Hybrid Microinverter

TSOL-MH2000

MORE SAFETY MORE POWER



Hybrid Microinverter is one key compoments of the plug and play storage system which designed for end-users.

Hybrid Microinverter, which is connected between solar modules and battery, can charge excess electrical energy into the battery and release it when needed.

- Zero Export
- Time-of-use Control
- Bidirectional Inverter Technology
- Parallel Output for Single/Three-phase Grids
- Dynamic Tariff Applicable
- Compatible with Various Types of Batteries
- Supports Black Start via PV or Grid
- Power Bypass Mode (PV-first supply)

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Technical Data

Model	TSOL-MH2000
PV Input(PV)	
Recommended Module Power (Wp)	400 ~ 700+
Quantity of PV Module	1 ~ 4
Start up Voltage @Rated condition (V)	22
Operating Voltage Range per Input (V)	16 ~ 60
Max. Input Voltage per Input (V)	60
Short Circuit Current per Input (A)	25
Max. Input Current per Input (A)	18
Quantity of MPPTs	4
Quantity of DC Inputs (MC4)	4
Battery Port (DC)	
Nominal Voltage (V)	51.2
Operating Voltage Range (V)	43.2 ~ 58.4
Max. Discharge Power (W)	2000
Max. Discharge Current (A)	50
Max. Charge Power (W)	2000
Max. Charge Current (A)	50
AC Port (On-grid)	
Max AC Output Power (W)	800[1] / 2000
Max. AC Output Current (A)	10 or 4
Max. AC Input Power (W)	2000
Max. AC Input Current (A)	11
Nominal AC Voltage (V)	220 / 230 / 240, L / N / PE
Nominal AC Frequency (Hz)	50 / 60
Power Factor	> 0.99 default 0.8 leading ... 0.8 lagging
THDI	≤ 3 % @100 % Load
AC Port (Off-grid)	
Max. AC Output Power (W)	2000
Max. AC Output Current (A)	10
Nominal AC Voltage (V)	220 / 230 / 240, L / N / PE
Nominal AC Frequency (Hz)	50 / 60
Switch Time (ms)	< 10
Peak Output Apparent Power (VA)	150 % 2 s
Efficiency	
Peak Inverter Efficiency	97.0 %
EU Efficiency	96.7 %
MPPT Efficiency	99.9 %
Battery Charge / Discharge Efficiency	95 % / 95 %
Mechanical Data	
Dimensions (Wx H x D mm)	385 x 354 x 57
Weight (kg)	8
General Data	
Communication	WiFi (Bluetooth) + 2 × RS485
Ingress Protection	IP65
Cooling	Natural Convection
Operating Ambient Temperature Range	-40 °C ~ 65 °C
Relative Humidity	0 ~ 95 %, Non condensing
Max. Operating Altitude Without Derating (m)	2000

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Technical Data

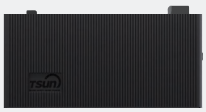
Model	TSOL-DB2000Elite	TSOL-B2000Elite	TSOL-B4000Elite
Battery Specifications			
Battery Type		$LiFePO_4$	
Battery Capacity (Wh)	2010	2010	4020
Cell Type		314 Ah	
Life Cycle		10,000[2]	
Nominal Voltage (V)		51.2	
Operating Voltage Range (V)	43.2 – 57.6	43.2 - 58.4	
Nominal Discharge Power (W)	800	2000	
Max. Discharge Current (A)	25	45	
Mechanical Data			
Dimensions (W×H×D mm)	380 x 203.7 x 180	455 x 236 x 280	583 x 333 x 375
Weight (kg)	20	17.6	
General Data			
Ingress Protection		IP65	
Cooling		Natural Convection	
Operating Temperature Range		-20 – 55 °C	
Relative Humidity		0 – 95 %, Non Condensing	
Max. Operating Altitude Without Derating (m)		2000	

[1]According to the legal requirements of certain countries, output load limits are implemented to 800W.
[2]Designed for a lifespan of 10,000 cycles at 25 °C ambient temperature.

Related Products


Hybrid Microinverter (MH)


Easy Solar Kit (Without Microinverter)


Stackable Battery Pack (DB2000Elite/B2000Elite 2kWh) (B4000Elite 4kWh)


2 x RS485 Connector


Battery Connector


Installation Kit


AC End Cable (2m)

or


AC Connector (On-grid)


AC Connector (Off-grid)


DC Cable


AC End Cable (5m/10m/15m)


Battery Cable (TSUN Battery)


RS485 Cable (Dispatch)


RS485 Cable (Meter)


Power Strip


RS485 Cable (Parallel)

Standard Accessories Optional Accessories

Smart Accessories


P1-2W


MR3-D4-WE


MR3-D4-WE


ADL200N-CT


ADL400N-CT


Projoy PEEM-S100


Projoy PEEM-S01


Projoy PEEM-T01

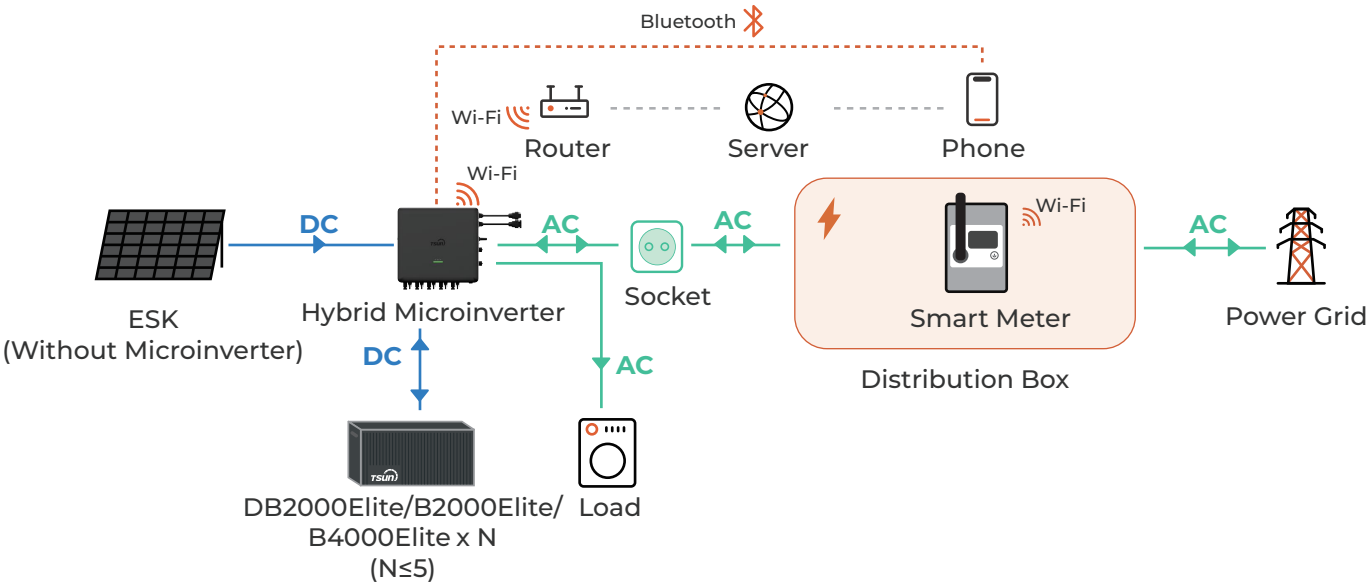

Shelly Pro EM-50


Shelly Pro 3EM


everHome EcoTracker IR

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System Diagram



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