



**samlexsolar®**  
A Division of Samlex America Inc.

# 10-30A



## Charge Controllers Solarix PR Series

**Model**  
PR-1010, 10 Amps  
PR-1515, 15 Amps  
PR-2020, 20 Amps  
PR-3030, 30 Amps

### Design Features

- Micro-controller based, multistage, temperature compensated charging using PWM / Shunt control
- State of Charge (SOC) Control with unique Steca-AtonIC and Data Logger for optimum charging
- Automatic detection of 12V / 24V battery
- Self-Testing
- Simple menu driven operation through graphical LCD display
- Night Light and Day Light Functions
- Displays charged and discharged energy in Ampere Hours
- Lower EMI - ideal for telecommunications
- Made in Germany, CE marked

## 2 YEAR WARRANTY

PARAMETER		PR-1010	PR-1515	PR-2020	PR-3030
BATTERY SYSTEM	NOMINAL VOLTAGE	12V (24V), Automatic Detection			
	BATTERY VOLTAGE DETECTION	6.9V to 17.2V: Detects as 12V Battery		17.3V to 43V: Detects as 24V Battery	
	MINIMUM BATTERY VOLTAGE TO OPERATE	6.9V	6.9V	6.9V	6.9V
SOLAR ARRAY	BATTERY TYPE	Lead Acid (Flooded / AGM / Gel)			
	MAX OPEN CIRCUIT VOLTAGE	< 47V	< 47V	< 47V	< 47V
	MAX SHORT CIRCUIT CURRENT AT 25°C	10A	15A	20A	30A
CONTROLLER CHARACTERISTICS	TYPE	Shunt, PWM	Shunt, PWM	Shunt, PWM	Shunt, PWM
	PWM FREQUENCY	30 Hz	30 Hz	30 Hz	30 Hz
	SELF CONSUMPTION	12.5 mA	12.5 mA	12.5 mA	12.5 mA
	DISPLAY	Graphical LCD Display for Operating Parameters, Fault Messaging & Self Test			
	TEMPERATURE COMPENSATION	-4m V per K and cell (internal sensor)			
FINAL CHARGING VOLTAGES	BOOST (FOR 2 HOURS)	14.4V (28.8V)	14.4V (28.8V)	14.4V (28.8V)	14.4V (28.8V)
	FLOAT	Liquid Electrolyte: 13.9V (27.8V) / Gel Cell: 14.1V (28.2V)			
	EQUALIZATION (FOR 2 HOURS)	Liquid Electrolyte: 14.7V (29.4V) / Gel Cell: No Equalization			
	30 DAY MAINTENANCE (2 HOURS)	Liquid Electrolyte: 14.7V (29.4V) / Gel Cell: 14.4V (28.8V)			
LOAD CONTROL	MAX LOAD CURRENT AT 25°C	10A	15A	20A	30A
	LOW VOLTAGE DISCONNECT	SOC Mode: < 30% / Voltage Control Mode: 11.1V / 22.2V			
	LOW VOLTAGE RECONNECT	SOC Mode: > 30% / Voltage Control Mode: 12.5V / 25.0V			
PROTECTIONS	ELECTRONIC PROTECTIONS WITH AUTOMATIC RESET AND ELECTRONIC FUSE				
INPUT/OUTPUT CONNECTIONS	- Reverse Polarity of Solar Array / Load / Battery Connections				
	- Short Circuit at Solar Array Input / Load Output				
EMC COMPLIANCE	- Over Charge, Over Load, Over Input Voltage and Over Temperature				
	- Deep Discharge / Under Voltage				
ENVIRONMENTAL	- Reverse Current Flow from Battery to Solar Array at Night				
	- Excessive Solar Array Current				
MECHANICAL	- Open Circuit (Battery is Not Connected)				
	MAX WIRE SIZES FOR TERMINALS	16mm <sup>2</sup> / 25 mm <sup>2</sup> or AWG #6 / AWG #4			
CE MARKED	EMC Directive 2004/108/EC European Standards: EN60730-1, EN60730-2-11, EN55014-1, EN55022				
OPERATING AMBIENT TEMPERATURE	-10°C to 50°C / 14°F to 122°F				
INGRESS PROTECTION CLASS	IP32	IP 32	IP 32	IP 32	
DIMENSIONS (D X W X H)	187 x 96 x 44 mm / 7.36 x 3.73 x 1.73 inch				
WEIGHT, KG/LB	0.35 kg. / 0.77 lb.				