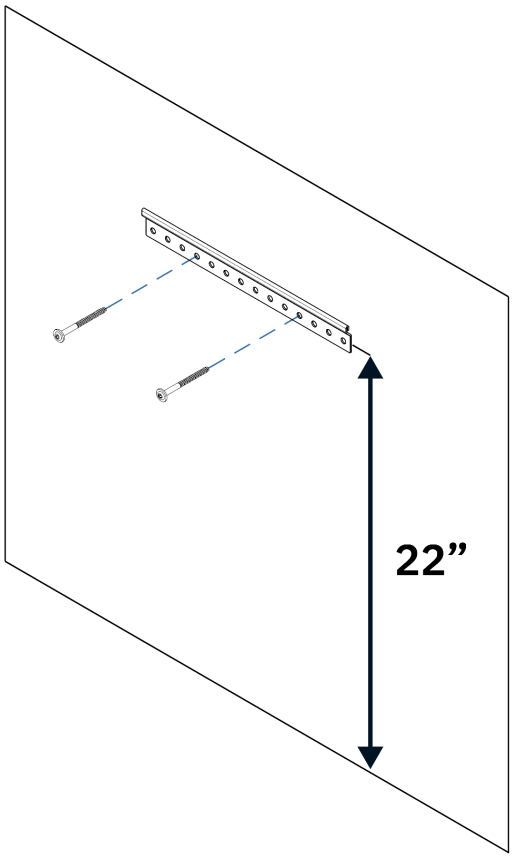
B. Orientation

The Lunar Bridge must always be installed in its correct orientation; it cannot be installed sideways or upside down under any circumstances.

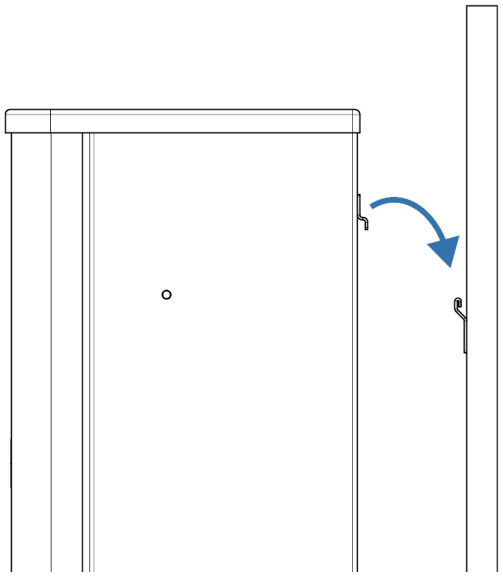
Surface Mount

1. Locate a wall stud and mark its location.
2. Use the wall bracket to dry fit the location of the Bridge over the wall stud.
3. Mark the wall at the bottom of the Bridge.
4. Measure up 22” from the marking

