

## PreP-Sys: 25/25

### Prepayment System with Charge Controller and Installation Box integration

- Prepayment function for Solar Home Systems
- Electronic Key for Prepayment transfer-easy to use
- Additional credit up to 10 days for customer convenience
- LCD display for prepaid days
- Unique System Provider ID
  
- Integrated Charge Controller for 12V Lead Acid Battery with PWM regulation
- Clear and easy to read LED display for System Status
- Battery SOC by 4 LEDs
- Four Stage PWM Charging
- Battery Temperature compensated charging
- External Battery temperature sensor for proper charge control
- Full electronic protection
- Over temperature protection
- Manual load on/off button
  
- Installation Box for save system connection
- Circuit breaker for disconnecting Battery and Solar Panel
- terminals for Solar panel connection
- Battery wiring



PreP-Sys makes it easy to setup Solar Home Systems with Prepayment functionality. The unique PreP-Key makes prepayment function easy to use for each customer. For transfer credit, just insert the Key and press Enter. The unique System ID makes it possible for each System Provider to register the Systems to his payment devices (PreP-Cash). Even to create different sections or areas is no problem, just by registration of different ID's.

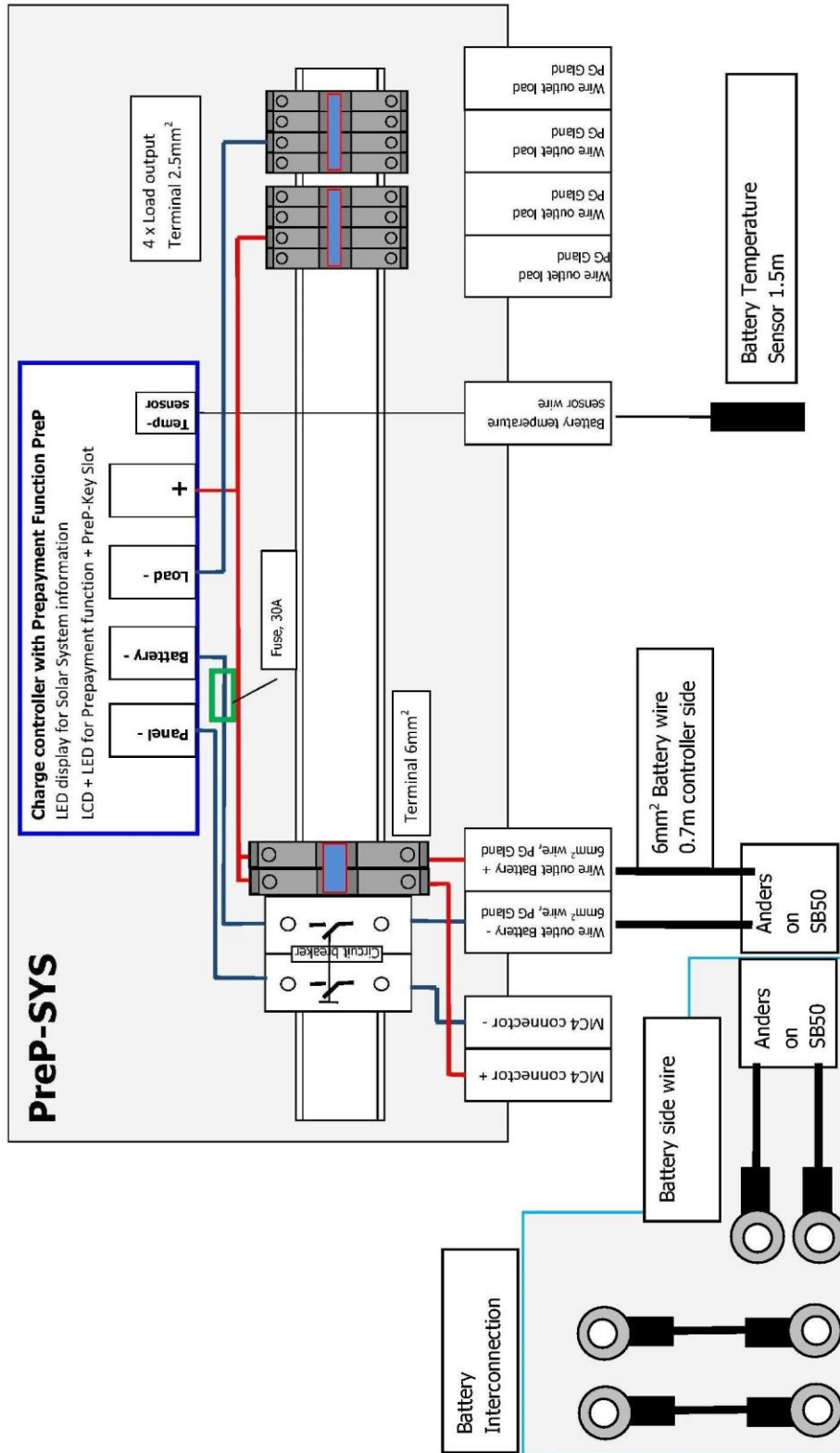
The integrated programmable Charge Controller will take care for the System Battery. With its external temperature sensor it can get real battery temperature for best adjustment of the charge voltage. With 4 different deep discharge modes the user can adjust the setting according to his demand and battery type.

