

ONE is enough. WattMatic AIO Home Series.

An all-in-one residential energy solution designed for scalable performance, smart management, and fast installation.

Inverter Options: [10kW~25kW] 3 Phase
Li-HV Battery Options: Basic Module 76.8V/3.84kWh
[2~9 Batteries] *3, Max. 103.6kWh

-  High Power. Strong Current.
Built for demanding needs.
-  Plug-in Expansion. Parallel 5 inverters,
3 battery clusters — anytime.
-  Flexible Modes.
Aligned with real-world usage.
-  Multi-scenario Compatibility:
EV, Heat Pump, Wind, WattMate.
-  Remote Maintenance.
No Site Return. Guaranteed by WattDesk.
-  Installer Toolkit Provided.
Local wireless access via iMaster.
-  All-in-One. Wall-mounted.
Wireless. Fast to install.



Engineered for Power. Designed to Scale.

Max. 25kW output · 50A current · Handles real loads

WattMate can always follow real-time PV generation and deliver surplus solar to water heating automatically.



Faster energy recovery

Fully recharge overnight using low-rate electricity



High-capacity battery compatible

No charge/discharge bottlenecks



Heavy-load ready

Air conditioning, water heaters, and induction cookers — all running at once



Business-grade current

Ideal for small commercial equipment with continuous power

Network 5 Units. Power a Village.

Modular & expandable without SOC prep

Each inverter system supports up to 3 battery clusters, expandable from 7.68kWh to over 30kWh. For larger applications, up to 5 inverter systems can be paralleled to scale both power and capacity.



