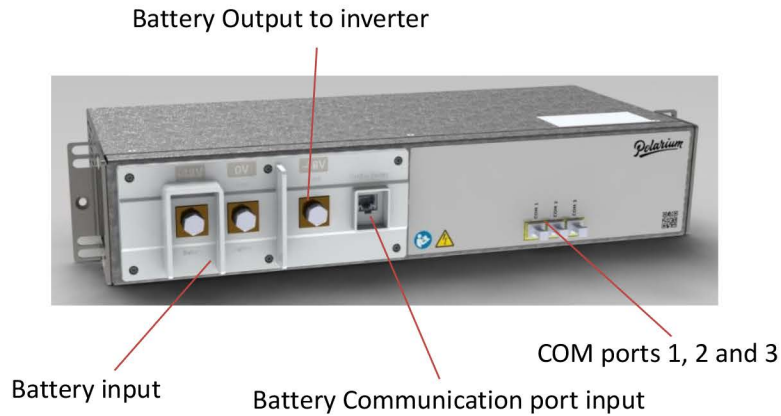


Solar Inverter Interface

Pre-Charge and Communication Unit
Generation 5 Batteries



The Solar Inverter Interface SII includes an advanced communications interface that translates the standard ModBus used in Polarium batteries into various communication protocols. The SII comes with CAN, TCP/IP and can be fitted with customized protocols. Additionally the SII unit will ensure a smooth start-up sequence and limit the inrush current in the system

- Safe
- Simple
- Strong
- Smart
- Secure
- Sustainable

Product Description

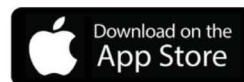
The Solar Inverter Interface [SII] communicates with the SLB48 via CAN and MODbus. It provides MODbus protocol translation to interface with site controllers or Polarium Studio PC. The SII also makes battery information available in the mobile App over Bluetooth. In addition to the communication protocol translation the SII includes a pre-charge contactor that limits the inrush current to the connected inverter at start-up

The SII is powered from the battery bus and will be operational as long as the battery is in operation. The unit will be automatically powered up when voltage is above 30V. The supply to the SII is protected against reversed polarity and has safety features built in to protect the product and site.

Studio Mobile Application

Polarium Studio Mobile has a series of functions available to the operator at the mobile phone level. While the capabilities of the PC iteration are more advanced, Polarium Studio Mobile can monitor the alarm system and site information via Bluetooth or cloud data sources.

You can download Studio Mobile from the Apple Store and Google Play Store. Search for "Polarium Studio".



Data subject to change without notice



Solar Inverter Interface



Pre-Charge and Communication Unit

Generation 5 Batteries

Electrical Specification

| Input Power | | |
|----------------------|---|--|
| Power Input | Bus bar or cable connections to the battery power terminals | |
| Operational Volt-age | 30-65 V | |
| Auto Start Voltage | 30 V | |
| Shutdown Voltage | 29 V | |

| Communication | | |
|-----------------|---|---------------|
| Ethernet | SNMPV2, can set SNMP traps Modbus TCP/IP, Remote update of firmware | RJ45, 8 COM 3 |
| RS485/CAN (Out) | Communicates with customer defined protocols | RJ45, 8 COM 2 |
| RS485/CAN (In) | Allows daisy chaining of the RS485 bus, Allows MCU access to the CANbus | RJ45, 8 COM 1 |
| RS485/CAN (Out) | Allows daisy chaining of the RS485 bus, Allows MCU access to the CANbus. PC access (with Studio PC) to view battery status. | RJ45, 8 COM 1 |
| Bluetooth BLE | View real time battery status | Wireless |

| Indications | |
|--------------------|----------------------------------|
| Power LED Green | Power on, Bluetooth connected |
| Power LED Off | Power off |
| Power LED Flashing | Power on, Bluetooth disconnected |
| RJ45 LED off | No communication |
| RJ45 LED Yellow | Communication problem |
| RJ45 LED Green | Communication Ok |

| Environmental | |
|-------------------------|---------------|
| Operational Temperature | -20C to 60C |
| Ingress Protection | IP20 |
| Humidity | 20% to 95% RH |

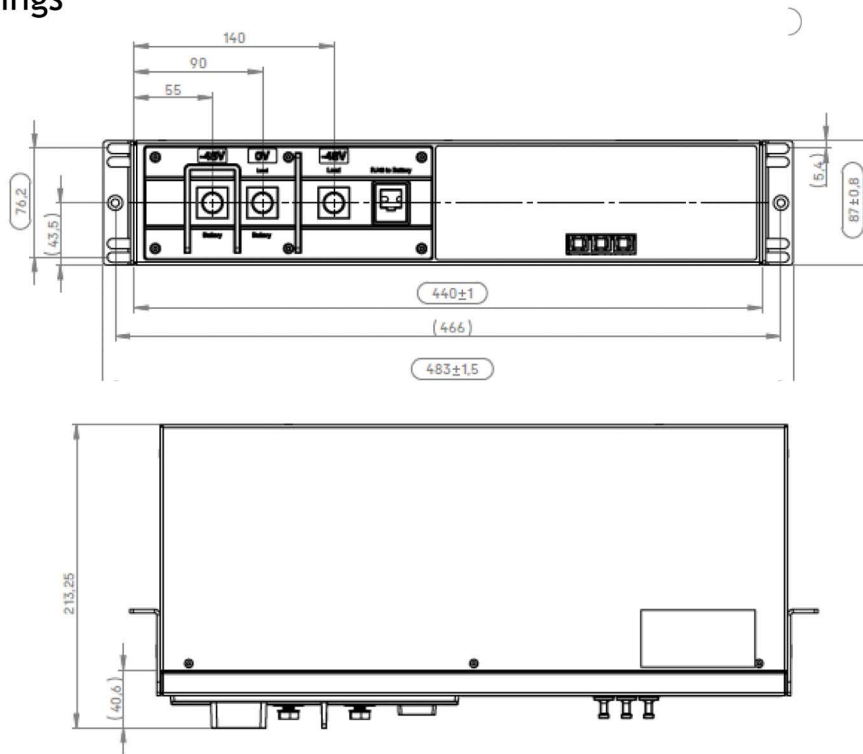
| Standards |
|--|
| ETSI 300 386, FCC Part 15, AS/NZS 4268, ETSI EN300 328, EN50663, ETSI EN 300 328 |
| IEC 62368, IEC 60950 |
| RoHS |

Solar Inverter Interface

Pre-Charge and Communication Unit
Generation 5 Batteries



Technical Drawings



Hardware Included in the box

| Name | Image | Description | Part Number |
|--------------------------|-------|---|-------------|
| Solar Inverter Interface | | Installation option to integrate SLB backup site to solar operation | 800-00107 |
| CAN bus Terminator Plug | | Placed into communication port at the end of the string. | 810-00002 |
| 2 x Communication Cable | | RJ45 "A" Connect to Solar Inverter Interface Box COM 2 RJ45 "B" Connect to Inverter comms port | 840-00259 |
| 3x Busbar | | RJ45 "A" Connect to Solar Inverter Interface RJ45 to battery RJ45 "B" Connect to last battery module in the string | 117-00006 |
| 2 x Mounting bracket | | Copper busbar to interconnect terminals, maximum current 300A for a single bus bar | 430-00361 |