



WattMate Series

Hot water is civilization


An eco-smart heating regulator — designed to maximize the self-consumption of solar to heat water.


Single Phase 0~3.6kW auto-follow


Three Phase 0~9kW auto-follow

 EMS Mode/ Smart Meter Mode/ Inverter Mode

 Intelligent O&M with self-learning

 Up to almost 100% energy self-consumption

 24h Real-Time heating data insights

 24/7 after-sales service



Born to heat water

Capture every drop of solar

Enhancing self-consumption and minimizing costs: the Wattmate heating driver offers a standalone solution with minimal impact on both expense and installation complexity. This innovative system harnesses photovoltaic energy to efficiently produce hot water. By automatically routing surplus solar power to an electric water heater equipped with a storage tank, users can immediately enjoy cost savings and, in certain cases, even eliminate their reliance on grid power for an entire year. The Wattmate heating driver is universally compatible, operating seamlessly alongside existing inverters and monitoring systems.

Cater to versatile scenarios

Strong compatibility with multi-system integration

EMS Mode

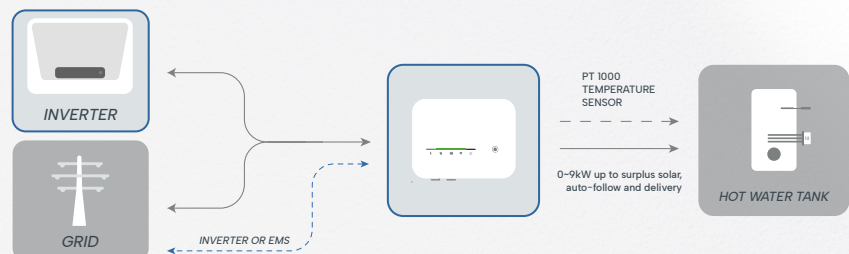
Thanks to standard Modbus RTU/TCP-IP protocols integrated, Wattmate can be seamlessly integrated by any external control devices.



Inverter Mode

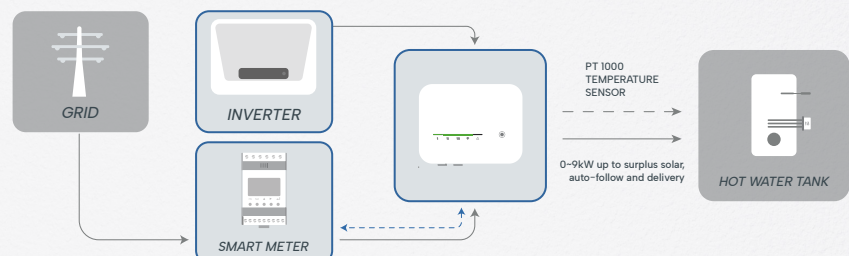
Set up direct communication to inverter via Modbus protocol, Wattmate can always follow real-time PV generation and deliver surplus solar to water heating automatically.

*Please disable "0-injection mode" on inverter to allow surplus solar could be captured by Wattmate .



Smart Meter Mode

Measuring available surplus solar by means of WattMate smart meter installed at grid side, the WattMate minimizes the power demand of the electric element in the water heater / hot water storage tank, consequently avoiding the need to draw electricity from the grid, plug and play.

