

Smart energy storage. Modular expansion. Simply via 230 V.

PowerHub ONE is an AC-coupled home battery system for residential use. The compact Main Unit works with modular 2.4 kWh LFP battery modules. Through the app and smart-meter integration, energy can be stored and used intelligently according to household energy use and electricity tariffs.

2.4 kW max. AC power	2.4 kWh per battery module	1-5 modules per Main Unit	IP65 protection rating
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Key features

- AC-coupled: suitable for use alongside an existing solar PV installation.
- Plug & play concept with 230 V AC connection.
- Modular expansion from 2.4 to 12.0 kWh per Main Unit.
- Flexible multi-unit setup and wireless parallel connection.
- Smart energy management for charging and discharging based on energy use and electricity tariffs.
- WiFi, Bluetooth, Ethernet and CAN communication.
- Natural cooling and IP65 enclosure.
- LFP battery technology.

PowerHub ONE configurations

Configuration	Battery modules	Nominal storage
PowerHub ONE 2.5	1	2.4 kWh
PowerHub ONE 5	2	4.8 kWh
PowerHub ONE 7.5	3	7.2 kWh
PowerHub ONE 10	4	9.6 kWh
PowerHub ONE 12	5	12.0 kWh

Nominal storage capacity based on 2,400 Wh per battery module.

Technical specifications

Specification	Value
Product series	PowerHub ONE
On-grid AC output - nominal	0.8 kW / 3.48 A
On-grid AC output - maximum	2.4 kW / 10.43 A
Nominal grid voltage	230 V
Nominal grid frequency (on-grid)	50 Hz $\pm 5\%$
AC charging input	230 V AC, max. 2,400 W
Inverter efficiency	$\geq 90\%$
Battery conversion efficiency	$\geq 85\%$
Backup output - nominal	2.4 kW
Backup peak current (1 second)	10.43 A
Backup grid frequency	50 Hz $\pm 2\%$
Total voltage harmonic distortion	THDv $< 3\%$
Backup switching time	≤ 10 ms
Battery module	PowerHub ONE battery module
Capacity per module	2,400 Wh
Modules per Main Unit	1-5 units
Nominal battery voltage	DC 48 V
Main Unit dimensions (L×W×H)	440 × 305 × 165 mm
Battery module dimensions (L×W×H)	440 × 305 × 220 mm
Main Unit net weight	approx. 13.95 kg
Battery module net weight	approx. 26.5 kg
Storage temperature	-40 °C to 70 °C
Operating temperature	-20 °C to 55 °C
Relative humidity	0-60%
Maximum operating altitude	4,000 m; derating from 2,000 m
Cooling	Natural cooling
Standby consumption	≤ 16 W
Protection rating	IP65
Display	LED + app
Communication	WiFi / Bluetooth / Ethernet / CAN

Safety, integrations and standards

Protection features

Overvoltage, undervoltage, overcurrent, overload, short-circuit and overheating protection, insulation monitoring, residual-current monitoring, anti-islanding and Type II DC/AC surge protection.

Smart integrations

Support for smart meters, smart plugs, infrared meters, heat pumps and power controllers. Compatible ecosystems include Shelly, Tibber Pulse, EverHome and HomeWizard P1 Meter.

Standards and compliance

Category	Standard(s)
Safety	EN 61558-1; EN 61558-2-16; EN 62368-1
EMC	EN IEC 61000-4-2/-3/-6/-11; EN 61000-4-4/-5/-8
Grid connection	VDE 4105:2018; EN 50549-1:2019; EN 50549-10:2022 C10/11
Wireless communication	CE RED (EN 300328 / EN 301489)

POWERHUB ONE

Designed as a simple, modular home battery solution for everyday energy management. Technical specifications are subject to change as part of ongoing product development and certification.