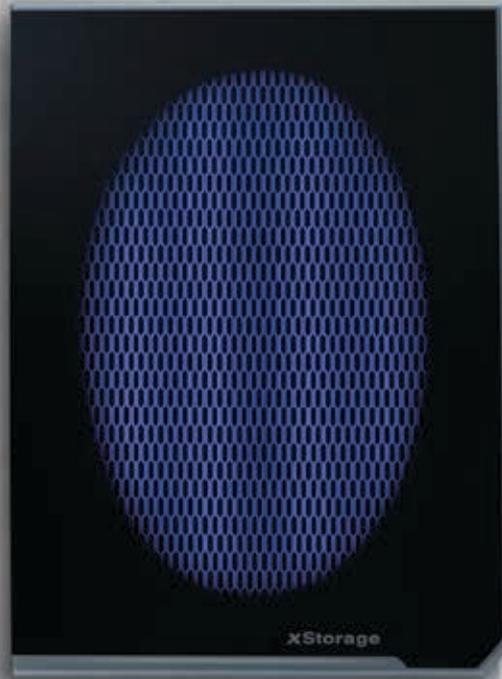


**xStorage Home**  
Eaton Nissan Home energy storage



# Homeowners need to take control of their energy supply to address multiple challenges:

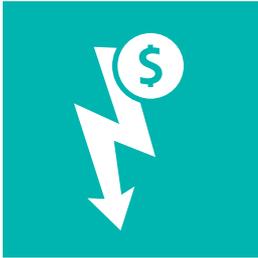
- Increasing power bills
- Variable electricity rates
- Power outages
- Potential natural disasters
- Intermittent solar pv production
- Decreasing incentives for solar pv production



**xStorage Home** helps store energy and control how and when to use it in homes.



# Benefits for homeowners



## Lower electricity bills

Connected to residential power supply and/or renewable energy sources such as solar panels, the unit helps save money on electricity bills by charging up when renewable energy is available or energy is cheaper (e.g. during the night) and releasing that stored energy when demand and costs are high.



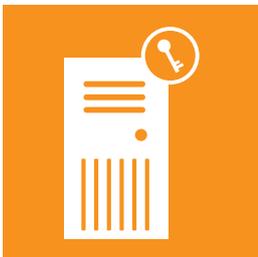
## Lower CO2 footprint

By storing, consuming or selling renewable energy back to the grid, homeowners are contributing to the decarbonisation of the energy supply, maximizing consumption of onsite generation, primarily solar energy.



## Ease of installation and use

This integrated unit ensures safety and performance when storing and distributing clean power. Once set-up by a certified installer, it is ready to work, giving homeowners the ability to plug in and power up easily. It also has smartphone connectivity to enhance usability and allow them to switch between energy sources at the touch of a button.



## Safe technology

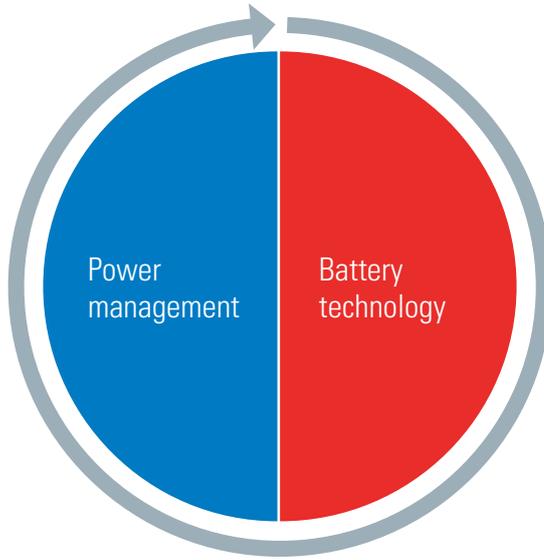
The technology is industrialized, tested and configured to deliver high levels of quality, reliability and performance. As a power management company with over 100 years experience and leader in Uninterruptible Power Supply (UPS), Eaton brings a depth of experience that is unmatched by most storage players. Nissan is the leader in Electric Vehicles and is a proven, high volume, maker of reliable Li-Ion batteries that meet the high safety standards of the automotive market.



## Customer service

The system is supported by a network of over 1,000 distributors, working with qualified installers in 77 countries.

# xStorage Home has been developed by two leaders in areas critical to Energy Storage



**Leader** in both electrical energy for buildings and in power electronics with **a depth of experience** unmatched by most storage players

**Leader** in Electric Vehicles and a proven, high volume, maker of reliable Li-Ion batteries **for 15 years**

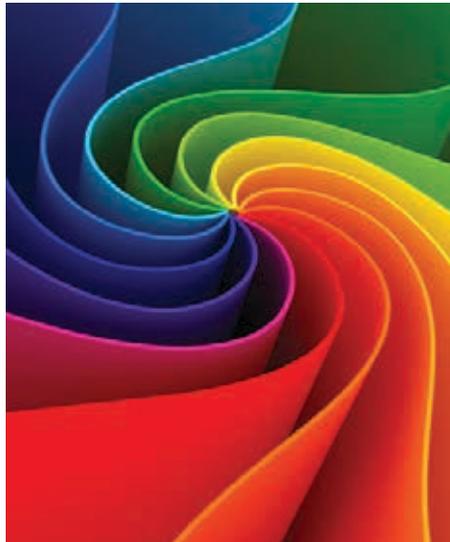
## Making energy storage simple for you

### Minimized risk



- Two global brands with strong financials
- A strong heritage of success
- Technology leadership

