

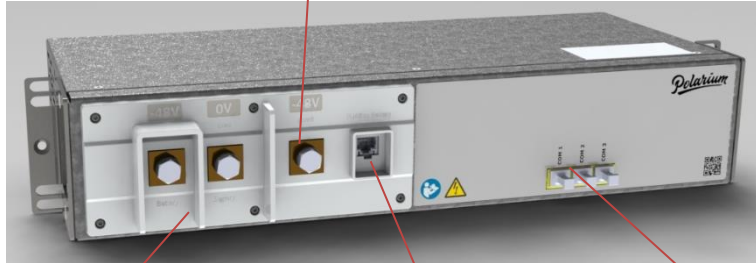


# Solar Inverter Interface

Pre-Charge and communication unit  
Generation 5 Batteries



Battery Output to inverter



Battery input

Battery Communication port input

COM ports 1, 2 and 3

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

## 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.

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

## 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



Polarium Energy Solutions AB

Jan Stenbecks Torg 17 | PO Box 1037 | SE-164 21, Kista, Sweden  
Phone: +46 8 5454 4000 | info@polarium.com | www.polarium.com



# 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		

### Polarium Energy Solutions AB

Jan Stenbecks Torg 17 | PO Box 1037 | SE-164 21, Kista, Sweden  
Phone: +46 8 5454 4000 | info@polarium.com | www.polarium.com

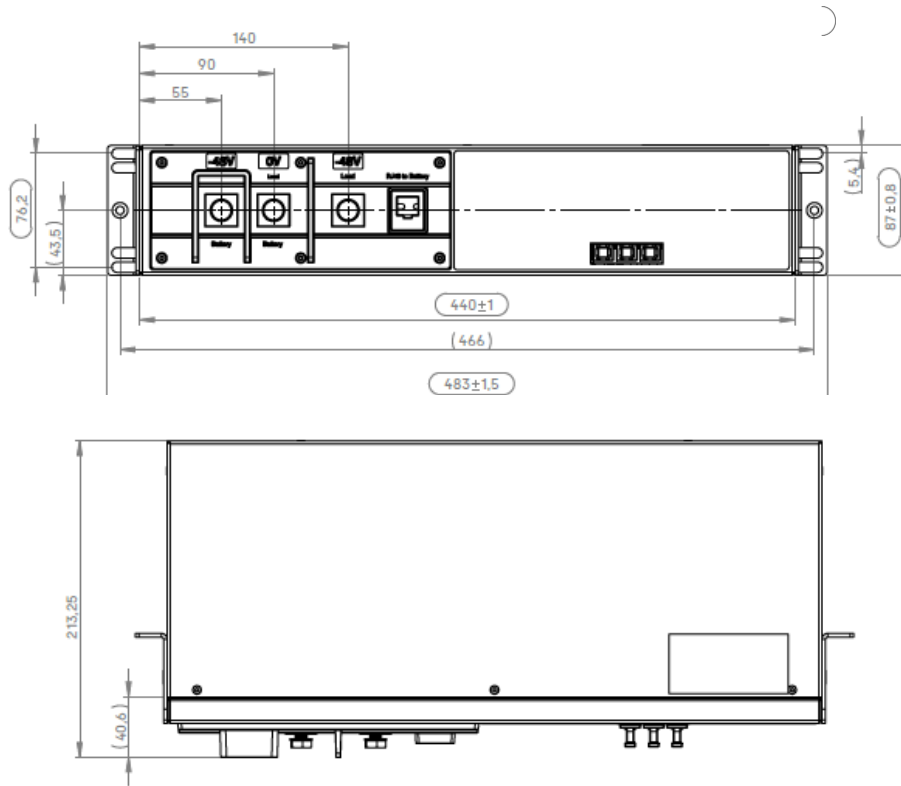


# Solar Inverter Interface

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 RJ45 "A" Connect to Solar Inverter Interface RJ45 to battery RJ45 "B" Connect to last battery module in the string	840-00259
3x Busbar		Copper busbar to interconnect terminals, maximum current 300A for a single bus bar	117-00006
2 x Mounting bracket		Mounting brackets for fixing into cabinet	430-00361

### Polarium Energy Solutions AB

Jan Stenbecks Torg 17 | PO Box 1037 | SE-164 21, Kista, Sweden  
Phone: +46 8 5454 4000 | info@polarium.com | www.polarium.com