



## PowerShaper XD

50kW/145kWh, Aircon, NMC



Fully integrated, pre-wired and factory configured system that reduces the installation time significantly.



EMS for remote monitoring, configuration and control, eliminates the need for complex on-site configuration.

### Flexible, scalable energy storage

PowerShaper XD is a modular IP55 system for on-grid, off-grid, and hybrid use. Built for solar self-consumption, peak shaving, grid support, and other value-stacking applications.

#### Built for future-proof performance

Designed and manufactured in Europe. Combining robust engineering with high-quality components to deliver modular, scalable and reliable energy storage for critical applications and demanding environments.

#### Secure, connected, and compliant

Our 48V systems are built for always-on operation. Encrypted communications, secure remote access, and full GDPR compliance, enabling uninterrupted connectivity, real-time insight, and maximum ROI through value stacking.

#### Resilient by design, reliable in use

Pixii BESS feature built-in redundancy, active monitoring, and automated recovery protocols. This ensures secure operation even under failure or cyber threat, ideal for mission-critical energy storage needs.

#### Pixii Energy Architect (EMS)

Managing power in on-grid and micro-grid setups. It automatically controls and balances different power sources like solar panels and generators. Tracking battery health, charge level, and energy use.

#### Easy deployment

The system is designed for easy deployment, shipped with batteries installed, and can operate autonomously or be integrated with higher-level energy management systems.

### Highlights

- Shipped with batteries installed
- High density NMC batteries
- Modular and scalable
- Galvanic isolation (AC-DC)
- Quiet operation at full power
- Safe ~48V installation and operation

### Key functions

- Hybrid and off-grid configurable
- Modular and scalable system
- On/off-grid compatible
- Backup and fast response



You can add up to 3 cabinets as your energy need evolves

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AC specifications		Efficiency		Battery	
Grid connection type <sup>1</sup>	IT / TT / TN	Max. efficiency (inverter)	96.9%	Battery ID	NMC 180Ah 14S 2U 23in P
Phase config. (grid)	1ph / 3ph	Communication and connectivity		Battery chemistry	NMC
AC voltage (-10/+15%)	230V / 400V	Wired interfaces	Ethernet LAN	Cells in series (qty)	14
Nominal frequency (grid)	50Hz	Wireless interfaces	Wi-Fi hotspot (local AP), 4G (optional kit)	Battery block capacity (Ah)	180Ah
Nominal AC current	72Arms (3Ph+N+PE)	Internal comm. protocols	Modbus TCP/RTU	Battery block capacity (kWh)	9.09kWh
Max. AC current (input)	83Arms (3Ph+N+PE)	External comm. protocols	MQTT	Max. depth of disch. (DoD)	80%
Nom. cont. AC power ( $\pm 2\%$ ) <sup>2</sup>	50kW	Safety		Max. charge/discharge cur.	90/90A
Max. AC power ( $\pm 2\%$ )	50kWp	Ingress Protection (IP)	IP55	Max. C-rate	0.5C
Max. apparent power	50kVA	Protection class	I	Rack height (Units)	2U
Max. reactive power	45kVAr	Overvoltage category (OVC)	II	Over-current protection	Breakers
Power factor (Cos $\phi$ leading)	0.5	Fire suppression (optional)	StatX, FirePro	Dimensions (HxWxD)(mm)	87x544x725
Power factor (Cos $\phi$ lagging)	0.5	Operating conditions		Net. weight (battery block)	57kg
THDi (grid connection)	<5%	Operating environment	Outdoor	Battery connection type	Screw
Off-grid operation support	Yes	Thermal management <sup>1</sup>	Heater, Aircon	Cycle life (cycles @%DoD) <sup>1</sup>	3650 (80%)
Generator backup support	Yes	Acoustic noise 1m distance	<57dB(A)	1. EOL: 70% SoH	
Phase config. (genset)	1ph, 3ph	Operating amb. temp. range <sup>2</sup>	-20 - +55°C	Warranty and compliance	
Frequency range (genset)	45 - 66Hz	Operating relative humidity <sup>3</sup>	5 - 95% NC	Battery standards	
1. TN includes TN-S and TN-C-S (MEN). 2. The stated power and energy capacities are baseline, or nominal, values. Actual performance can vary and may be constrained by several factors, including the state of charge (SoC), state of health (SoH) of the system, as well as thermal conditions.					
DC specifications		Physical specifications		Warranty (years/cycles) <sup>2</sup>	
Installed capacity (max)	145.5kWh	Dimensions (HxWxD)(mm)	1155x835x2300	See note	
Usable capacity (max)	116.4kWh	Net. weight (cabinet only)	560kg	1. <i>Designed in accordance with the relevant national and international standards listed above. Certification to specific revisions available on request. Additional local requirements may apply. VDE-AR-N 4105 currently valid for PixiiBox. System approval pending.</i>	
Max. system capacity	145.5kWh	Net weight (equipped) <sup>1</sup>	1502kg	2. <i>Whichever comes first. EOL defined as <math>\geq 70\%</math> SoH. See warranty document for details.</i>	
Nominal DC voltage	~51.2V	Color	RAL 7035		
1. Includes PixiiBoxes and batteries.					