5. Drill pilot holes and/or install wall anchors as needed.

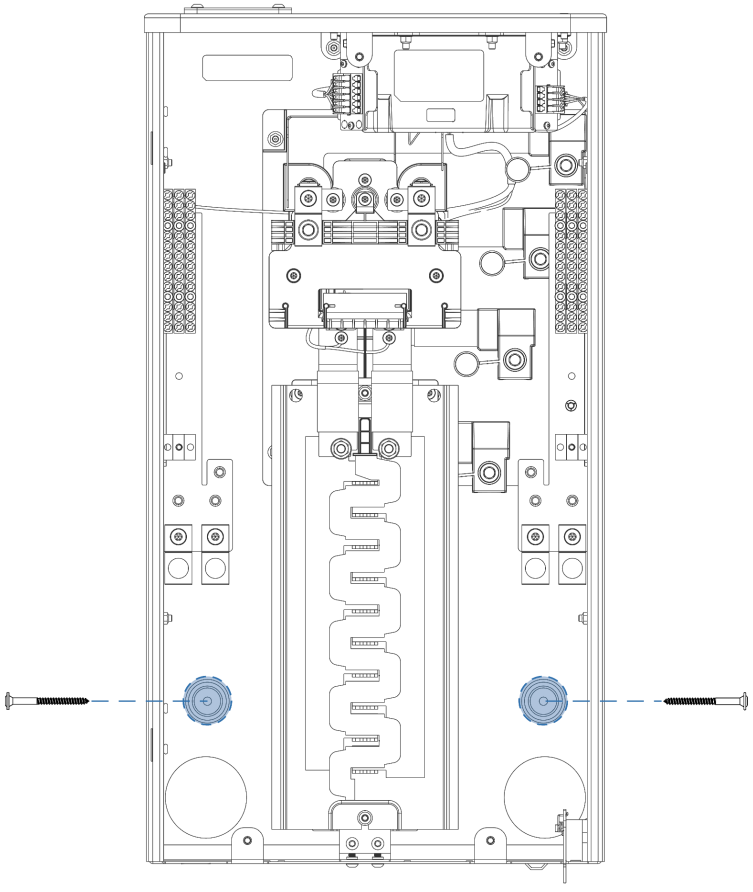


6. Install 1 fastener through the wall bracket into the stud.
7. Install 1 additional fastener through the wall bracket into the wall material.
8. Hang the Bridge enclosure on the bracket.



Note the Bridge can slide left or right up to 1".

9. Install 2 fasteners through the embossed points, inside the Bridge enclosure, into the wall.



Semi-Flush Mount

When semi-flush mounting the Bridge enclosure between two adjacent wall studs, the mounting bracket is not required. Instead, the enclosure is secured directly to the available wall studs through its sides, following the instructions provided in the ***Anchoring Details*** section.

The requirements for semi-flush mount installations of the Bridge are as follows:

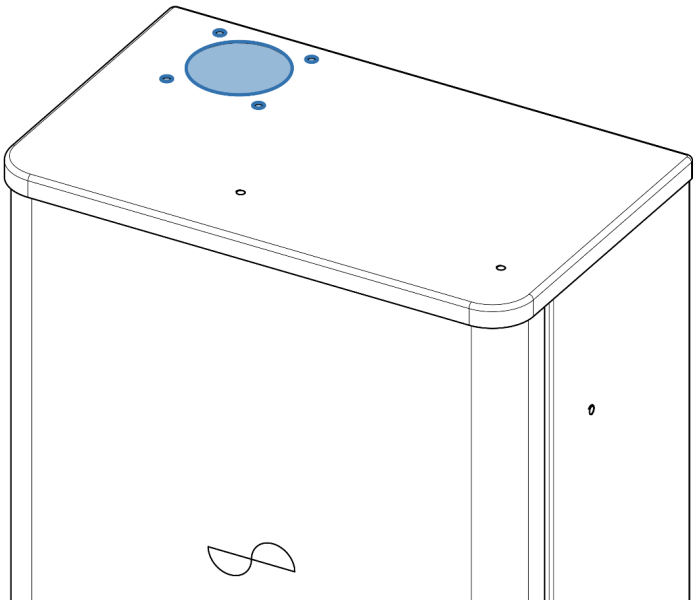
1. The enclosure must be mounted between two adjacent wall studs in a manner that meets the anchoring requirement in this manual.
2. To maintain door clearances, the enclosure must extend at least 3 inches beyond the surface of the wall.
3. The enclosure door must be capable of opening at least 90° from its closed position.

Install Conduit

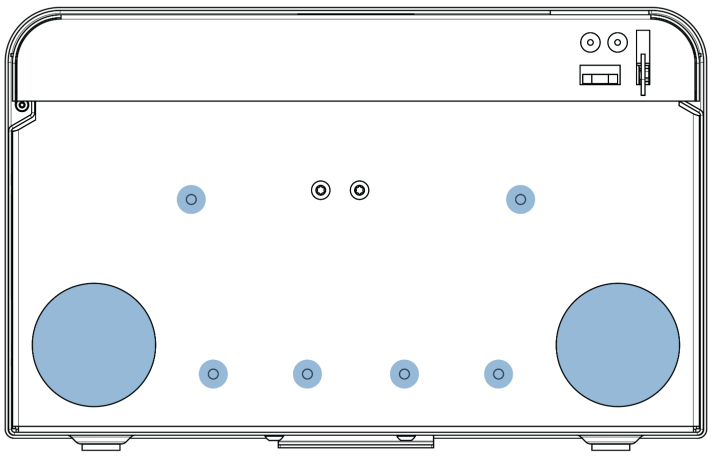
The Lunar Bridge allows conduit connections to the enclosure from the top, bottom, sides, and back of the enclosure:

A. Conduit Entry into the Bridge

1. The top of the Bridge enclosure has a covered conduit entrance that can accommodate any NEMA Type 4X A-series 2-inch conduit hub (purchased separately).



2. The bottom, sides, and back of the Bridge enclosure include guide dimples for field-made conduit entries of up to 1-inch trade size holes in all locations, and up to 2-inch trade size knockouts in certain locations.



