

FORGE TSPS (Tower & Shelter Power Systems)

Scalable Power and Control System from 1.5 kW to 9 kW

Portable 3 kW



Scalable rack up to 9 kW



System Features

- Scalable in 1.5 kW increments to 9 kW
- Scalable 2.4 kW lithium energy storage modules
- Auto start/stop generator control
- Single phase 120 V, 60 Hz output (240 V available)
- Single case, portable 130 lbs / 59 kg
- Customizable mounting options
- Expandable rack mount in a cabinet or open configuration
- 2.9 kW of solar capacity
- Supplemental energy storage modules available

The ZeroBase™ Tower and Shelter Power System reduces dependency on unstable, costly generator power in shelter and self-erecting tower applications where clean, quiet power is preferred. The TSPS power management and energy storage system takes over control of the generator, relegating it's role to recharging or providing supplemental power. Optional solar modules further reduce the need for generator use.

This rugged power system comes in scalable rack mounted configurations or a man-portable single unit that can be mounted inside/outside of a tactical shelter or deployed as a self sustaining portable power unit in support of mobile missions.

Key Benefits

- Generator fuel savings and runtime reduction
- Dual functionality as a power system and UPS
- Optional solar modules up to 2.9 kW
- Silent, conditioned pure sine wave power
- Mission-ready, quick set-up
- Maintenance free
- Field portable
- Wall or floor mount configurations



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System Specifications

	TSPS-Portable	TSPS-6k Rack	TSPS-9k Rack
AC Input	85-275 VAC	85-275 VAC	85-275 VAC
Solar Input	2.9 kW max	2.9 kW max	8.7 kW max
AC Nominal Output	1.5 kW or 3.0 kW	6.0 kW	9.0 kW
AC Outlets	Two 120 V, 60 Hz	Four 120 V, 60 Hz	Four 120 V, 60 Hz
Max Energy Storage	2.4 kWh	7.2 kWh	9.6 kWh
Max DC Discharge Current	50 A	100 A	150 A
AC Charging	25 A	48 A	48 A
Enclosure IP Rating	IP54	Open Rack	NEMA 3R (Option)
Weight	140 lbs / 63.5 kg	300 lbs / 136 kg	380 lbs / 172 kg
Dimensions LWH (in)	12 x 24 x 30	24 x 24 x 26	24 x 24 x 36
Dimensions LWH (cm)	30.5 x 61.0 x 76.2	Depends on Options	Depends on Options
Operating Temp (Discharge)	-10° to 50° C / 14° to 122° F (applies to all systems)		
Storage Temp	-20° to 60° C / -4° to 140° F (applies to all systems)		

2.4 kWh Battery Parameters

DC Voltage	48 V
AMP Hours	50 Ah
Usable Capacity	2200 Wh
Max Charge / Discharge	50 A
Peak Charge / Discharge	100 A @ 15 s
Communication	RS232, RS485, CAN
Cycle Life	> 4,500 at 25° C

Optional Solar Module Parameters

Max Power (Pmax)	300 W	Power Density	177.6 W/m ²
Rated Voltage (Vpm)	67.0 V	Rated Current (Imp)	8.92 Amps
Open Circuit Voltage (Voc)	58.96 V	Short Circuit Current (Isc)	9.48 Amps
Weight	95 lbs / 43.1 kg	Efficiency (Cell / Module)	20% / 17.8%
Dimensions LWH (in)	68.5 x 42 x 8.25	Dimensions LWH (cm)	982 x 1653 x 38
Operating Temp (F)	-4° to 140° F	Operating Temp (C)	-40° to 90° C

