

SolarEdge Home Hot Water Controller

SMRT-HOT-WTR-30-S2 / SMRT-HOT-WTR-50-S2



Maximizes self-consumption by storing excess solar energy as hot water

- / Reliable and robust communications using SolarEdge Home Network
- / Wireless communication to the inverter, reducing wiring, labor, and installation faults
- / Integrates seamlessly with the complete SolarEdge Home ecosystem, offering a single source for warranty, support and training, to streamline logistics & operations
- / Automatically adjusts power supplied to the heater, using any amount of available PV power (up to 5.0kW)
- / Built-in water tank power consumption meter
- / Simple wall mount installation
- / Suitable for powering purely resistive loads only
- / Optional temperature sensor for optimized heating

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	SMRT-HOT-WTR-30-S2	SMRT-HOT-WTR-50-S2	
ELECTRICAL SERVICE			
Operating Voltage Range	205 – 264		Vac
AC Frequency	50		Hz
Nominal Voltage	230		Vac
Supported Grids	L / N / PE		
Maximum Supported Load Size	3.0	5.0	kW
Input Overvoltage Protection ⁽¹⁾	264		Vac
Maximum Load Current Rating	13	22	A
Minimum Output Power	5% of load rating		
Load Type	Resistive		
Efficiency	> 98		%
Output Overcurrent Protection	13	22	A
External Overcurrent Protective Device Rating	≥ 20	≥ 25	A
Type of Action	Type 1 C		
COMMUNICATION			
Supported Communication Protocol	SolarEdge Home Network		
Device Configuration	Monitoring platform/app or SetApp; Ethernet connection is required		
Operating Frequency Range	863 – 870		MHz
Modulation	O-QPSK (Quadrature phase shift keying)		
EIRP with Antenna	14		dBm
STANDARD COMPLIANCE			
Radio	ETSI EN 300 328 V 1.8.1, ETSI EN 301 489-1, ETSI EN 301 489-17		
Safety	IEC-60730-1		
Emissions	EN61000-6-1,2,3, EN61000-4-2,3,4,5,6,8,11, EMC directive 2014/30/EU		
INSTALLATION SPECIFICATIONS			
Dimensions (H x W x D)	375 x 240 x 110 / 14.7 x 9.5 x 4.5		mm / inch
Weight	5.3 / 11.7		kg / lb
Operating Temperature Range	-10 to +50 / +14 to +122		°C / °F
Maximum Distance between Device and Load/Cable Cross-Section	3/10 for 15 AWG / 1.5mm ² 20/65 for 13 AWG / 2.5mm ²	3/10 for 13 AWG / 2.5mm ² 20/65 for 11 AWG / 4mm ²	AWG / mm ²
Terminal Block Minimum Wire Cross-Section	15 / 1.5		AWG / mm ²
Interfaces	1. AC in; 2. AC out; 3. External antenna RP SMA		
Cable Gland Diameters	2 glands 6-12, 1 gland 4-8		
Mounting Type	Wall mount		
IP Rating	IP65		
Self-Consumption	< 2.5		W
SENSOR SPECIFICATIONS ⁽²⁾			
Sensor Type	Pt100 (100 Ohms @ 0°C) to IEC 751, Class B, ¾ wire		
Construction	6.0mm diameter stem in 316 stainless steel		
Termination	IP67 aluminum alloy weatherproof connection head with 4 wire connection block, M20 x 1.5mm cable entry (gland included)		
Process Connection	1/2" NPT parallel		
Probe Temperature Range	-100°C to +450°C (connection head @ 170°C)		
Probe Diameter	Ø6mm (¼")		
Probe Length	150mm ½" BSPP		
Temperature Accuracy	1		%

(1) The device stops diverting power to the load when this threshold is exceeded.

(2) Temperature sensor HOTWTR-SENS-RW-S1 ordered separately. For more information, please contact SolarEdge.