3. The sides of the Bridge enclosure have 3/4-inch trade size half shear knockouts.

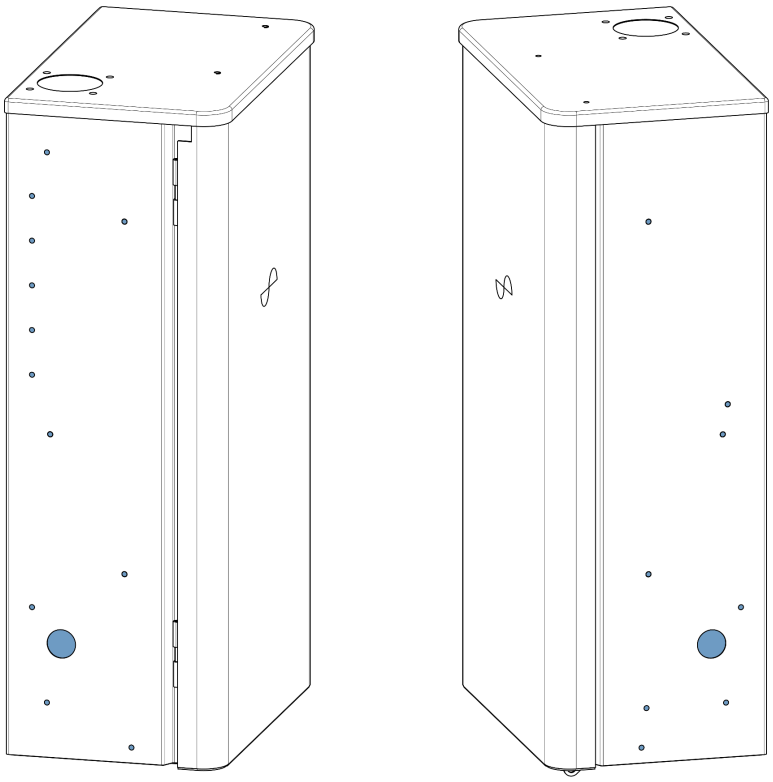


Figure 6: Location of knockouts and drill guide dimples on sides of Bridge enclosure

Configure as a Main Panel or Sub-Panel

A. Configuration Requirements

The Lunar Bridge can function either as a main panel or as a sub-panel. By default, it is configured at the factory to operate as a sub-panel.

Sub-Panel

When using the Bridge as a sub-panel (not located at the service entrance):

1. Ensure that the provided neutral-to-ground main bonding jumper is not installed in the Bridge.
2. Ensure that a main bonding jumper is properly installed in the upstream equipment located at the service disconnect.
3. If a main breaker is not installed in the Lunar Bridge, a separate switch or circuit breaker must be included in the installation as means for disconnection of the equipment. Ensure that an equipment disconnect is suitably located and easily reached. The switch or circuit breaker must be marked as the disconnecting device for the equipment.

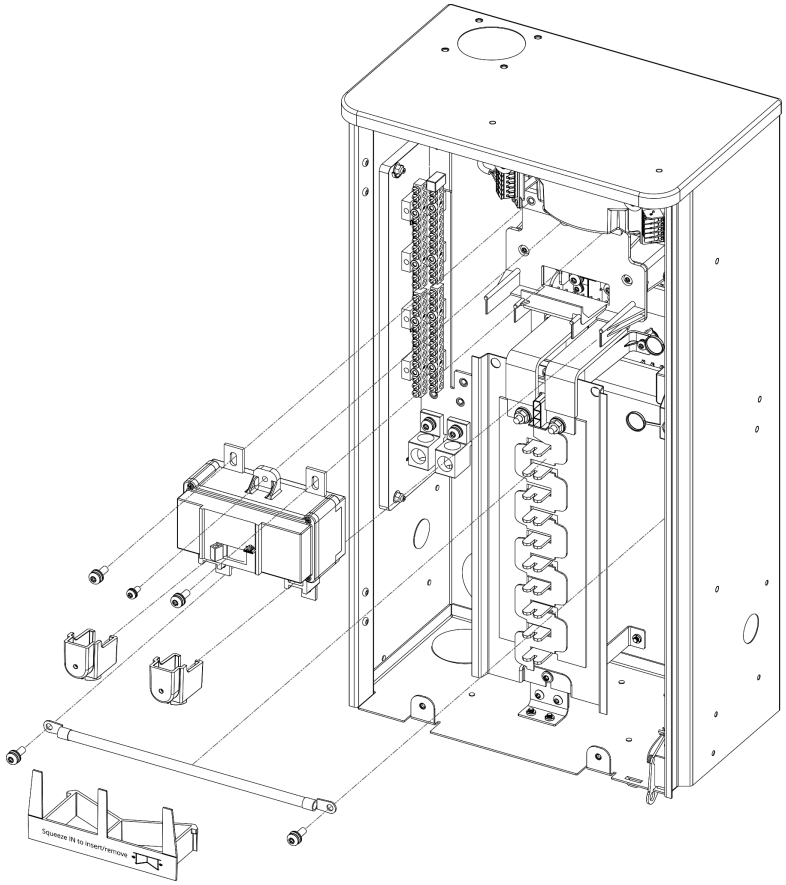
Main Panel

When the Bridge is to be used as the main panel (located at the service entrance):