### Customized solution



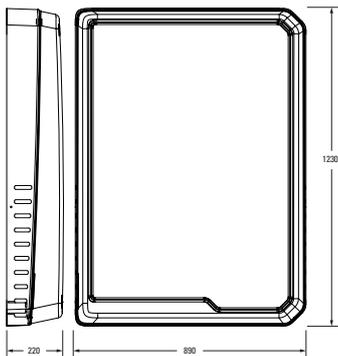
- Customizable power rating and energy storage capacity

### Global support



- Over 24,000 employees in more than 40 countries in EMEA
- A network of over 1,000 distributors working with qualified installers in 77 countries

# System combinations overview



## xStorage Home single phase

Battery Capacity	AC Inverter Power (nominal)			Max. Recommended PV input power	Weight (appr.)	Dimensions (appr.)
4.2 kWh	3.6 kW	4.6 kW	6 kW	4.8 kW	135 kg	1230 x 890 x 220 mm (H x W x D)
6 kWh						
7.5 kWh						

**TECHNICAL DISCLAIMER:** All drawings, specifications, any descriptions or illustrations contained in this brochure are issued or published by Eaton for the sole purpose of giving an approximate idea of the supplies described in them. They will not form part under these Terms in general or this Warranty specifically and might be subject to technical changes in the future.

## Technical specifications

Battery pack	SECOND LIFE		BATTERY TYPE	
Nominal	4.2 kWh		6 kWh	NEW
Cell chemistry	LMO (Lithium Manganese Oxide)		NMC (lithium nickel manganese cobalt oxide)	
Operating temperature range	0 – 35°C		0 – 30°C	
Max charge/discharge current DC	42 A		54 A	70 A
DC battery input voltage	74.4 - 98.4 V			
Overcharge protection	Fuse + Contactor			
Standards	IEC 62619; UN 34.81; UN 38.3; CE			
Hybrid inverter	INVERTER POWER RANGE			
	3.6 kW		4.6 kW	6 kW
PV INPUT (DC)				
Max. Recommended DC power	4.8 kW			
Maximum DC Voltage	500 V			
Nominal DC operating voltage	100 - 500 V			
MPPT max. voltage range	240 - 500 V			
Max. Input current	20 A			
Initial feeding voltage	150 V			
Number of MPP Trackers	1			
DC insulation resistance	VDE0126 & VDE0126-1-1/A1: Riso > 1.5 MΩ, Others: Riso > 200 kΩ			
LOAD/GRID OUTPUT (AC)				
Nominal Output Power	3600 W		4600 W	6000 W
Nominal AC Grid Voltage	230 V (Grid-Tie), 230 V ± 3% (Off-Grid)			
Nominal frequency	AC Synchronized operation 50 Hz / 60 Hz ± 1 Hz			
Nominal AC output current	15.7 A		20 A	26.1 A
Max. AC current	17.4 A		22.3 A	29 A
AC wiring system	Single phase/N/PE, TN-C, TN-S, TN-C-S, TT, IT (additional fuse or CB required)			
Total Harmonic Distortion (THD)	<3%			
Power Factor	0.99 (Grid-Tie), ±0.9 (Off-Grid)			
Metering capability	Power meter for load and PV production (not meter-grade)			
EFFICIENCY				
MPPT efficiency	>99%			
Maximum efficiency (battery to AC)	>90%			
PV to grid max. efficiency	97%			
Standby Losses	<10 W			
INTERFACE				
Communication	LAN, RS-485, USB Host (with USB WIFI dongle) USB: Type B receptacle for firmware upgrade			
Comms Protocols	CAN BUS: Only for battery pack - inverter internal comms HTTP REST API			
LED indicators	Green (ON): Normal status Red (ON): Fault status. Inverter is unable to connect to the grid Green (Blinking): Communication activity			
Display	LCM display: Character 16 words, 2 lines, 3 Function keys			
STANDARDS				
EMC/EMI standard	EN 61000-6-2: 2005/EN 61000-6-3: 2007+A1: 2011			
CE	LVD: 2014/35/EU EMC: 2014/30/EU			
General system specs		XSTORAGE		
Applicable for all system combinations				
SAFETY				
Degree of protection	IP20 (InDoor)			
Hazard substance restriction	Lead free, compliance with RoHS GP2			
Standards	EN 62109-1 (2010), EN62109-2:2011 (IEC 62109-1; IEC 62109-2)			
OPERATING CONDITIONS				
Storage temperature range	from -10 – 40°C			
Operating temperature	0 – 30°C			
Humidity	5% to 95% Relative Humidity (Non condensing)			
Acoustic noise	35 dB (indoor application)			
Altitude	Elevation: max 2000 meters			
Cooling	Natural airflow			
OTHERS				
Solar DC Switch	Integrated			
Topology	Transformerless			
Grid integration	AC coupled			
Grid certificates	UK (G83/2, G59/3-2); FR (UTE C15-712-1, SEI REF 04, V6 or CRAE, Mainland/Island); IT (CEI 0-21: pending)			
Common use cases	Grid tie: self-consumption; Off-grid: backup			

Smart and  
clean power.  
Made simple.



ENERGY STORAGE

[eaton.eu/energystorage](http://eaton.eu/energystorage)



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