

SAVANT

Savant Power Storage Battery Module Charger Quick Reference Guide

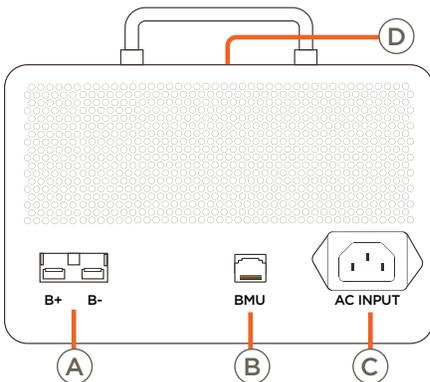
Box Contents

- (1) Savant Power Storage Battery Module Charger (PS20-BATT-CHARGER-00)
- (1) COMM Cable
- (1) Terminal Box
- (1) AC Power Cable

Specifications

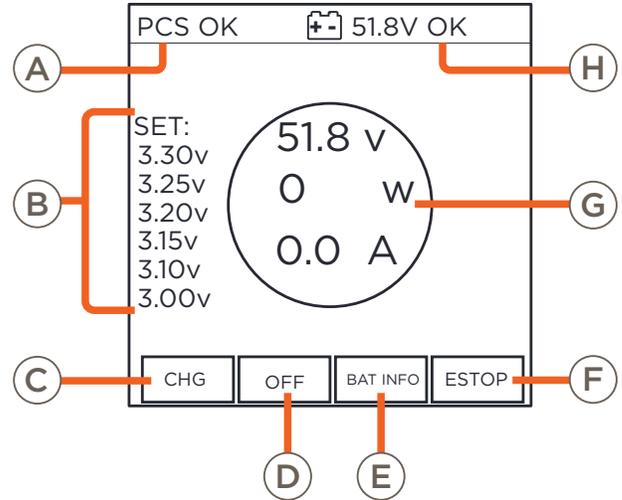
Environmental			
Temperature	14 °F ~ 104 °F (-10 °C ~ 40 °C)		
Dimensions and Weights			
Height	Length	Width	Weight
7.7 in (195mm)	16.5 inch (420mm)	8.6 inch (220mm)	33.07 lbs (15 kg)
Battery Power			
Input Voltage	90-144Vac 50/60HZ		
Input Current	10A@120Vac		
DC Voltage	40-56V		
DC Current	20A±5%		
Rated Charging Power	1.1kW		
Rated Discharging Power	0.4kW		
Discharge Cutoff Cell Voltage	3.0V/3.1V/3.15V/3.2V/3.25V/3.3V (Configurable)		
Compatibility			
Savant Power Storage 20 and Savant Power Storage 50			

Back Panel



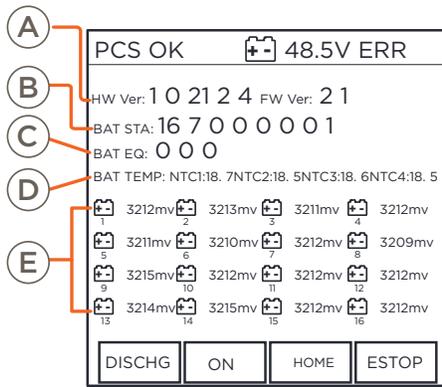
- (A) Battery Charge Port
- (B) COMM Port
- (C) AC Input
- (D) Touch Screen UI (Top Panel) See [User Interface - Home Screen](#)

User Interface - Home Screen



- (A) PCS (Charger) Status Internal PCS/Rectifier module status
- (B) Cut-off Voltage Setting (Discharge Mode Only) Use to select the cut-off voltage when discharging the battery module
- (C) CHG/DISCHG Button Use to toggle between charge and discharge modes
- (D) ON/OFF Button Use to power toggle the charger On or Off
- (E) Battery Information Detailed information of the battery module
See [User Interface - Battery Information](#)
- (F) Emergency Stop Button Use to stop/continue the charge/discharge
- (G) Charger Information Voltage(V)
Power(W)
Current(A)
- (H) Battery Status OK / ERR

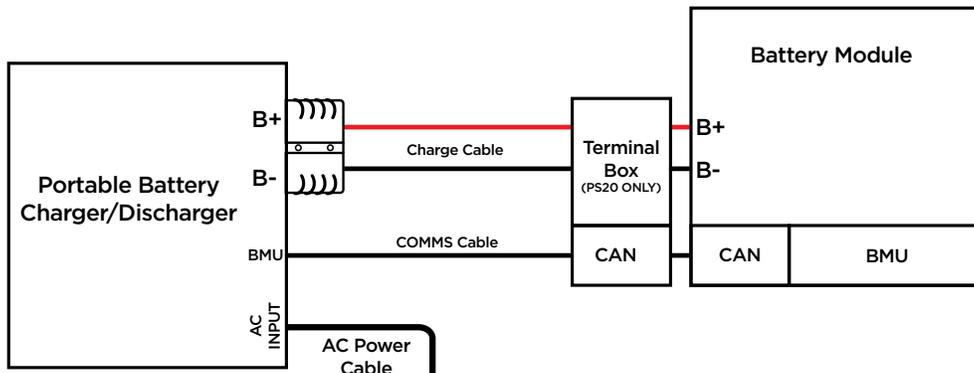
User Interface - Battery Information



(A)	Version Information	Used for support purposes
(B)	Battery Diagnostic Status	Used for support purposes
(C)	Cell Balance Status	Used for support purposes
(D)	Temperatures	Battery module temperatures (C)
(E)	Cell Voltages	Battery Cell Voltages (mV)

Cable Wiring

- (PS20 only) Remove protective film from PS20 battery module connector (if still attached). Connect the Terminal Box to the Battery Module.
(PS50 only) Bolt the red cable onto the positive terminal and the black to the negative terminal.
NOTE: Don't mix modules between batches or enclosures.
- (PS20 only) Connect COMMS Cable to Portable Battery Charger.
(PS50 only) Connect module to Link Port 1 to Portable Battery Charger using the COMMS Cable.
- Connect the Charge Cable to the gray charging port and verify the COMMS Cable is connected to the Portable Battery Charger.
- Connect the AC Power Cable from the Portable Battery Charger/Discharger to a power source; the Status Indicator will turn solid green.



Charging Process

- Press **CHG/DISCHG** to switch to CHG - Charging.
- Press **ON/OFF** to start charging.
- Wait for the process to complete automatically. The **ON/OFF** button will turn red when charging is complete.

Discharging Process - Used for Support Purposes Only

- Press **CHG/DISCHG** to switch to **DISCHG** - Discharging
- Press **ON/OFF** to start discharging.
- Wait for the process to complete automatically. The **ON/OFF** button will turn red when discharging is complete.

⚠ IMPORTANT NOTES!

- The minimum supported battery module voltage is 40V.
- It is recommended to charge a battery module rather than discharge it.
- Charge/discharge all battery modules to the same level, and disconnect the battery module only after charging or discharging has fully stopped automatically.
- The battery module will be fully charged when set to charging mode.