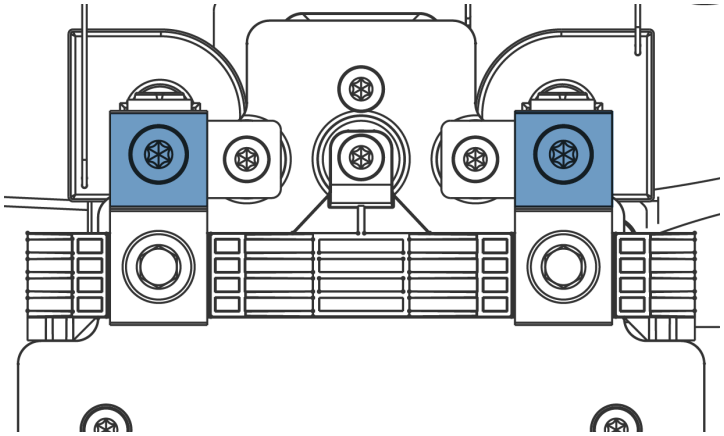
1. Install the provided Neutral-to-Ground main bonding jumper.
2. Install a service disconnect (main breaker) in the Bridge.
3. Install the service barriers.
4. Install an appropriately sized Grounding Electrode Conductor (GEC) on any available ground terminal

B. Install a Main Breaker / Service Disconnect

When using the Lunar Bridge as a main panel, a main breaker must be installed. The main breaker serves as the service disconnect. For details on compatible breaker models and their ratings, please refer to the ***Tools & Materials, Compatible Circuit Breakers***.



1. Remove the two large gauge grid supply terminal lugs at the top center of the relay housing by unscrewing the 2x M6 bolts using a T27 or T25 bit. Reserve these bolts for a later step.



2. Remove the plastic retainer for the grid supply lugs by removing the fastener in the center with a T25 bit. The plastic retainer can be thrown away.
3. Insert the main breaker by placing the top flange with the screw hole against the mounting boss and rotating it down so the two tabs at the bottom engage the relay cover.
4. Fasten the main breaker mounting tabs to the relay housing with the 2x M6 / T27 or T25 bolts removed in an earlier step.
    a. Torque these 2 bolts to 75 in-lbs (9 Nm).
5. Attach the main breaker to the relay housing at the top of the breaker assembly either with the bolt removed earlier, or with one provided with the main breaker by the breaker manufacturer. Torque the bolt in this location to 30 in-lbs (3 Nm).
6. Install the “SERVICE DISCONNECT” label next to the main breaker when applicable.

C. Install Insulated Service Breakers

When the Lunar Bridge is used as a main panel, a **Schneider Electric Square D PKSB1HA** Service Barrier must be installed. The barrier insulates exposed electrically energized parts or wire at the termination of the unprotected supply side conductors on the service disconnect.

After the service entrance conductors have been properly installed in the service disconnect, press the service barrier onto the service entrance conductor and the plastic ribs surrounding the terminals until fully seated.

D. Install Insulated Circuit Breakers

When the Lunar Bridge is to be used as a main panel, a neutral-to-ground main bonding jumper must be installed.

1. Locate the neutral-to-ground main bonding jumper and the 2 M6 fasteners provided in the packaging
2. Route the main bonding jumper behind the branch breaker load tray busbar
3. Using a T27 bit, fasten the M6 bolt to 115 in-lb (13 Nm) in the threaded holes available on both the ground and neutral mounting plates.

Connect Power Wiring

Refer to sections elsewhere in this Installation Manual for examples of system wiring schemes.

Refer to sections elsewhere in this Installation Manual to abide by terminal requirements for min/max wire gauge, wire type, temperature rating, wire strip length, required tool, and torque value.

