

Li-HV Commercial

Three Phase Hybrid AIO ESS

Inverter Options 25/30/36/40/50kW-100A-3P
HV Battery Options Li-HV-69/130/195/260/325kWh



Up to 98.8% Max efficiency



Module design | Plug and play



Flexible logistics management



High efficiency operation,
keep everything under control



Intelligent management, support
remote monitoring and upgrade



Incredible capacity, Trustworthy security



High standard warranty
10 years or
8,000 cycles@90% DOD of battery 

Up to **120%**  for **60 seconds**
overloading output at back-up side

Up to **100%** 
unbalanced load



SPD integrated for DC surge
power protection of inverter

From **KW** to **MW** level 
Parallel operation capacity support system size

100A 
Charge/Discharge



Inverter IP65 protection degree
Outdoor-proof versions of inverter
intensified waterproof design 

135-750V 
Super wide battery voltage range

Up to **110%** 
AC output overloading





 **WattDesk** supported

Higher Efficiency, Lower Cost

The user-friendly WattDesk Cloud enables flexible Li-HV Commercial Three Phase Hybrid Series management, whether on the go or at your desk.  empowers you to view real-time data, analyze energy storage performance, monitor system health, and promote sustainability.

With real-time monitoring and automatic alerts, WattDesk ensures your proactive management in addressing issues before they escalate. Remote firmware updates keep devices current, minimizing the need for installer on-site maintenance costs and downtime.

Use it in whatever way you like, just one click.

To facilitate how you generate a more accurate and local policy-compliant production and consumption pattern for your home, Wattsonic comes with several built-in operating modes. Cloud based artificial intelligence algorithms will constantly check the data to remind you to choose the appropriate modes.

General Mode



Peak Load Shifting Mode



UPS Mode



Off-grid Mode



Economy Mode



Master BMS

Operation Voltage [Vdc]	150~900V/900~1500V (Need to confirm upon order)
Max. Charge/Discharge Current [A]	100
Recommend Charge/Discharge Current [A]	100
Functions	Pre-charge, Over-Less Voltage/ Over-Less Temperature Protection, Cells Balancing/SOC-SOH calculation etc.
Communication Protocol/Connector Type	CAN/RS485 ModBus, TCP/IP/ RJ45/WiFi/LAN/GPRS
Power Connection Type	Amphenol MC4
User Interface	LCD Display (Optional, need to confirm upon order)
Dimension [W*H*D mm]	517.6*180*367
Weight	11.8kg
Operating Temperature [°C]	-20~55
Ingress Protection	IP21
Installation Method	Rack Mounted
Warranty	10 years

38.4V/3.84kWh Battery Module

Nominal Voltage/Capacity per Module	38.4V/3.84KWH
Expand Capability	String:Max. 1000V[20*3.84kWh], Optional 1500V[34*3.84kWh]
DOD Recommended	90%
Max. Charge/Discharge Current[A]	100A Continual
Recommend Charge/Discharge Current[A]	100A Continual
Communication Protocol/Connector Type	CAN/ RJ45
Power Connection Type	Amphenol MC4
Dimension [W*H*D mm]	489*95*768.5 per module
Weight	38kg
Charge Temperature Range [°C]	0~45
Discharge Temperature Range [°C]	-20~55
Ingress Protection	IP21
Installation Method	Rack Mounted
Cables Connection	Connection at front
Warranty	10 years or 8,000 cycles@90% DOD

Cabinet Frame

Dimension [W*H*D mm]	640*1970*850
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Three Phase Hybrid Inverter

	25kW	30kW	36kW	40kW	50kW
PV Input					
Max. Input Power (kW)	37.5	45.0	54.0	60.0	75.0
Start-up Voltage (V)	135	135	135	135	135
Max. DC Input Voltage (V)*	1000*	1000*	1000*	1000*	1000*
Rated DC Input Voltage (V)	620	620	620	620	620
MPPT Voltage Range (V)*	200-850*	200-850*	200-850*	200-850*	200-850*
No. of MPP Trackers	4	4	4	4	4
No. of DC Inputs per MPPT	2	2	2	2	2
Max. Input Current (A)	30×4	30×4	30×4	30×4	30×4
Max. Short-circuit Current (A)	40×4	40×4	40×4	40×4	40×4
Battery Side					
Battery Type	Lithium Battery (with BMS)				
Battery Voltage Range (V)	135-750				
Max. Charge/Discharge Current (A)	100/100				
Grid Side					
Rated Output Power (kW)	25.0	30.0	36.0	40.0	50.0
Max. Output Apparent Power (kVA)	27.5	33.0/30.0 ¹⁾	39.6	44.0	55.0
Max. Input Apparent Power (kVA)**	30.0	36.0	43.5	48.0	60.0
Max. Charging Power of Battery (kW)	25.0	30.0	36.0	40.0	50.0
Rated AC Voltage (V)	3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
Max. Output Current (A)	42.0	50.0/43.5 ²⁾	60.0	66.0	83.0
Power Factor	0.8 leading ... 0.8 lagging				
Max. Total Harmonic Distortion	<3% @Rated output power				
DCI	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In
Back-up Side					
Rated Output Power (kW)	25.0	30.0	36.0	40.0	50.0
Max. Output Apparent Power (kVA)	27.5	33.0	39.6	44.0	55.0
Max. Output Current (A)	42.0	50.0	60.0	66.0	83.0
UPS Switching Time	<20ms	<20ms	<20ms	<20ms	<20ms
Rated Output Voltage (V)	3/N/PE; 220/380V; 230/400V; 240/415V				
Rated Output Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
Peak Output Apparent Power (kVA)***	30, 60s	36, 60s	43.5, 60s	48, 60s	60, 60s
Voltage Harmonic Distortion	<3% @Linear load				
Efficiency					
Max. Efficiency	98.8%	98.8%	98.8%	98.8%	98.8%
European Efficiency	98.3%	98.3%	98.3%	98.3%	98.3%
Protection		General Data			
DC Reverse Polarity Protection	Integrated	Over Voltage Category		PV: II ; Main: III	
Battery Input Reverse Connection Protection	Integrated	Dimensions (W×H×D mm)		800×620×300	
Insulation Resistance Protection	Integrated	Weight (KG)		72.0	
Surge Protection	Integrated	Protection Degree		IP65	
Over-temperature Protection	Integrated	Standby Self-consumption (W)		<15	
Residual Current Protection	Integrated	Topology		Transformerless	
Islanding Protection	Integrated	Operating Temperature Range (°C) -30~60			
AC Over-voltage Protection	Integrated	Relative Humidity (%) 0-100			
Overload Protection	Integrated	Operating Altitude (m) 3000 (>3000m derating)			
AC Short-circuit Protection	Integrated	Cooling		Smart Fan	
		Noise Level (dB)		<50	
		Display		OLED & LED	
		Communication		CAN, RS485, WiFi/LAN (Optional)	

* PV Max. Input voltage is 850V, otherwise inverter will be waiting

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery

1) AS 4777.2, VDE-AR-N 4105: 30.0kVA; 2) AS 4777.2, VDE-AR-N 4105: 43.5A

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