Up to 3 battery clusters per inverter system



Up to 5 inverter systems in parallel

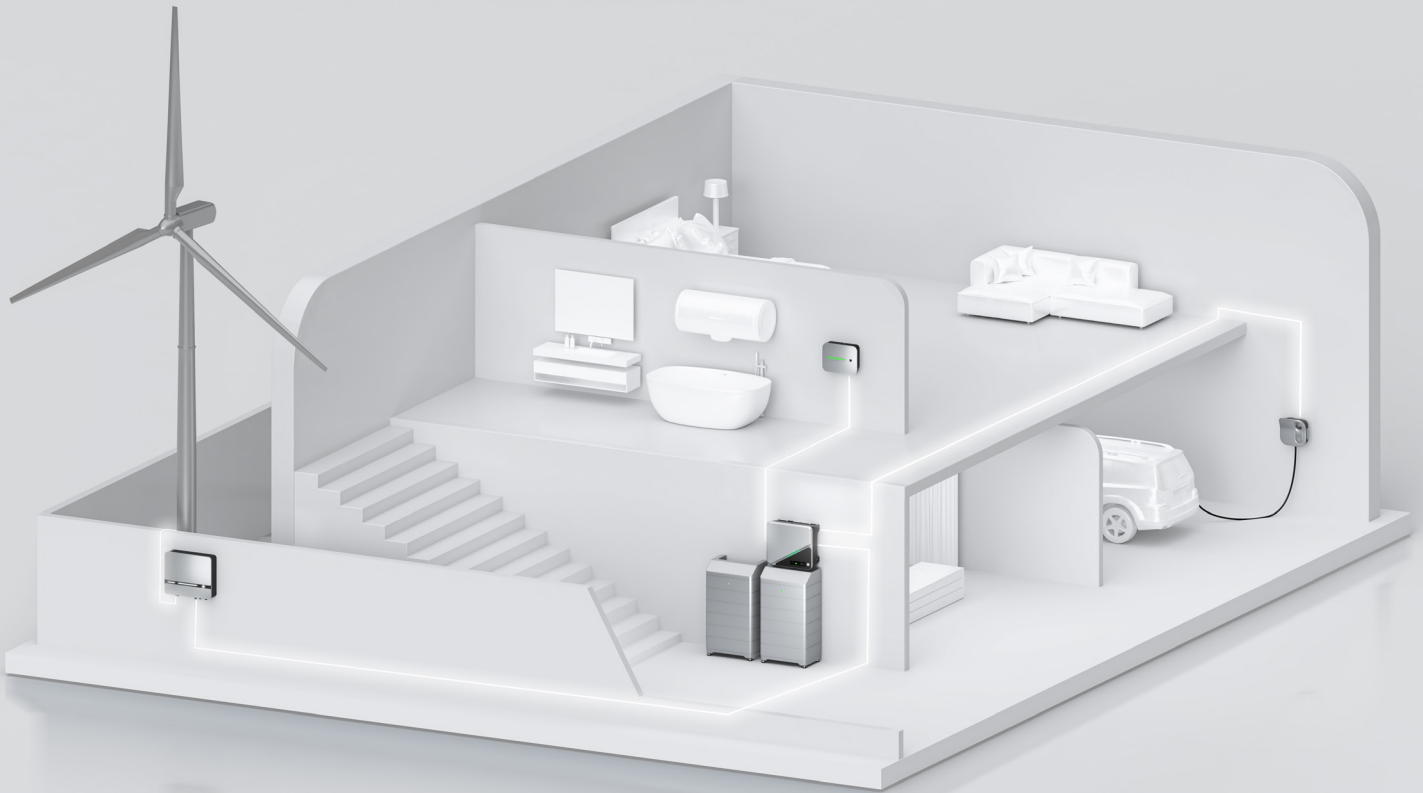


No SOC matching required — passive balancing handled by BMS



Flexible. Adaptive. Ready for Every Scenario.

WattMatic adapts to diverse energy needs through smart operating modes and broad device compatibility. It seamlessly supports UPS, peak load shifting, and time-based strategies — while integrating with EV chargers, SG-ready heat pumps, smart heaters, and wind turbines.



Intelligent Operating Modes

Smart software for real-world energy needs

Choose from UPS, TOU, Load Shifting, or Economic mode. WattMatic adapts to your energy goals — solar-first, cost-cutting, or always-on backup.

-  General mode
-  Off-grid mode
-  Peak load shifting mode
-  Geek Code Mode
-  Economic mode
-  Smart Grid Mode
-  UPS mode
-  EMS Mode

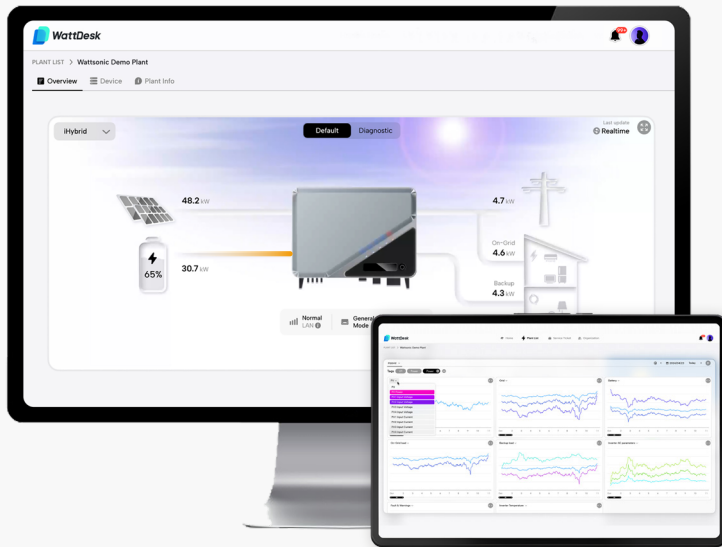
Broad Hardware Compatibility

Integrates with your energy ecosystem

WattMatic AIO is designed for flexible integration with third-party devices and energy applications — enabling the system to adapt to varied scenarios and maximize energy use across sources and loads.

-  **SG Ready Heat Pumps**
Automate heating via solar surplus and schedules.
-  **Smart EV Chargers**
Charge with solar or by time and load.
-  **WattMate Smart Heater**
Use excess PV for water heating, tracked in WattDesk.
-  **WindMate Turbines**
Add wind power as a second input beyond PV.

WattDesk Cloud Platform



**Reduce site visits.
Increase service efficiency.**

WattMatic systems connect seamlessly with the WattDesk cloud platform, enabling real-time monitoring, remote diagnostics, and over-the-air firmware upgrades — all without stepping on site.

No downtime. No callbacks.

- 
Remote Firmware Updates
 Push upgrades from anywhere, with zero system disruption
- 
Online Diagnostics & Configuration
 Identify faults, monitor performance, and adjust settings in real time
- 
Lower Service Costs
 Eliminate travel time, accelerate issue resolution, and reduce O&M expenses

Professional Tools. Open Connectivity.

iMaster Access & SunSpec Protocol Support

Wattsonic provides the iMaster desktop utility for local system maintenance, diagnostics, and firmware updates — all performed wirelessly over the local area network. With native support for the SunSpec protocol, the system integrates easily with third-party O&M platforms and industry-standard toolchains.