A. Connect Supply and Load Wiring

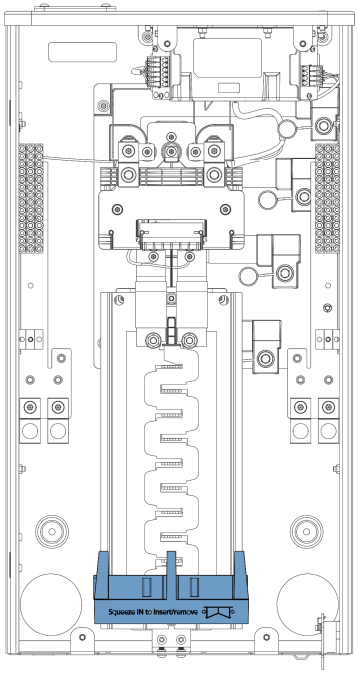
Determine the grid supply conductors, including ground and neutral, as appropriate for site conditions. Terminate conductors on grid supply terminals or main breaker.

Determine the branch circuit and/or subpanel conductors, including ground and neutral, as appropriate for site conditions. Terminate breakers on the busbar load tray. Terminate conductors on branch breakers and/or available terminal lugs.

The Lunar Battery output breaker must be located in the bottom 2 rows of the load tray (left or right) and serves as the parallel energy source disconnect.

B. Install a Breaker Hold Down

To hold down a branch breaker at the bottom of the load tray, 2 options are available:



1. The Lunar Breaker Hold Down
    - Compatible with breakers only at the bottom of the load tray (left or right)
    - Compatible with full size, duplex, triplex, and quadplex breakers
    - While squeezing in both sides of the Hold Down, engage the side clips onto the load tray at the unused breaker retention clips.
2. Using an Eaton BRHDK125 hold-down kit
    - Compatible with breakers in the bottom 2 rows of the load tray (left or right)
    - Abide by manufacturer's requirements for installation

    NOTE: Hold-down kits are only compatible with full size Eaton BRXXXB breakers that have a hole in the breaker.

C. *Optional* Field Modification for Additional Ground and Neutral Terminations

Where more neutral and/or ground terminations are desired, the Bridge is configured to easily accept additional terminals installed in the field.

For additional large gauge wire terminals, remove the single terminal chair lugs that are factory installed. Reserve the M6 fastener and inspect for damage. Install new Ilsco PB2300 2-port terminals and reuse the M6 fastener. See torque table for appropriate fastener torque.

For additional small gauge wire terminals, install Ilsco NBAS-012-2-A adjacent to existing 12 port terminal bars in the factory supplied mounting holes. Fasten with (2) M5 x 14, Steel, Zn-Ni plated bolt. See torque table for appropriate fastener torque.

D. Optional Load Tray Removal

For installations requiring entry into the rear of the Bridge, the load tray may interfere with working clearances. If needed, the load tray can be removed and reinstalled in the field as follows:

Load Tray Removal

1. Using a 7/16” socket and socket wrench, remove the two hex nuts at the top of the load tray.
2. Remove the T25 fastener at the bottom of the load tray.
3. Remove the load tray.

Load Tray Installation

4. Position the load tray in place.
5. Install the two hex nuts using a 7/16” socket and torque wrench. Torque to **7 Nm**.
6. Install the T25 fastener and torque to **5 Nm**.

> **NOTE**: Failure to properly torque the load tray fasteners will void the warranty.

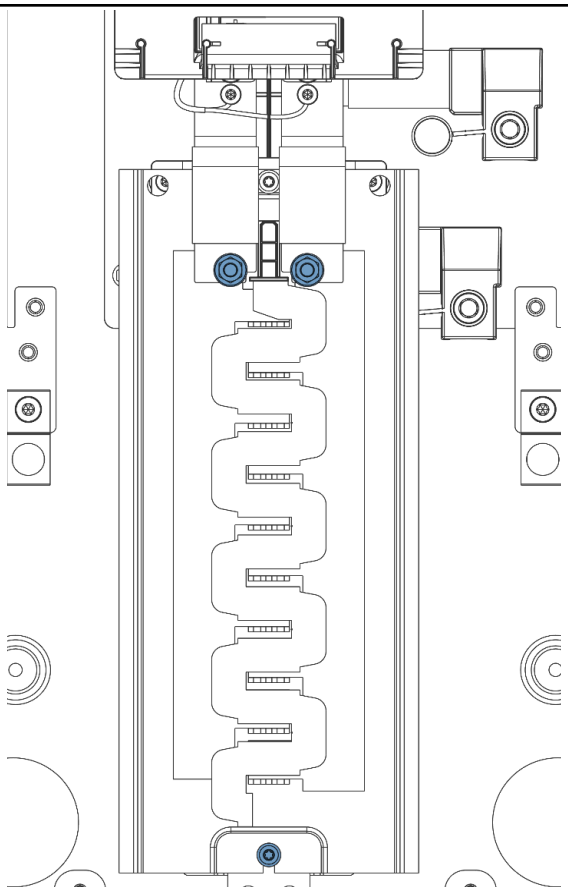


Figure 7: The Bridge Load Tray hex nut, and T25 fastener location.

