

xStorage Compact

Single rack energy storage system

All in one

The Eaton xStorage Compact energy storage system enables buildings owners and facility managers to solve power management challenges for their small and medium commercial and industrial sites. Eaton xStorage Compact helps them increase local renewable energy consumption and integrate electric vehicles charging infrastructure on site.

Eaton xStorage Compact is available in a single rack version which is easy to install, ready-to-use with symmetric charge and discharge and is backup ready. The system also includes a control platform with user interface and simple expansion options. This compact system is modular, scalable and well suited for a wide range of energy storage applications.

Key features

- Up to 50 kWh per string of 5 battery packs
- Bidirectional 3-phase converter up to 40 kW
- Symmetrical charge and discharge
- Battery pack with proprietary Battery Management System (BMS)
- Expandable with parallel connections from 42 kWh/rack to 100 kWh/rack
- Integrated user interface and application controller
- Battery backup

Benefits



Multi-usage system enabling PV self consumption, peak shaving, load shifting, back-up power, electric vehicle charging station integration



One single supplier providing you with one point of contact for certifications, warranty and services



Scalable, modular and quick to deploy



Highly efficient with minimum system losses



Safe and reliable with tested systems, controls and a proprietary Battery Management System (BMS)



Small system footprint – All included in less than 1 sqm/rack



This is a visual representation.
The final product may differ.

[Eaton.com/xstorage](https://www.eaton.com/xstorage)

Technical disclaimer

In line with our goal to continuously improve the products and the customer service we provide, all specifications contained in this document are subject to change without notice. All drawings, descriptions or illustrations contained in this document serve to provide a clear overview and/or technical explanation of the present product and its various components and accessories.

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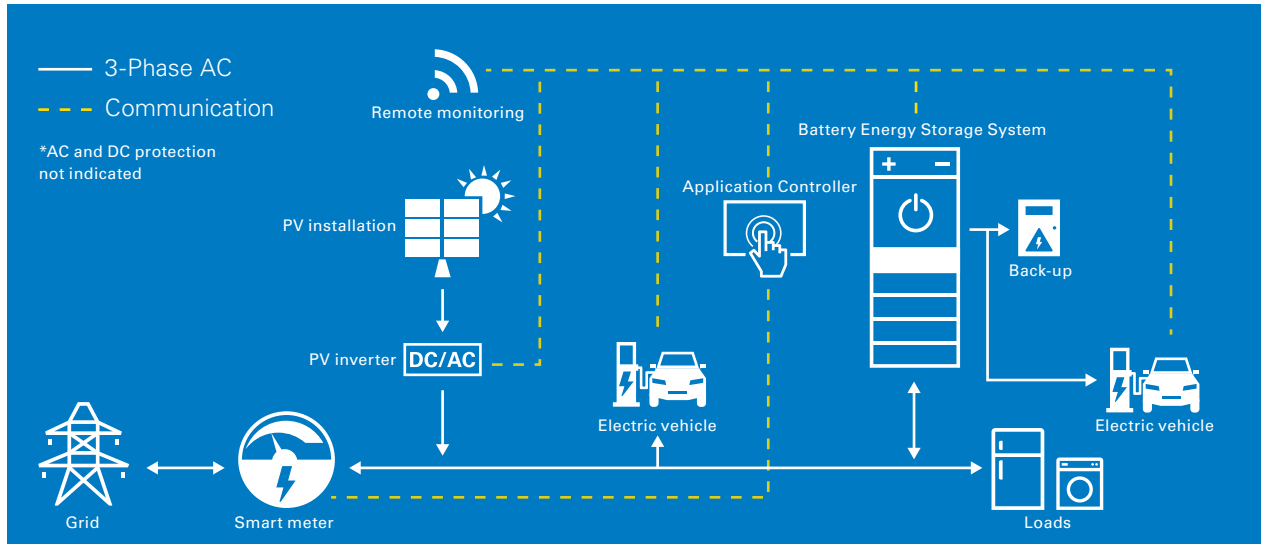
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Single rack energy storage system

A multifunctional system

xStorage Compact enables light commercial building facility managers and operators to store energy from renewable sources or the grid to improve the building resiliency and reduce its carbon footprint. The system can also provide use cases such as peak shaving, load shifting or maximize PV self consumption.



Technical specifications

Eaton.com/xstorage

Battery	Second-life	New
Nominal system capacity	21 kWh per string, up to 3 strings	50 kWh per string, up to 3 strings
Modularity	additional 42 kWh/rack	additional 100 kWh/rack
Cell Chemistry	LMO (Lithium Manganese Oxide)	NMC (Lithium Nickel Manganese Cobalt)
BMS	1 BMS per battery pack (5 BMS per battery string to ensure safety and monitoring performance)	
Battery warranty	Up to 5 years	Up to 10 years
Max. charge/discharge current DC	132 A	
Compliance and standards	IEC 62619, IEC 62040-1, IEC 62477-1, UN 38.3	

System	
Conversion power range	20 kW to 40 kW, parallel up to 5 units
Nominal AC Grid Voltage	220 V/380 V; 230 V/400 V; 240 V/415 V; 3-phase (TN, TT, 4-wire)
Rated output frequency	50 Hz/60 Hz; configurable
Topology	Bidirectional rectifier/inverter - Backup
Full system dimensions H x W x D	1987 mm x 600 mm x 1000 mm
Full system weight	From 690 kg to 725 kg
Degree of protection	IP20
Topology / Grid integration	Transformerless / AC coupled grid tie / Grid forming
Operating environment	From 0 °C to 35°C / From 5 % to 95% relative humidity (non-condensing) / Pollution degree 2
Application controller capability	Back up, peak shaving, load shifting, PV self consumption and EV integration
Minimum clearances	Front: 900 mm, Back: 200 mm, Top: 300 mm, side to side: 0 mm
Round trip efficiency	> 85%
THD	<1.5% at 100% linear load
Communication protocol	Modbus TCP (Eaton XV303 interface capability)
Compliance and standards	Safety: IEC 62040-1, IEC 62477-1 Grid connection: EN 50549-1, VDE-AR-N 4105:2018, CEI 0-21:2019, G99