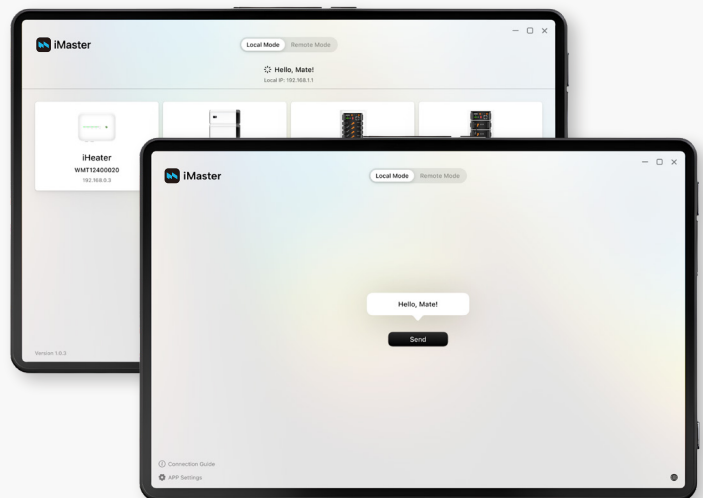
iMaster

Wireless local access via LAN through iMaster



SunSpec

Fully compatible with SunSpec-compliant tools





All-in-One. Wireless. Expandable.

Reduce site visits. Increase service efficiency.

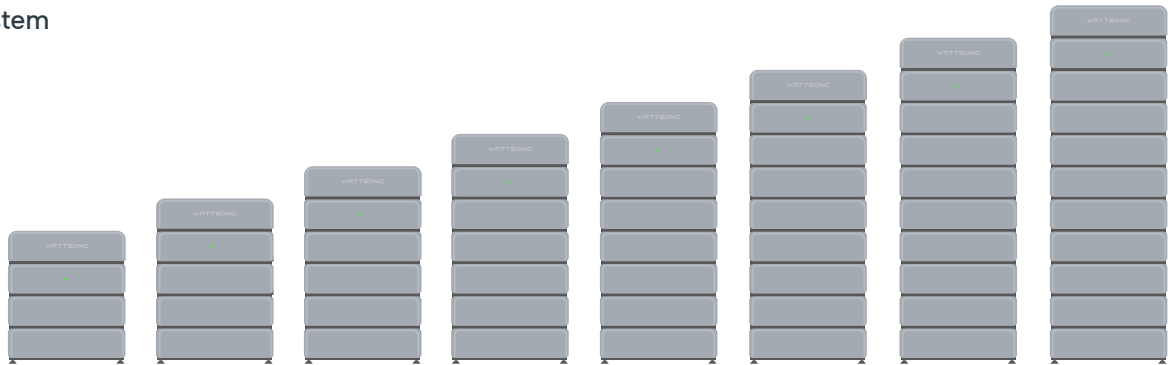
WattMatic combines inverter, BMS, and battery in a compact wall-mounted design — with wireless battery communication and tool-free expansion. Installation is fast, clean, and space-saving.

Wall-mounted inverter simplifies servicing

No need to remove it when replacing BMS or battery modules.

Battery Module

3 Phase AIO ESS System



Number of Battery Modules	2	3	4	5	6	7	8	9
Battery Capacity	7.68kWh 153V	11.5kWh 230V	15.3kWh 307V	19.2kWh 384V	23kWh 460V	26.8kWh 537V	30.7kWh 614V	34.5kWh 691V
Size (W*H*Dmm)	570*375*628.2	570*375*763.2	570*375*898.2	570*375*1033.2	570*375*1168.2	570*375*1303.2	570*375*1438.2	570*375*1573.2
Weight (kg)	90kg	125kg	160kg	195kg	230kg	265kg	300kg	335kg
DOD Recommended	90%							
Power Connection Type	Hard Connection with Positioner							
Warranty	10000 Cycles within 10 Years Guarantee							

*Wattsonic reserves the right to modify the technical datasheet and appearance of the product in the user manual without prior advice to the users.

Hybrid Power. One Step Ahead.

One Inverter. Total Control.