Communication Wiring

Refer to other sections of this Installation Manual for examples of system communication wiring schemes, maximum distances, compatible wire types, wire gauges, and wire strip lengths.

lunar energy **Bridge Low Voltage Connections**

Coil 1A
Coil 1B
Do not use
Coil 2A
Coil 2B
Do not use

13V+
CAN Hi
CAN Low
Signal Gnd

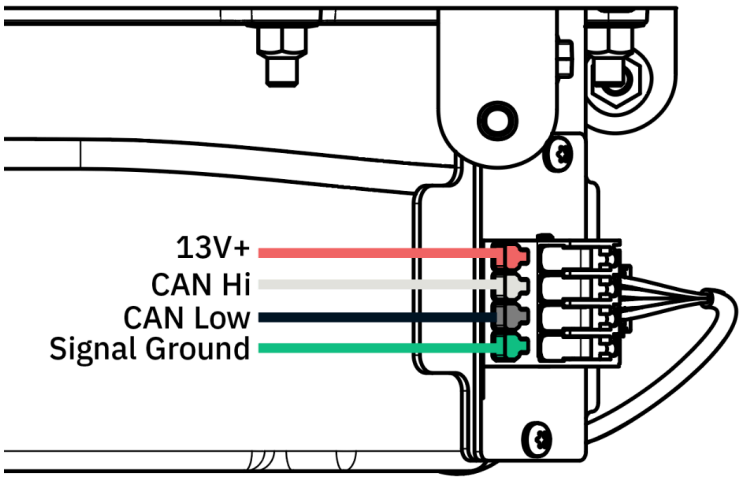
Phase & Polarity of Coils auto-configured when installed on Service Disconnect

Lunar Energy, Inc. - 755 Ravendale Dr, Mountain View, CA 94043 USA

All terminals compatible with 24-12 AWG, Cu/Al. Strip wires 0.4"

Nominal Voltage: 120/240 Va.c. Split-Phase
Input Current: 0.75 A

1. Route shielded communication wires for 13V+, signal ground, CAN High, and CAN low from the Lunar Battery to the Lunar Bridge.
2. Open the levers for terminals at the Bridge Low Voltage Connections.
3. Strip wire and insert into the terminal.
4. Close the lever until snap or click.



Rogowski Coil (CTs)

Rogowski Coils are flexible, air-core sensors designed to measure alternating current (AC) by detecting the rate of change of current in a conductor. These current transformers (CTs) provide accurate, non-intrusive current measurements and transmit this telemetry to the Lunar System. The Application Note ***Rogowski Coils (CTs) for the Lunar System*** contains further information.

The integration of Rogowski Coils within the Lunar System enables the following functionalities:

- **Partial Home Backup**: Monitoring energy usage of non-backup loads connected to an upstream panelboard.
- **Power Control System (PCS)**: The Lunar System, which includes the Lunar Battery (ESS), Lunar Bridge and optional Rogowski Coils (CTs), have been certified to both UL 1741 PCS CRD and UL 3141.

> **Note**: Rogowski Coils are an optional component of the Lunar Power Control System (PCS). For more details about PCS features, refer to the '*Power Control System (PCS) Features for the Lunar System*' Application Note and '*The Lunar Battery Installation Manual*'.

A. Compatible Coils

Only install Rogowski Coils sourced directly from Lunar Energy. The Lunar System uses the Magnelab RCT-120L Series Coils. Two Rogowski Coils along with the field applied labels are included in the Rogowski Coils kit (90-06789A). The datasheet for the Magnelab RCT-120L Coil is available here.

B. Installation

Coils Installation at Main Panel

The latch end of the Coils are typically installed on the service disconnect for a residential home.

Location: The Coil must be installed on the conductors in series between the Lunar Bridge and the grid.

Clasp: Ensure the Coil clasp is fully engaged by performing a gentle tug test to confirm it is secure.

