SolarTrunk

Micro Hybrid Storage Unit

TSOL-MSU2000

MORE SAFETY MORE POWER





TSOL-MSU2000+B2000

Zero Export

Time-of-use Control

Bidirectional Inverter Technology

Dynamic Tariff Applicable

Power Bypass Mode (PV-first supply)

Parallel Output for Single/Three-phase Grids

CE VDE 4105 EN 50549-10 UN38.3

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Technical Data

Model	TSOL-MSU2000
PV Input(PV)	
Recommended Module Power (Wp)	400 ~ 700+
Quantity of PV Module	1 to 4
Max. PV Input Power (W)	2800+
Start up Voltage @Rated condition (V)	22
Operating Voltage Range per Input (V)	16 ~ 60
MPPT Voltage Range @ Nominal Power (V)	27.7 ~ 54
Max. Input Voltage per Input (V)	60
Nominal Input Voltage (V)	42
Short Circuit Current per Input (A)	25
Max. Input Current per Input (A)	18
Quantity of MPPTs	4
Battery (DC)	
Battery Capacity (Wh)	2048
Battery Type	$LiFePO_4$
Nominal Voltage (V)	51.2
Operating Voltage Range (V)	43.2 - 58.4
Max. Discharge Power (W)	2000
Max. Charge Power (W)	2000
Max. System Capacity (kWh)	10.24 MSU2000/MSU2000DE (2.048 kWh) + 4 x B2000 (8.192 kWh)
AC Port (On-grid)	
Max AC Output Power (W)	800[1] / 2000
Max. AC Output Current (A)	4 / 10
Max. AC Input Power (W)	2000
Max. AC Input Current (A)	11
AC Port (On-grid)	
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) (Optional)	
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)	< 20
Efficiency	
Peak Inverter Efficiency	97.0%
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 x 320 x 280(SolarTrunk) 455 x 205 x 280(B2000)
Net/Gross Weight (kg)	32/34.7 (Metal Housing) 26.8/29.5 (Plastic Housing) Die-cast Heat Sink
Battrery Weight (kg)	17.2/19

[1]According to the legal requirements of certain countries, output load limits are implemented to 800W.

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Technical Data

Model	TSOL-MSU2000
General Data	
Communication	Server : WiFi (Bluetooth)
Extra Communication Ports	3 x RS485(Dispatch+Meter+Parallel) (Gen 3)
Ingress Protection	IP65
Cooling	Natural Convection
Operating Ambient Temperature Range	-20 ~ +55 °C
Relative Humidity	0-95%, Non Condensing
Max. Operating Altitude without Derating (m)	2000
Display	SOC Light
Type of Isolation	Reinforced Insulation
Protection Class	I
Overvoltage Category	PV II ; AC III

Related Products



Micro Hybrid Storage Unit (MSU)



Battery Pack (B2000)



Easy Solar Kit (Without Microinverter)



Smart Meter (WiFi-CT Connected)



Smart Meter (RS485-CT Connected)



AC End Cable (2 m)



Tool



2 x RS485 Connector



DC Cable



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



RS485 Cable (Dispatch)



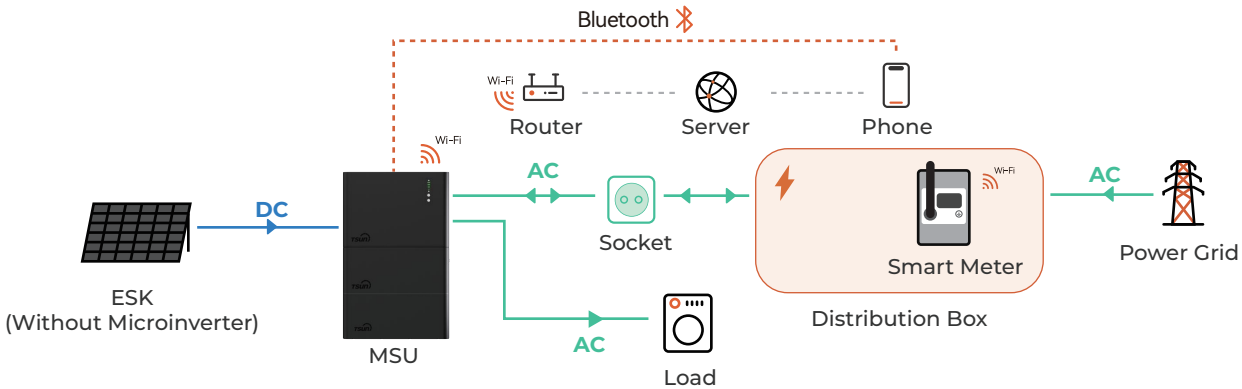
RS485 Cable (Meter)



RS485 Cable (Parallel)

Standard Accessories Optional Accessories

System Diagram



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