

# 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 3.0kW)
- 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

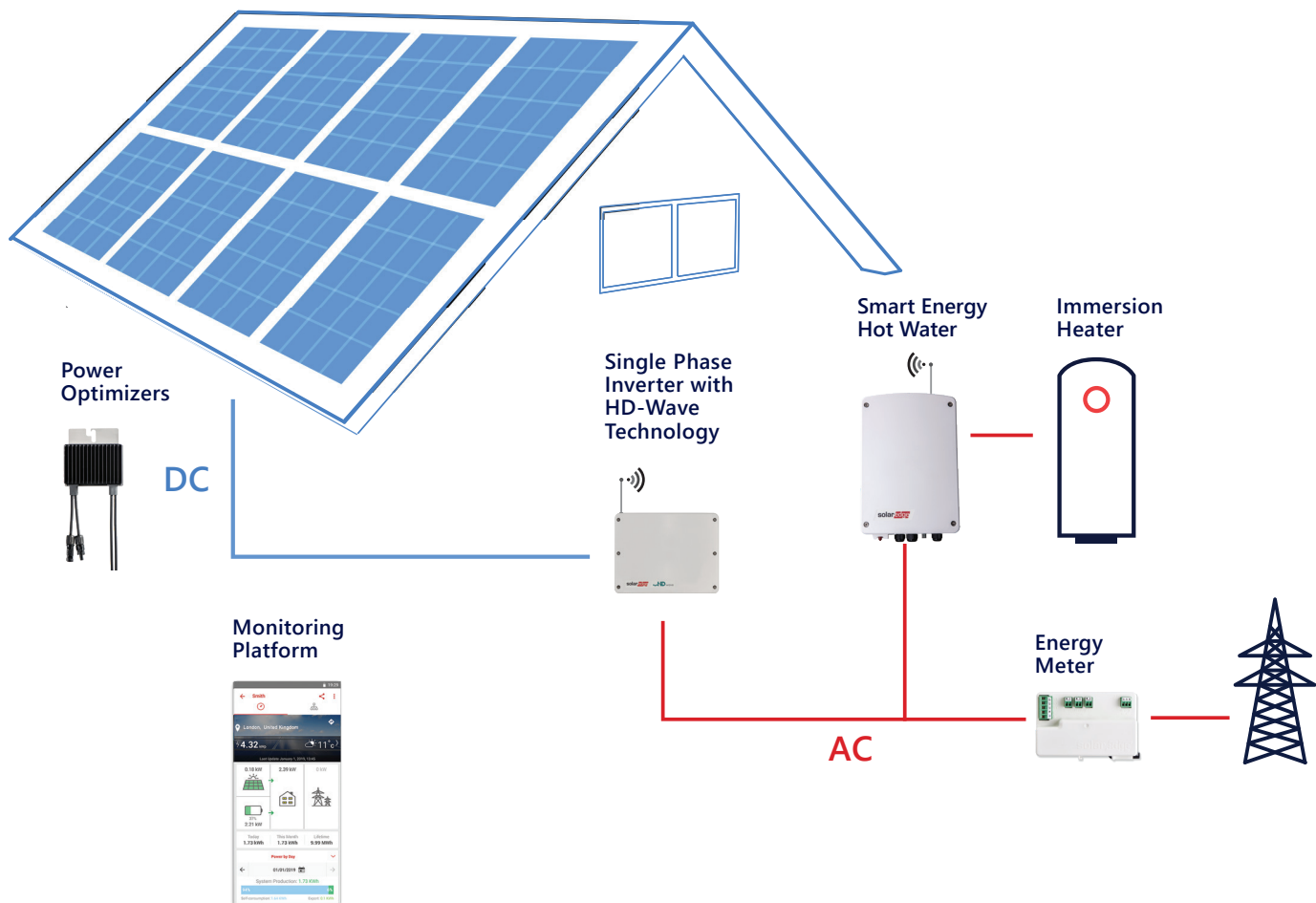
| SMRT-HOT-WTR-30-S1   |  | SMRT-HOT-WTR-50-S1   | UNIT                  |
|--|--|--|-----------------------|
| ELECTRICAL SERVICE   |  |  |                       |
| Operating Voltage Range                                      | 205-264  |  | Vac                   |
| AC Frequency   | 50   |  | Hz                    |
| 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>                 | 264  |  | Vac                   |
| Maximum Load Current Rating                                  | 13   | 22   | A                     |
| Minimum Output Power   | 5% of load rating  |  |                       |
| Load Type  | Resistive  |  |                       |
| Efficiency   | > 98   |  | %                     |
| Output Over-current Protection                               | 22   |  | A                     |
| External Over-current Protective Device Rating               | ≥ 20   |  | A                     |
| Type of Action   | Type 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><br>20/65 for 13 AWG/ 2.5 mm <sup>2</sup>   | 3/10 for 13 AWG/2.5 mm <sup>2</sup><br>20/65 for 11 AWG/ 4 mm <sup>2</sup> | m / ft                |
| Terminal Block Minimum Wire Cross Section                    | 1.5 / 15   |  | mm <sup>2</sup> / AWG |
| Interfaces   | 1. AC in<br>2. AC out<br>3. External antenna RP SMA  |  |                       |
| Cable Gland Diameters  | 2 glands 6-12, 1 gland 4-8   |  |                       |
| Mounting Type  | Wall mount   |  |                       |
| IP Rating  | IP65   |  |                       |
| SENSOR SPECIFICATIONS <sup>(3)</sup>                         |  |  |                       |
| Sensor type  | Pt100 (100 Ohms @ 0°C) to IEC 751, Class B, 3/4 wire   |  |                       |
| Construction   | 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                                      | -100°C to +450°C (connection head @ 170°C)   |  |                       |
| Probe Diameter   | Ø6mm (1/4")  |  |                       |
| Probe length   | 150mm 1/2"BSPP   |  |                       |

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

(2) Approximate values. May differ depending on specific installation conditions

(3) Temperature sensor ordered separately. For more information please contact SolarEdge

# / SolarEdge System with Smart Energy Hot Water



## Temperature Sensor<sup>(3)</sup>

