

# PCV10/20 (10 A/20 A)

Solar Charge Controller + IRDA Remote Control



Charge controllers are the core of every PV system, precisely controlling the energy flow, protecting the battery, and increasing system efficiency. Isolated PV systems exposed to extreme weather/environmental conditions (streetlights, navigation buoys, etc.) have increased risk for damage to the power electronics. In order to assure reliable battery protection under such conditions, LC Power developed a fully encapsulated charge controller to prevent corrosion: PCV10/20.

PCV10/20 is an industrial-grade charge controller that is suitable for all practical PV applications. It conforms to the IP68 protection system. Four-stage PWM-charging is combined with low-voltage disconnect, flexible load timer functions, and a IRDA Remote Control system. The small size of the devices gives extra flexibility, as they fit in every application.

- ◆ Developed for applications in demanding and harsh environments, especially in the oil and gas industry;
- ◆ Fully protected by the encapsulated case (protection class IP68): increased lifetime and reliability, reduced costs;
- ◆ Intelligent timer and various output modes available for lighting control;
- ◆ Auto-protect function: two voltage disconnects extends system operation time and reliability;
- ◆ Four-stage battery charging (main, float, boost, equalization), temperature compensated;
- ◆ Small size: fits everywhere;
- ◆ Automatic system voltage recognition (12/24 V);
- ◆ LED digital display, waterproof button, easy operation;
- ◆ Data-protection function on power down;
- ◆ IR Remote Control.
- ◆ Lithium Battery and Lead-acid battery mode

## Technical Parameters:

Model no.	PCV10	PCV20
System voltage	12/24 V auto recognition	
Max. charge/load current	10A	20A
Float Charge	13.8V/27.6V(25°C)	
Main Charge	14.4/28.8 V (25 °C), 30 min. (daily)	
Boost charge	14.4/28.8 V (25°C), 2 h Activation: battery voltage < 12V/24V	
Deep discharge protection: Cut-off voltage	11V/22V	
Deep discharge protection: Reconnect voltage	12V/24V	
Overvoltage protection	16V/32V	
Max. panel voltage	55V	
Temperature compensation	-4mV/°C·2V	
Max. own consumption	5 ~ 10mA	
Night/day detection delay time	3min	
Overload and short-circuit protection	Overload: $\geq 1.2$ times rated current and last 20 seconds; $\geq 1.5$ times rated current and last 3 seconds; Short-circuit: $\geq 2.5$ times rated current.	
Grounding	Positive grounding possible	
Working temperature	-40 ~ +55°C	
Maximum above sea level	4,000 m above sea level	
Dimensions (L*W*H)	82*59*20 mm	82*100*20 mm
Wire cross section	2.5mm <sup>2</sup>	
Weight	140g	310g
Protection grade	IP68 (1.5 m, 72 h)	

# Monitor display:

