

Micro Hybrid Storage Unit

TSOL-MSU1000/MSU2000

TSOL-MSU1000DE/MSU2000DE



TSOL-MSU1000+B2000



Zero Export



All-in-one Unit



Charge Battery from
Module and Grid



-20°C ~ +55°C
Working Temperature



Built-in WiFi, Bluetooth
APP Remote Monitoring

TSUNESS Co.,Ltd

sales@tsun-ess.com www.tsun-ess.com +86-512-66186028

Technical Data

Model	TSOL-MSU2000	TSOL-MSU2000DE	TSOL-MSU1000	TSOL-MSU1000DE
PV Input(PV)				
Recommended Module Power [Wp]	300 ~ 700+	300 ~ 700+	300 ~ 700+	300 ~ 700+
Quantity of PV Module	1 to 4	1 to 4	1 to 2	1 to 2
Start up Voltage @Rated condition [V]	22	22	22	22
Operating Voltage Range per Input [V]	16~60	16~60	16~60	16~60
Max. Input Voltage per Input [V]	60	60	60	60
Short Circuit Current per Input [A]	25	25	25	25
Max. Input Current per Input [A]	18	18	18	18
Quantity of MPPTs	4	4	2	2
Quantity of DC Inputs [MC4]	4	4	2	2
Battery (DC)				
Battery Capacity (Wh)	2048	2048	2048	2048
Battery Type	LiFePO ₄	LiFePO ₄	LiFePO ₄	LiFePO ₄
Nominal Voltage (V)	51.2	51.2	51.2	51.2
Operating Voltage Range (V)	43.2 - 58.4	43.2 - 58.4	43.2 - 58.4	43.2 - 58.4
Max. Discharge Power (W)	2000	2000	1000	1000
Max. Discharge Current (A)	45	45	25	25
Max. Charge Power (W)	2000	2000	1000	1000
Max. Charge Current (A)	40	40	20	20
Max. System Capacity (kWh)	10.24 (1 MSU + 4 * Stackable Battery)			
AC Port (On-grid)				
Max AC Output Power (W)	2000	800	1000	800
Max. AC Output Current (A)	10	4	5	4
Max. AC Input Power (W)	2000	2000	1000	1000
Max. AC Input Current (A)	11	11	5.5	5.5
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	2000	1000	1000
Max. AC Output Current (A)	10	10	5	5
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]	200% 2s			

Technical Data

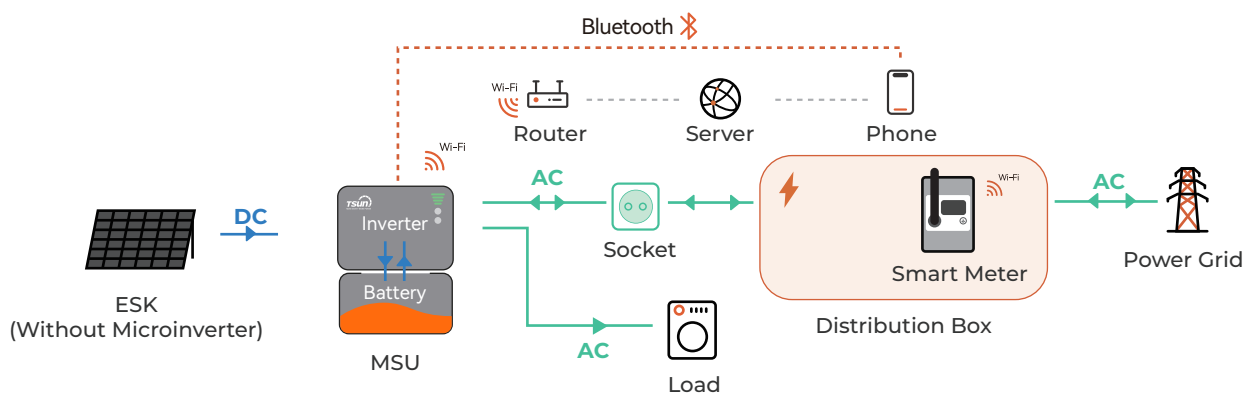
Model	TSOL-MSU2000	TSOL-MSU2000DE	TSOL-MSU1000	TSOL-MSU1000DE
Efficiency				
Peak Inverter Efficiency				97.0%
EU Efficiency				96.7%
MPPT Efficiency				99.9%
Battery Charge/Discharge Efficiency				95%/95%
Consumption (Without Load)				< 25W
Self-consumption (Device Shutdown)				< 1W
Mechanical Data				
Dimensions (W×H×D mm)	455×320×280(MSU) / 455x205x280(B2000)			
Weight [kg]	29 (MSU) / 19 (B2000)			
General Data				
Communication	WiFi (Bluetooth) + 2 * RS485			
Ingress Protection	IP65			
Cooling	Natural Convection			
Operating Ambient Temperature Range	-20°C ~ +55 °C			
Relative Humidity	0-95%, Non Condensing			
Max. Operating Altitude Without Derating [m]	2000			

Diagram

Micro Storage Unit (MSU) is one key components of the plug and play storage system which designed for end-users.

MSU can store excess electrical energy in the battery and release it when needed.

This solution, Solar Module + MSU, is typically used as an energy storage solution for small household, conventional balconies, courtyards, family carports, and other micro systems.



MORE SAFETY MORE POWER



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