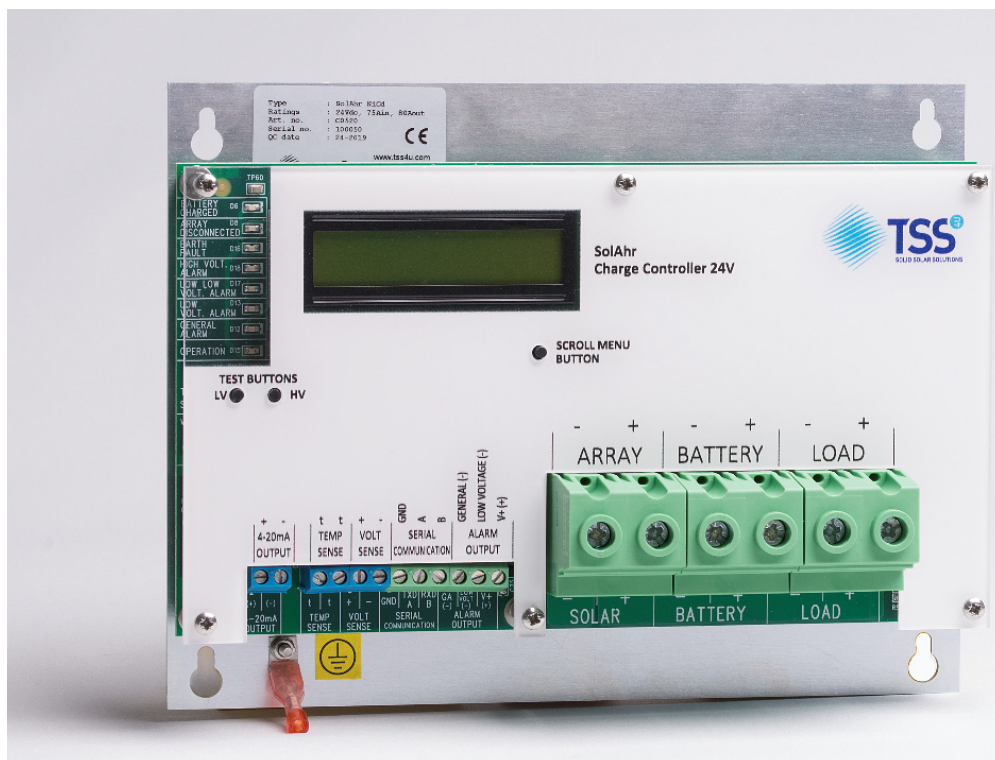


SolAhr PWM Controller

The charge controller is the beating heart of any solar energy system. The desire for perfection at TSS has resulted in the most solid and most efficient charge controller for stand-alone solar energy systems. It is designed to have exceptional performance and lasts longer especially in the most harsh environments.



Efficiency 99.75%

This reduces your overall system cost.

LCD Display

Complete visualization of process parameters. In the blink of an eye your system's status is available and clear.

Battery Management

Controller can be optionally equipped with an industry standard Modbus RTU interface for easy and reliable remote monitoring.

Cost Effective

The charge controller provides the most cost effective solution for small solar energy systems.

Technical Specifications

Typical specifications		SolAhr PWM Controller	
Input voltage capability		24 Vdc	
Solar array inputs		1	
Max. continuous array input current		75 Adc	
Max. array input voltage		80 Vdc	
Max. continuous battery charging current		80 Adc	
Max. battery input voltage		60 Vdc	
Load output		1	
Nominal load output current		80 Adc	
Maximum load output current		100 Adc (1 minute)	
Peak load output current		500 Adc (1 seconds)	
Operating efficiency @ full input and full load		99.75 %	
Terminal connector size		≤ 35 mm ²	
Voltage/temperature sensor		External	
Test buttons		On PCB	

Typical settings		Lead Acid	Nicd (19 cells)
Load disconnect high system voltage (alarm)		30.5 Vdc	31.5 Vdc
Load re-connect high system voltage		28.8 Vdc	29.45 Vdc
Boost @ 25 °C level		28.8* Vdc	N.A.
Float @ 25 °C level		28.2* Vdc	28.5 Vdc
Low battery voltage (alarm, non-essential load disconnect)		23.6 Vdc	23.0 Vdc
Load disconnect low voltage (alarm, essential load disconnect)		23.0 Vdc	21.85 Vdc
Load re-connect high system voltage		24.5 Vdc	24.5 Vdc
Earth fault alarm		>100 mA	>100 mA
Temperature compensation		-3mV / °C / cell	N.A.

* Boost and float voltage for Lead Acid are temperature dependent

General specifications	
Operating temperature	-20 °C to +85 °C
Storage temperature	-30 °C to +85 °C
Humidity	100% non-condensing
Mounting	Indoor
Dimensions (H x W X D)	16.0 x 8.0 x 14.6 cm
Unit weight	0.98 kg
Communication (external)	Modbus RTU (optional)
Battery voltage (0-30 Vdc) analogue output	4-20 mAdc (passive)
Digital output	2x open drain
Approvals	CE
Standards	IEC 61000-6-2, IEC 61000-6-4, IEC 60950-1

This datasheet is not legally binding. Actual specifications and /or product features may vary. TSS4U BV reserves the right to make changes to specifications without notice.