All integrated into PreP installation box with prewiring, allows proper System connection and protects the installation from misuse and manipulation. Terminals for Solar Panel connection and Battery wire with Anderson connector makes it easy to setup the System. 4 sets of screw terminals for load connection make the load wiring safe.

<b>Technical Data</b>	<b>PreP-Sys-25A with Installation Box Integration</b>
<b>Prepayment Function:</b>	
Payment Method	Daily fee
Data Transfer	By electronic memory Key (PreP-Key included)
Display	LCD Display: remaining number of days / extra credit in use (up to 10 days) LED: running out of credit
Buttons	1) Enter: load new credit from PreP-Key 2) +: Activate extra day
System Key	PreP-Key included
Assembly	Front panel assembly
others	PreP-Key insertion slot
<b>Charge Controller:</b>	
Nominal System Voltage	12V
Battery Type	Lead Acid / flooded, AGM and GEL
Charging Current	25A
Load Current	25A
Charge Control Type	PWM, Serial with reverse current protection by Mos-Fet
Float Charge	13.8V @25°C
Main Charge	14.4V @25°C (once a day, 30 min)
Boost Charge	14.4V @25°C (120min), activation at <12.3V
Equalization Charge	14.8V @25°C (120 min), activation at <12.1V
Charging Temperature Comp	-25mV/K
Low Battery Load Disconnect	Load off level: 1) SOC1: 11.4 – 11.9V 2) SOC2: 11.0 – 11.75V 3) Voltage: 11.0V 4) Voltage: 11.5V Reconnect level: 12.8V
Overvoltage Protection	15.5V
Under Voltage Protection	10.5V
Max Panel Voltage	30V
Self-Consumption	<6mA
Grounding	Positive Grounding possible
Battery Temperature Sensor	External Sensor (1.5m wire)
Working Temperature	-20 ... +50°C
Max. Altitude	4000m
Display	<ul style="list-style-type: none"> <li>• SOC (4 LEDs, yellow)</li> <li>• Charging (green)</li> <li>• Load on (2 yellow)</li> <li>• Load off (red)</li> <li>• Failure (red)</li> </ul>
Electronic Protection	<ul style="list-style-type: none"> <li>• Overload (load and panel side)</li> <li>• Over Temperature</li> <li>• Revers polarity</li> <li>• Surge protection by Varistor on Panel input</li> </ul>
Others	Manual load on/off button
<b>Installation Box:</b>	
Dimensions (WxHxD)	160x240x90mm
Wire Outlet	PG Gland
Fuse	Battery wire fuse, 30A
Protection	IP20
Circuit Breaker	Two pole Circuit Breaker (one pole for battery, second for Panel)
Input/Outputs	Solar input: Pair of connector Battery: <ul style="list-style-type: none"> <li>• Anderson SB50 terminal, 6mm<sup>2</sup> wire, 70cm (Controller side wire)</li> <li>• Anderson SB50 terminal, ring lug, 6mm<sup>2</sup> wire, 30cm (Battery side wire)</li> <li>• 2pc Battery interconnection, 6mm<sup>2</sup> wire, 25cm with ring lug</li> </ul> Load output: 4 pair of Din Rail terminals, 2.5mm <sup>2</sup> , Temperature sensor wire

Datasheet: DATASHEET-PREP-SYS-25A-2014-05-14A Subject to change without notice

# PreP-Sys Schematic Diagram:



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