WATTSONIC

Model	Matic-10kW-50A	Matic-12kW-50A	Matic-15kW-50A	Matic-20kW-50A	Matic-25kW-50A
PV Input Parameters					
Maximum Input Power	16kW	19.2kW	24kW	32kW	40kW
Max DC Input Voltage	1000V				
Min Input Voltage / Start-up Voltage	150V/180V				
Rated DC Input Voltage	620V				
MPPT Operating Voltage Range	200~950V (derating >850V)				
Full-load DC Voltage Range	400-850V	480-850V	300-850V	400-850V	500-850V
Max Input Current	20A×2			20A×4	
Max Short-circuit Current	30A×2			30A×4	
Number of Strings per MPPT			1		
Number of MPPTs	2			4	
Grid Input & Output					
Rated Output Power	10kW	12kW	15kW	20kW	25kW
Max Output Apparent Power	10kVA	12kVA	15kVA	20kVA	25kVA
Max Grid-tied Input Apparent Power	20kVA	24kVA	30kVA	40kVA	50kVA
Max Battery Charging Power	10kW	12kW	15kW	20kW	25kW
Rated Output Current	14.5A	17.4A	21.7A	29A	36.2A
Max Output Current	16.5A	19.1A	23.8A	31.9A	39.8A
Rated AC Voltage	3L/N/PE; 220/380V; 230/400V; 240/415V				
AC Voltage Range	-15%~+10%				
Rated AC Frequency	50Hz/60Hz				
AC Frequency Range	45-55 Hz/55-65 Hz				
Power Factor	>0.99 (at rated power)				
Adjustable Power Factor Range	0.8 (leading) ~ 0.8 (lagging)				
Grid Current Harmonic (THDi)	<3% @ rated power				
DC Component	<0.5% * IpN (rated current)				
Backup Ouput					
Rated Output Power	10kW	12kW	15kW	20kW	25kW
Max Output Apparent Power	10kVA	12kVA	15kVA	20kVA	25kVA
Peak Output Apparent Power (Sufficient PV and Battery Power)	120% × rated power @60s				
Max Output Current	16.5A	19.1A	23.8A	31.9A	39.8A
Rated Output Voltage	3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated Output Frequency	50Hz/60Hz				
Total Voltage Harmonic Distortion (THDv)	<3% @ linear load				
UPS Switching Time (Upon Grid Outage)	<20ms				
Battery Parameters		Basic Parameters			
Battery Type	Lithium Battery	Overvoltage Category		DC Type II/AC Type III	
Battery Voltage Range	180-800V	Dimensions		559*486*259mm	
Start-up Voltage	180V	Weight		<51kg	
Rated Battery Voltage	620V	Protection Grade		IP66	
Max Charge/Discharge Current	50A/50A	Pollution Degree		PCS internal level II	
Max Charge/Discharge Power	30kW/30kW	Corrosion Protection Level		C3 (C5 optional by request)	
Number of Battery Inputs	1	Standby Loss		<15W	
Battery Charging Mode	Controlled by BMS	Topology		Transformerless	
BMS Communication	CAN	Operating Temperature		-30°C to 60°C, derating >45°C	
Efficiency Parameters		Relative Humidity		<100%	
Max Efficiency	98.40%	Storage Temperature		-40~70°C	
European Efficiency	97.90%	Storage Humidity		<80%	
Protection Parameters		Max Operating Altitude		4000m (derating above 2000m)	
PV Input Reverse Polarity Protection	Integrated	Cooling Method		Smart Forced Air Cooling	
Battery Reverse Polarity Protection	Integrated	Mounting Method		Wall-mounted	
Insulation Resistance Protection	Integrated	Display Method		LED indicators; optional LCD screen	
Surge Protection	Integrated (PV Typell+AC Typelll)	Communication Method		RS485*2; CAN*2; LAN*1; DI*6/DO*2; USB*1; WiFi*1(optional); Bluetooth*1 (optional)	
Overtemperature Protection	Integrated	Standards and Certifications			
Leakage Current Protection	Integrated	Grid Standards			
Anti-islanding Protection	Integrated	EN50549-1:2019, EN50549-10:2022, C10/11:2021, TOR Erzeuger Type A:2022, OVE-Richtlinie R25:2020, VDE4105:2018, VDE0124-100:2020, NC RFG , Type ABCD, PTPIREE, NRS097-2-1"			
Overvoltage Protection	Integrated	Safety and EMC Certificationsc			
Overload Protection	Integrated	CE-EMC: IEC/EN61000-6-1/2/3/4			
Short Circuit Protection	Integrated	CE-LVD: IEC/EN62109-1:2010,			
AFCI Function	Optional	IEC/EN62109-2:2011, IEC/EN62477-1:2022			
PID Protection Function	Integrated	CE-RoHS: IEC63000:2018			
BMS Power Supply	Optional 24V (20W)				

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