Coil Installation on Branch Circuits

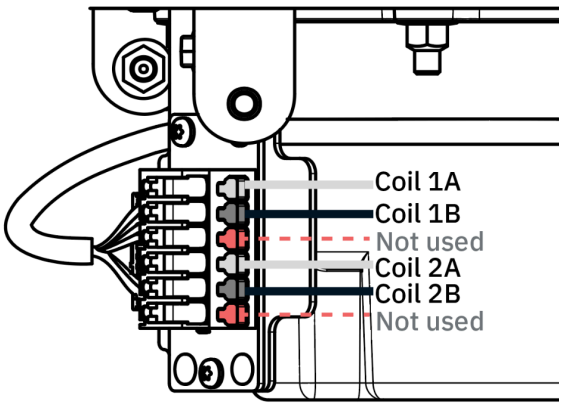
When direct installation of the coils on the service disconnect conductors is not feasible – such as in cases involving 4-wire main breaker– refer to the Application Note titled ***Rogowski Coils (CTs) for the Lunar System*** for alternative guidance.

Coil Termination at the Bridge

Terminate the Coil leads to the labeled terminals Coil 1A/1B and Coil 2A/2B in the Bridge

If a drain wire is present, do not splice or connect it to any conductor or terminal.

When extending the length of the Coil free-end wires, splice the wires using 12-24 AWG shielded, twisted or untwisted wires. Note that the maximum length of spliced wire is 100 feet.



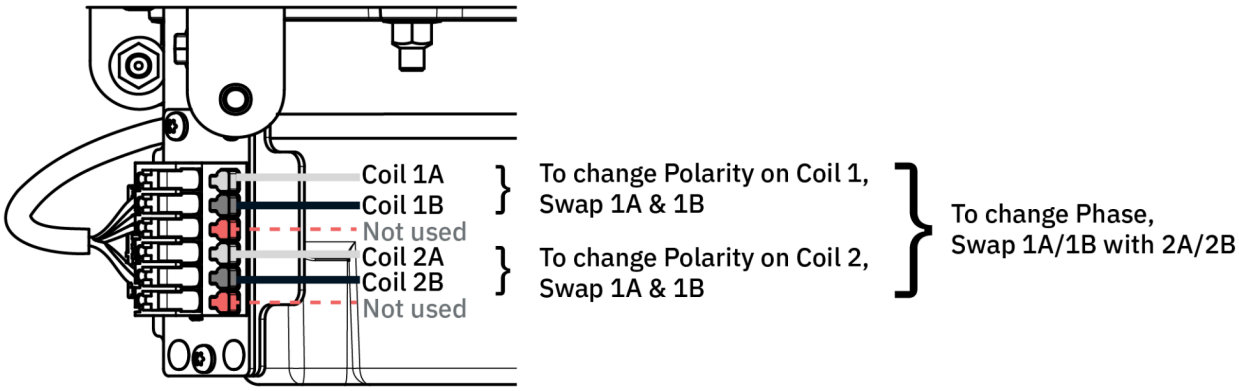
C. Coil Phase & Polarity

To verify the correct phase (L1 versus L2) and polarity (positive current vs negative current) of the Coils, please follow the guidance in the Lunar Installer App.

Adjusting Coil Phase & Polarity

The easiest method to adjust Coil phase or polarity is to adjust the wiring terminations at the Bridge, rather than adjusting the clasp end of the Coil.

Coil Phase is flipped by swapping the terminations of Coil 1A and Coil 1B with Coil 2A and Coil 2B.
Coil Polarity is flipped by swapping the terminations of Coil 1A with Coil 1B, and similarly, swapping the terminations of Coil 2A with Coil 2B.



Coil Indicator Arrow and Wire Termination

Each Coil has an arrow indicator intended to point toward the load. However, in the Lunar System, the Coil arrow may be pointed in either toward the Load or to the Grid, as long as the arrow indicator directions are consistent with the coil A/B wiring terminations

Coil Arrow Direction	Wiring Terminations
Arrow points toward the Load	Black on Coil A
	White on Coil B
Arrow points toward the Grid	White on Coil A
	Black on Coil B

D. Commissioning

The Installer App uses the factory-installed Bridge Current Transformers (CTs) to compare the measured current from the Coils with that of the Bridge CTs, ensuring accurate Coil installation. This verification process requires the installer to adjust which loads are on or off in the home.

The Installer App will prompt the installer to:

1. Turn off all non-backup loads.
2. Turn on the backup loads fed from the Lunar Bridge, ensuring that the following conditions are met
    - Both AC L1 and AC L2 must have at least 2A of measured current.
    - There must be at least 2A of imbalanced current between AC L1 and AC L2 (i.e., one line must have at least 2A more measured current than the other).

