

Pb/LI-CC: Charge Controller for Lead Acid Battery and LiFePO4 Systems With battery protection and payment options

- PWM charge controller
- External battery temperature sensor
- Clear and easy to read 8/9 LED display for System Status
- Load output control by MosFet with freewheeling diode for inductive load protection
- Manual load on/off Switch
- 12 Months Datalogger integrated
- Front Panel assembly for optimized project design
- PWM charging
- Programmable overcharge and overdischarge parameter via PC Interfaceadapter (option)
- USB Interface (option) for reading data logger Values and transfer customized settings
- Load time control options (streetlight or other timer applications)
- Software update via Interface on demand
- PAYG option
- USB charging option
- LiFePO4 option: single cell monitoring and cell balancing
- PB-option: 4 stage charging, with temperature compensation



CC-Charge Controller with 4 stage temperature compensated PWM charging for Pb-Batteries or single cell monitoring for LiFePO4-Batteries with integrated balancing with outstanding options for long battery life and battery protection. The clear and easy to read System status LED-display informs the user about the latest system status. The various deep discharge protection options can allow the Project to adjust according to system and battery requirements. Via computer Interface most system parameters can be adjusted according the demand.

The integrated one year datalogger can support analyzing the systems in the field applications. Monitor consumptions, harvests and help to detect problems.

The front panel case allows easy installation into battery boxes without user access to wiring for safe system operation.

Technical Data	PB-CC-xx	PB/LI-CC-xx-PG-USB @ PB-setting:	PB/LI-CC-xx-PG-USB @ LiFePO4-setting:
Nominal System Voltage:	12V		12.8V
Battery Type:	Lead Acid (GEL, AGM, flooded)		LiFePO4
Max Current:	Charging/Load: a) 10A: PB-CC10-xx...; PB/LI-CC-10-PG-USB b) 16A: PB-CC16-xx...; PB/LI-CC-16-PG-USB		
Charge voltage settings:	<ul style="list-style-type: none"> • Float Charge: 13.6V • Main Charge: 14.4V (30min. daily) • Boost Charge: 14.4V (2h, activation @ battery voltage < 12.3V) • Equalization Charge: 14.8V (2h, activation @ battery voltage < 12.1V) • Temperature compensation PB option: -24mV/K (external battery temperature sensor) • All values @ 25°C for 12V System 	Settings for LiFePO4 Batteries 12.8V Nominal Voltage based on Cell voltage requirements; Battery temperature monitoring and protection features	
Connections:	Panel +/-: Terminal 4mm ² (other connection options on request) Battery +/-: Terminal 4mm ² (other connection options on request) Load +/-: Terminal 4mm ² (other connection options on request) Terminal for Cell Voltage Sensor wires (LI option only)		
USB terminal (USB option only)	2 pcs USB-A sockets Charging USB devices up to 1.5A (USB option only) Connecting PreP-Keypad or PreP-Stick (PAYG option only)		
Interface:	UART Interface: USB/Uart converter (option) for PC communication (configuration, data read out)		
Load Control	based on battery status a. Fix Voltage: 11V b. Fix Voltage: 11.5V c. SOC (11V to 11.75V) d. SOC (11.5V to 11.9V) e. Factory configuration on request Load reconnect level: 12.8V	Settings for LiFePO4 Batteries, 12.8V Nominal Voltage	
Protections:	Load overcurrent, Load short circuit, Burst/Surge (Varistor), Overtemperature, Battery reverse polarity, Panel revers polarity, Panel reverse current, Inductive load protection		
Further Protections:	PB: Battery undervoltage: 10.5V Battery overvoltage: 15.5V	Overvoltage, Undervoltage according LiFePO4 cell requirements; Single cell monitoring, Cell-Balancing	
Comments:	For Li Option with Single cell monitoring need extra wire set option (not included)		
Datalogger	1 year datalogger		
Grounding:	Positive grounding		
Ambient Temperature:	-25 to +50°C		
Dust and Water protection:	IP22		
Self-consumption:	<8mA @ 12V		
Max altitude:	5000m		
Display:			
Charging	Green LED		
SOC	4 yellow LED		
Load output	Yellow LED for Load output ok, red for failure, red flash for overcurrent		
PAYG	PG only: red status LED for lack of payment warning LCD: show left paid days		
Dimensions (WxHxD)	116x116x50mm		
Assembly type:	Front panel		
Timer functions:	Streetlight application, Timer for load control (Option on request)		
Pay as you Go	PG option only		

PG: Pay as you Go

USB: USB-device charging output

PB: Lead Acid batteries

LiFePO4: Lithium Ferro Phosphate batteries

Datasheet: DATASHEET-PBLI-CC-2018-06-10 Subject to change without notice, misprints excluded