# **Smart Energy Hot Water**

SMRT-HOT-WTR-30-S1, SMRT-HOT-WTR-50-S1



# SMART ENERGY

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

- Seamless integration with all SolarEdge inverters, and the monitoring platform
- Adjusts power supplied to the heater based on available PV power (up to 5.0kW)
- Built-in water tank power-consumption meter
- Simple wall mount installation
- / Wireless communication with the inverter
- Suitable for powering purely resistive loads only
- Optional temperature sensor for optimized heating



## / Smart Energy Hot Water

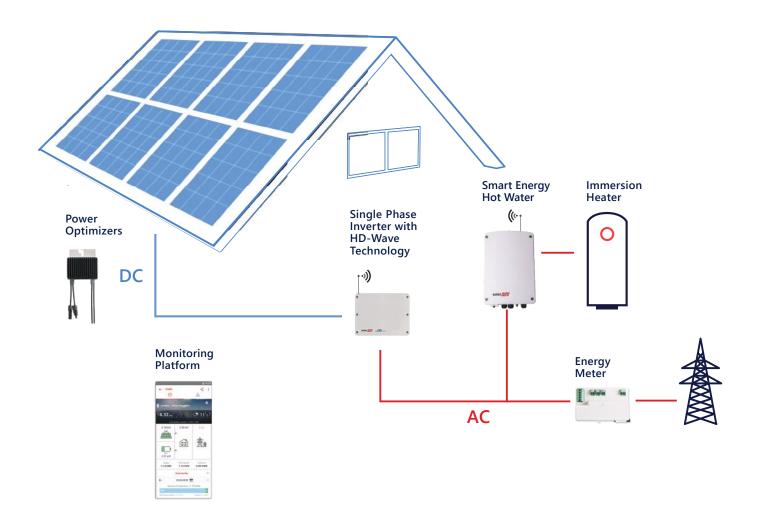
### SMRT-HOT-WTR-30-S1, SMRT-HOT-WTR-50-S1

	SMRT-HOT-WTR-30-S1	SMRT-HOT-WTR-50-S1	UNIT
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 over voltage protection <sup>(1)</sup>	26	4	Vac
Maximum Load Current Rating	13	22	A
Minimum Output Power	5% of load rating		
Load Type	Resistive		
Efficiency	> 98		%
Output Over-current Protection	13	22	A
External Over-current Protective Device Rating	≥ 20	≥ 25	A
Type of Action	Туре	1 C	
COMMUNICATION			
Supported Communication Protocol	ZigBee Home Automation		
Device Configuration	Via the inverter LCD, the monitoring platform/ app, or SetApp; Ethernet connection is required		
Nominal Transmit Power	11.8		dBm
Operating Frequency Range	2.4 - 2.5		GHz
EIRP with Antenna	16.8		dBm
Maximum Emitted Power	≤20		dBm
Bandwidth	2		MHz
Modulation	O-QPSK with DSSS coding		
Outdoor (LOS) Range	400 / 1312		m / ft
Indoor Range <sup>(2)</sup>	50 / 164		m / ft
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 / in
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/1.5 mm <sup>2</sup> 20/65 for 13 AWG/ 2.5 mm <sup>2</sup>	3/10 for 13 AWG/2.5 mm <sup>2</sup> 20/65 for 11 AWG/ 4 mm <sup>2</sup>	m / ft
Terminal Block Minimum Wire Cross Section	1.5 /		mm² / AWG
	1. AC in		
Interfaces	2. AC out		
Cable Gland Diameters	3. External antenna RP SMA 2 glands 6-12, 1 gland 4-8		
Mounting Type	2 giands 6-12, 1 giand 4-8  Wall mount		
IP Rating	IP65		
SENSOR SPECIFICATIONS(3)	11 0	-	
Sensor type	Pt100 (100 Ohms @ 0°C) to	DIFC 751 Class B 3/4 wire	
Construction	Pt100 (100 Ohms @ 0°C) to IEC 751, Class B, 3/4 wire  6.0mm diameter stem in 316 stainless steel		
Termination	IP67 aluminium alloy weatherproof connection head with 4 wire connection block,		
	M20 x 1.5mm cable entry (gland included)		
Process connection	1/2"BSP parallel		
Probe temperature range Probe Diameter	-100°C to +450°C (connection head @ 170°C)  Ø6mm (1/4")		
Probe length	150mm 1/2"BSPP		
			0/
Temperature Accuracy	1		%

<sup>(1)</sup> The device stops diverting power to the load when this threshold is exceeded (2) Approximate values. May differ depending on specific installation conditions

<sup>(3)</sup> Temperature sensor ordered separately. For more information please contact SolarEdge

## / SolarEdge System with Smart Energy Hot Water



### Temperature Sensor®



