

Solar Charge Controller

PR 0303, PR 0505

Overcharging (HVD) and deep discharging (LVD) protection
Reverse polarity, short circuit and overload protection
Maintenance free operation by electronic fuse
Temperature compensation



Display of battery charging process
Display of battery's voltage level
Manual load disconnection
Large connection terminals

CE

Applications

The range of photovoltaic regulators PR 0303 and PR 0505 are well adapted for small solar home systems with either a 3 or 5 Amp solar charging and load current capacity. Loads such as lights, radios or small TV's can be manually switched "off" on the controller without additional wall mounted switches.

Regulators can also be used in small photovoltaic power supplies for telecommunication systems when treated with a conformal coating.

Several safety features guarantee maintenance free operation. High quality production standards and semiconductor components according to ISO9001 assure a long life span of the controllers especially in extreme climatic conditions.

The regulators can be used with amorphous, thin film and crystalline solar modules.

Standard Features

- PWM series battery charging
- high voltage disconnect (HVD)
- variable low voltage disconnect (LVD) by load current
- temperature compensated end of charge voltage
- manual load disconnect with built in "light switch"
- low standing current

Electronic Protections

- short circuit
- overload
- reverse polarity
- reverse current at night
- open-circuit operation
- high voltage protection

Displays

- battery charging
- battery voltage level
- Deep discharge protection
- End of charge voltage
- yellow LED
- green and red LED
- red LED
- flashing yellow LED

Technical Data:

product designation	PR 0303	PR 0505
Nominal system voltage	12 V	
Protection class	IP 22	
Max. module short-circuit current at 50° C	3.0 A	5.0 A
Max. load current at 50° C	3.0 A	5.0 A
Max. self consumption	3 mA	
Boost charge voltage at 25°C	14.5 V	
End of charge voltage (HVD) at 25°C	13.8 V	
Reconnection threshold at 25°C	12.5 V	
Deep discharge protection (LVD) at 25°C (current based)	11.0 V...11.5 V	
Permissible ambient temperature	-25° ..+ 50°C	
Terminals (fine/single wire)	6 mm ² / 10 mm ²	
Weight	160g	160g
Dimensions	146 x 90 x 33 mm	