

HSX Range

High Specification eXpanded Power Systems — 3.6kW to 12kW | LiFePO4 | Pure Sine Wave

OVERVIEW

The Powapacs HSX Range is a family of rugged, expandable power systems delivering between 3.6kW and 12kW of silent, zero-emission output. Built around high-performance LiFePO4 battery banks and pure sine wave inverter technology, HSX units are suitable for standalone deployment or full integration with solar, wind, and ARC systems.

Designed for construction, military, and critical infrastructure use, each model features a reinforced housing, integrated BMS, and GENMATE smart monitoring via Wi-Fi app. UPS mode is supported with a switch time of less than 20ms.

All EU/UK variants output 230V AC at 50Hz. The HSX 12000 (EU 3P) delivers full three-phase 400V AC output, making it suitable for three-phase tools, welfare blocks, and compound power installations.

CE and UKCA certified. Compatible with the full Powapacs ARC solar, wind, and hybrid charging range.



MODEL RANGE — EU / UK VARIANTS

Model	Rated Output	Peak Output	Battery Capacity	Voltage	Phases	Weight (kg)	Dimensions (L x W x H mm)
HSX 3600	3.6 kW	7.2 kW	3.43 kWh	51.2V	1-Phase	45	600 x 400 x 500
HSX 6000 (EU)	6.0 kW	12.0 kW	5.38 kWh	51.2V	1-Phase	70	650 x 430 x 550
HSX 12000 (EU 1P)	11.0 kW	22.0 kW	7.68 kWh	51.2V	1-Phase	80	700 x 480 x 580
HSX 12000 (EU 3P)	12.0 kW	24.0 kW	7.68 kWh	51.2V	3-Phase	90	700 x 480 x 580

SHARED SPECIFICATIONS — ALL HSX MODELS

SPECIFICATION	VALUE	SPECIFICATION	VALUE
Battery Chemistry	LiFePO4 (Lithium Iron Phosphate)	IP Rating	IP54 standard (IP65 upgrade available)
Cycle Life	>3,000 cycles @ 80% DoD	Operating Temp	-20°C to +50°C
Expected Service Life	>8 years at one full cycle per day	Noise Level	<45 dB at 10m
Output Waveform	Pure Sine Wave, THD <3%	UPS Mode	<20ms switch time
AC Output Voltage	230V (1-Phase) 400V (3-Phase)	Smart Monitoring	GENMATE app — Wi-Fi, LCD display
Frequency	50 Hz	BMS Protection	Over/under voltage, short circuit, overcurrent, thermal runaway
Solar Input (MPPT)	36-140V DC, up to 3,000W	Certifications	CE, UKCA, EMC, LVD, RoHS
AC Charging Input	230V AC, up to 3.5 kW	Warranty	5 years (excl. physical damage)
Wind Input	3-phase AC 22-26V (with rectifier)	ARC Compatible	Solar, wind, and hybrid ARC systems
Vehicle Charging	12-30V DC, 160W typical	Patent	Pending: GB2510031.9

PRIMARY USE CASES

<p>Construction & Civil Engineering</p> <p>Welfare blocks, site tools, cabins, compound power, and rail or highway infrastructure.</p>	<p>Military & Defence</p> <p>Modular tactical energy hubs, FOB power, field comms, and critical infrastructure backup.</p>	<p>Humanitarian & Emergency Response</p> <p>Field hospitals, aid stations, logistics power, and disaster response operations.</p>
---	---	--

To discuss your power requirement or request a quotation:
admin@powapacs.co.uk | www.powapacs.co.uk