The Installer App will display a green checkmark to confirm the coil installation only when all required conditions are met. If the conditions are not met, the app will prompt users with the necessary actions to ensure proper installation.

Final Inspection & Closing the Unit

A. Inspection

- Confirm wall bracket and Bridge are securely fastened
- Confirm that all electrical fasteners are secure and torqued to specification.
- Confirm that all power, ground, and neutral conductors used are appropriately sized and of the correct material
- Where used as a main panel, confirm modifications complete to be suitable as service equipment
- Confirm that wires are routed correctly and that they will not interfere with the dead front assembly.
- Ensure all conduit entries are secured and have the proper water ingress protection.

B. Deadfront and Bridge Door Installation

1. Install the deadfront to the enclosure with its four screws. Torque to the specified value.
2. When used as a Main Panel, affix the Service Disconnect label to the deadfront panel next to the main breaker switch. Where used as a sub panel, label the upstream overcurrent protection device.
3. Align the exterior door onto the hinges on the enclosure, then slide the door down on the hinges.
4. Close the door, then lift up to latch it shut.

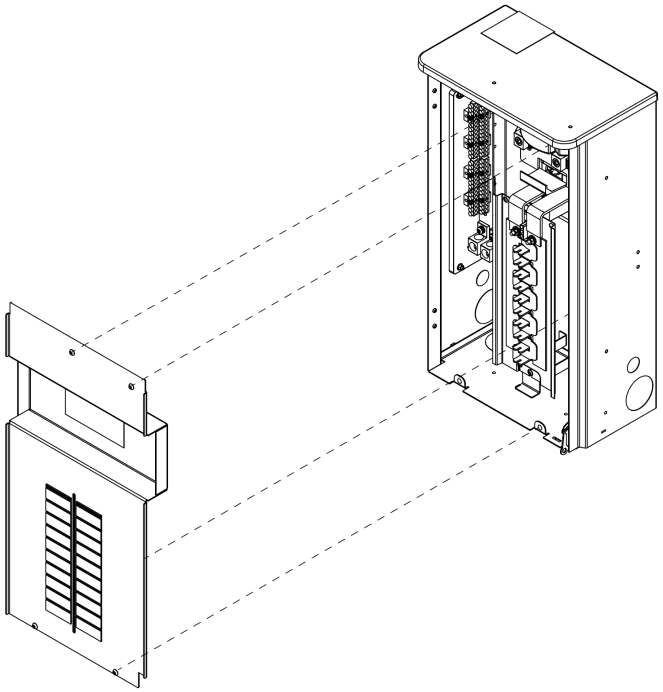


Figure 8. Removing the Bridge deadfront

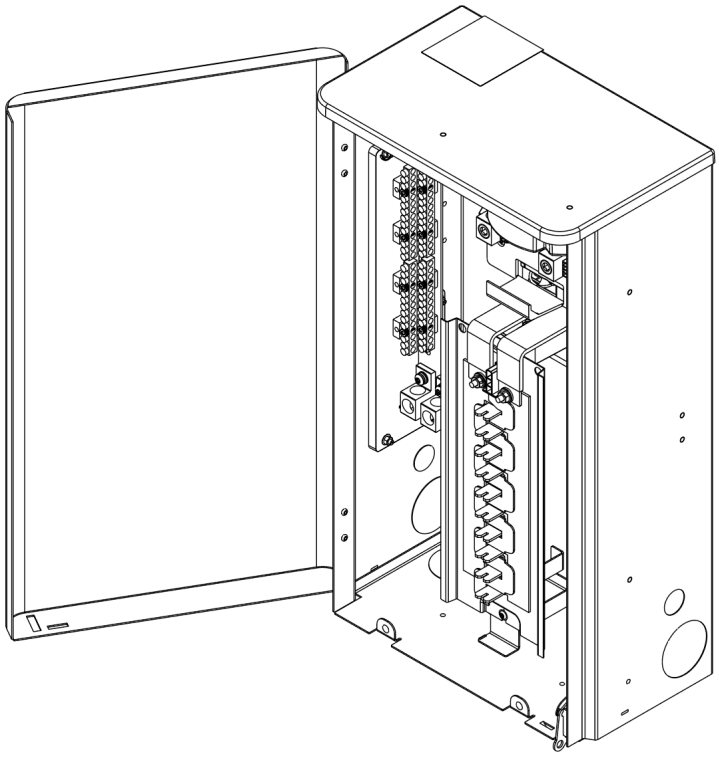


Figure 9: Removing the Bridge Door.