

Content

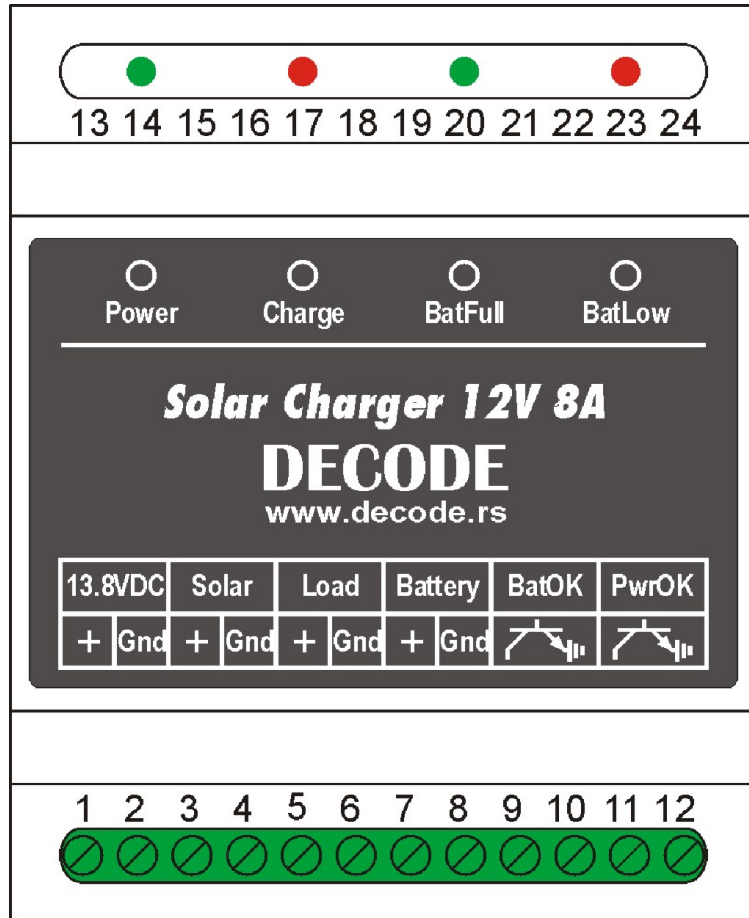
Description	1
Operating mode	3
Technical Specifications	4
Connecting devices	5
Scheme of connecting devices	6

Description

Solar Charger 12V (or 24V) is regulator of solar and network power source which charge battery on nominal voltage of 12V (or 24V). Provides recharging from solar panels and / or mains of battery-powered systems. "IU-charging" recharge the batteries evenly and quickly, while battery is protected against over discharge (over discharge can occur damage to battery cell).

The solar charger unit controls the gas-formation and therefore removes and prevents the development of battery acids. This process depends upon the temperature and is regulated by the in-built temperature-sensor.

Alarm outputs configuration "open collector" show the validity of the battery and the presence of a network. The unit has LED indication of the presence of the network, charging and battery condition - full, empty. Device connecting is done via screw terminals. The device is designed for mounting on 35mm DIN rail.



Solar Charger 12V

Operating mode

Solar Charger 12V (or 24V) primary powers consumers and charges the battery from the mains voltage. If the voltage of the solar panels is high enough, the device automatically powers the system directly from solar sources. In battery-powered systems are commonly used lead-acid batteries that require protection from overcharge and deep discharge. The device meets these requirements while the battery is charging "IU" method of control gas-formation, with temperature compensation, and if the battery is discharged below the allowable limit excludes the consumer until the battery voltage reaches the required value. Alarm output "open collector" provide insight into the presence of network and battery status, while involved transistors indicate the validity of the network and battery.

Technical Specifications

System voltage	12/24V
Panel/Load current	< 8A
Internal current consumption	2-5mA
Temperature sensor	built-in
Charging end voltage	Normal 13,3V/27V Gassing deactivated 13,8V/27,8V Temperature compensation -4 mA/K/cell
Deep discharge disconnection	Cut-off voltage 10,8V/21,8V Reset voltage 12,5V/25,3V
Gassing regulation (JMP in position 1-2)	Gassing active 12,4V/24,8V Gassing end voltage 14,3V/28,7V, Temperature compensation -3 mA/K/cell
Alarm output "open collector"	transistor is turned on - BatOK, PwrOK
LED indication	Network, Charging, Battery Full and empty
Fuse	T10A
Operating temperature	-20°C - +75°C, 0 - 95%(no condensation)
Dimensions	70 x 85 x 58 mm
Mounting	DIN šina 35mm

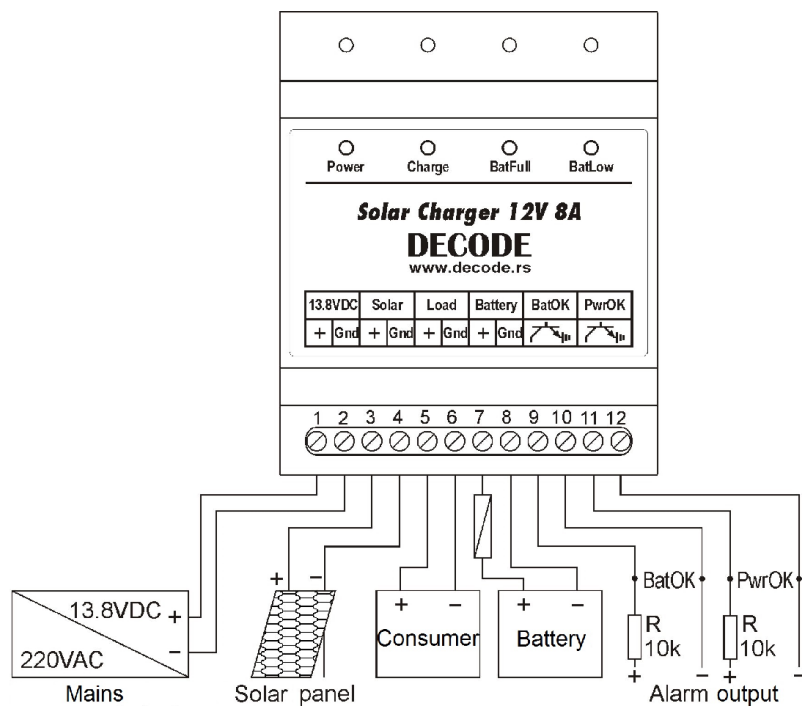
Connecting devices

The device should be placed as close to the battery and it should be protected from the impact of bad weather. Place battery in well ventilated area because the fumes during charging. In order for the device to function properly, it is necessary to connect the solar panel and / or mains, the battery and the consumer. When connecting, pay attention to the polarity of the connections. Connection on the device labeled "GND" are connected to each other inside the device. Inside the device there is a jumper JMP which should be set to the proper position depending on the source of charge the battery type:

JMP 1-2: solar panels and lead battery
JMP unmounted: solar panel and gel battery
JMP 2-3: mains and gel or lead battery

IMPORTANT! Be sure to set the fuse T10A on "+" battery clamp to avoid battery explosion at random short circuit cables. In order to avoid cable heating which could create voltage drop, use cable with cross-section 2.5-4mm² to connect the battery.

Scheme of connecting devices



Scheme of connecting devices