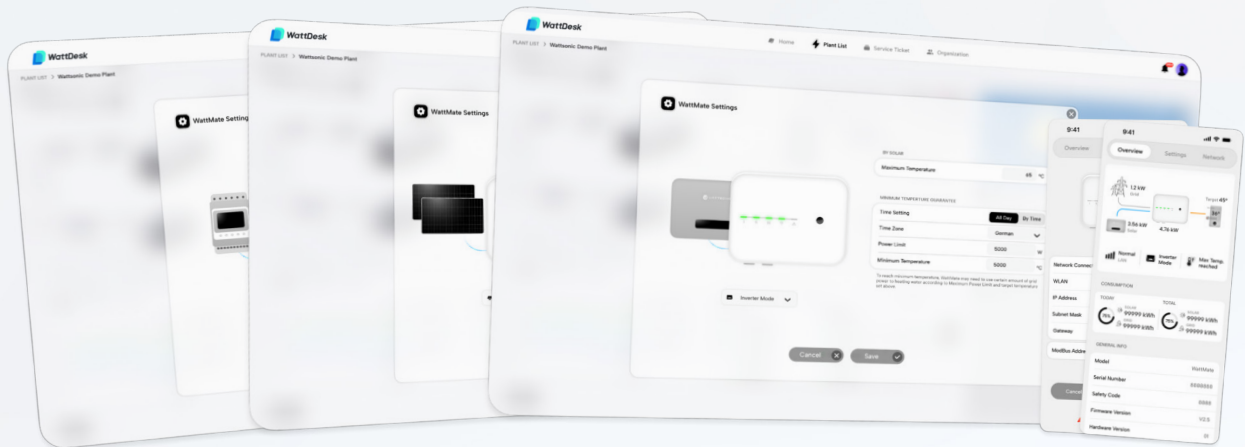


Solar Mode

Running off-grid with direct PV input. When there is still roof space for additional PV panels to connect WattMate, it can support a direct DC (PV) input within 120V~300V at max. 14.5A to heat water under an off-grid operation.



 **WattDesk** supported



Remote O&M makes you in a breeze

Cloud-based system Monitoring from any time & anywhere

Whether you use a smartphone or a computer, WattMate always provides real-time running data about your smart home system, including heating elements. You can heat water on a personal set schedule, such as adjusting the desired heating period, water temperature, or running mode, checking the running status, and remote firmware updates anytime, anywhere.

ECO Smart Mode is the mastermind behind it



Stunning self-learning algorithm ensures precise preheating times

If low or no PV production during winter period, WattMate can also bypass grid power to heating water at assigned time and temperature with also assigned grid power. The self-learning aspect enables the heating control to keep continual optimization over time based on historical data and your habits, no late, no earlier, ultimately enhancing sustainability and your experience.



WattMate

Smart heating partner



WM-3.6KW-IP

WM-9.0KW-3P

AC Input

| | | |
|-------------------|---------|------------------|
| Voltage | AC:230V | AC:1~230V/3~400V |
| Frequency | 50Hz | 50Hz |
| Max.input Current | 16A | 3*14A |
| AC Detection | Yes | Yes |

DC Input

| | | |
|---------------------|---------------------------------------|---------------------------------------|
| Input Voltage Range | 120~300V | 120~300V |
| Maximum Power Input | 3.6kW | 3.6kW |
| Current | 14.5A | 14.5A |
| Protection | Over input voltage/current protection | Over input voltage/current protection |

Heating Output

| | | |
|------------------------|--|--|
| Max. heating power | 3.6kW | 9kW (L1:0~3kW adjustable, L2/L3:3kW fixed) |
| Frequency | 50Hz | 50Hz |
| AC max. output current | 16A under AC input 14.5A under DC input | 3*14A under AC input 14.5A under AC input |
| THDi | < 3% | < 3% |

General

| | |
|--|--|
| Type of power regulation | Pulse width modulation(PWM) |
| Self-consumption | <10w standby |
| Communication | ModBus RTU, ModBus TCP/IP, WiFi/LAN, Web Portal, APP |
| Dimensions (height x width x depth)/Weight | 258*338*90(mm)/ 4.6kg |
| Protection class | IP65 |
| Installation | Wall Mounted |
| Ambient temperature range | 0~+40°C |
| Permitted humidity | 0~99%, non-condensing |
| Certificates and compliance with standards | CE, EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 300 328 |

* If DC input exceed the maximum voltage of 300V, WattMate will close the heating element to protect the system circuit.

• Only resistance load is approval.

• AC input and DC input cannot work at the same time, solar self-consumption is always high priority, while grid power working as backup upon demand.

• 1*PT-1000 temperature sensor is included as standard accessory, plug and play.

• WattMate reserves the right to modify the technical datasheet and apperance of the product in the catalogue without prior advice to the users.

• WattMate is a Wattsonic company.