

Storage systems
and solutions
for **energy** management



EN

ATON General Catalog - Rev. 2, 05/14/2024

The new form of energy



ATON GREEN STORAGE S.p.A.


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 Italian Product



EN



ATON Green Storage

the new form of energy

About us

Founded in 2014 in Spilamberto, in the province of Modena, from the twenty-year experience of a team of ten engineers, today **Aton Green Storage S.p.A.** is an innovative SME among the main players in the **engineering and production market of storage systems for photovoltaic systems.**

Our products are **made in Italy**, made in the best Italian style and equipped with a high degree of customization based on customer requests. Versatile and ideal for both the domestic and industrial sectors, designed in different solutions to adapt to new photovoltaic systems or existing systems.

Energy storage systems designed, created and assembled in **Italy**



















For homes, companies and any external reality.

What is an energy storage system?

An energy storage system is a device that allows people to store in batteries the energy produced by photovoltaic panels and use it when needed, maximizing **self-consumption**. A concrete **saving on energy costs** is thus possible, making homes more self-sufficient and significantly reducing emissions thanks to the **use of renewable energies**.



ATON Green Storage Energy Storage Systems

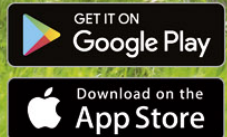
-  **All-in-One**
Products that includes everything you need to start the journey towards energy independence.
-  **LiFePO4 Batteries**
The most reliable technology on the market, offering longer life and safety.
-  **Modularity**
Modular systems adaptable to different needs, with the possibility of increasing the storage capacity by adding battery modules.
-  **Weather Alert**
The system prepares for an emergency by guaranteeing fully charged batteries before violent atmospheric events that could lead to blackouts on the national electricity grid. It can also be programmed manually, for example for scheduled grid maintenance.
-  **Zero Noise**
Noiseless, environmentally friendly.
-  **Anti Blackout**
In hybrid models, it ensures the continuity of photovoltaic production in the event of a blackout.
-  **AC-side Storage Mode**
Possibility of connection to an existing pv inverter in AC post-production mode.
-  **Different Models**
Tailor-made options to meet all the consumers' needs.
-  **Connectivity**
Our service center constantly monitors the systems that are connected via GPRS, Wi-Fi, or Ethernet.
-  **Electric Vehicles Charging**
Smart and eco-friendly home charging. Smart process management and charging optimization according to the scenario selected via the ATON Care App.
-  **CHAIN 2**
Embedded device for direct communication with DSO's smart meters.
-  **Energy Sharing**
Prepared for the management of Joint Self-Consumption and for participation in Renewable Energy Communities (REC) and Aggregations.
-  **Combinable Systems**
Possibility of connecting several systems in parallel to achieve greater powers and capacities.
-  **Built-in Protections**
In all-in-one models, to safely manage the energy flow.
-  **Simple Installation**
Functional all-in-one products, optimized for every specific need.
-  **Ecology and Economy**
The systems allow to self-consume and to produce energy from renewable sources only.

-  **10-Years Guarantee**
-  **Made in Italy**
-  **ATON Storage App**
Smart management and real-time active and direct control of the production data. Automatic push notifications via App or e-mail when the software detects any operation outside the standard parameters.

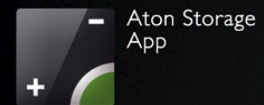
Integrated
**Amazon
Alexa**
Interacting
with your storage system
is now even easier.



Our active
monitoring system



"Alexa, open Aton Storage."



Your monitoring center for the **ATON Storage** ecosystem: monitor the produced and consumed energy in real time, consult production history, optimize your consumption, receive any weather alerts to prepare well in advance for any blackouts and manage electric vehicles charging, all from a single **App for PC, iOS and Android** devices.



Aton Storage App



System Powers

Instant overview of system operation. Thanks to the always active connection, the **ATON** app is able to show the **system status** at all times.

The interface is highly customizable which allows the selection and **display of data** according to preference.

This screen displays an overview of the powers managed by the system.

- Grid** This screen displays the power exchanged with the national electrical grid. A positive value indicates that the system is supplying energy (blue), while a negative value indicates that the system is drawing energy (red).
- Solar** Displays the power generated by the photovoltaic system.
- Consumption** Displays the power required by the household.
- Electric Vehicle** Displays the power delivered to the vehicle.
- Battery** Displays the power input or output from the battery.
- Battery** Displays the battery's charge percentage.
- External inverters** Displays the power output from secondary inverters not connected to the battery.
- Diverter** Displays the power that the system is supplying for the diverter's operation.
- Weather Forecast** Weather forecasts based on web information.

Electric Vehicles

EV interface that allows **total control of power supply to electric vehicles** via the **Axis.T** EV charger. With multiple **Axis.Ts** columns it is possible to view the charging status of all connected vehicles.

Electric Vehicle

8,460 W
42.30 km/h

NORMAL

1	2	3	4	5	6
3.1 kW	1.3 kW	1.6 kW	7.9 kW	8.5 kW	5.7 kW

Energy Chart

Visualization of the entire system operation. The production data, self-consumption, energy purchased, sold or injected into vehicles are also shown with a **column chart**. The **history** is available daily, monthly and yearly.

Energy Chart

16/08/2023

- Solar Energy: 47.77 kWh
- Self-produced Energy (98%): 33.55 kWh
- Bought Energy: 0.60 kWh
- Sold Energy: 11.14 kWh
- EV Energy: 26.77 kWh

Energy Totals

Screen showing the **history of the energies** managed by the system in comparison during the selected time interval, offering a complete report of the **system's performance**.

Energy Totals

16/08/2023

- Solar Energy: 47.77 kWh
- Self-produced Energy (98%): 33.55 kWh
- Used Energy: 34.15 kWh
- Sold Energy: 11.15 kWh
- Bought Energy: 0.60 kWh
- EV Energy: 26.77 kWh

Monthly report

Function that offers a quick report on a monthly basis of the system operation with calculation of the **self-sufficiency** achieved and **energy savings**.

Monthly Report

August 2023

During this month you have used 616.00 kWh. **The 95 % of the energy** was supplied by your storage system, allowing you to save on the purchase of 586.40 kWh.

- Bought Energy: 29.59 kWh
- Self-produced Energy: 586.40 kWh
- Sold Energy: 505.26 kWh
- Self-sufficiency: 95 %
- Energy Saving: 0.95 kWh/day

Anti-Blackout

Function that allows **ATON** systems to store and **maintain energy** within the batteries and be able to exploit it in the event of a **planned energy network interruption** by the operator.

Anti Blackout

Select start date

February 2024

Su	Mo	Tu	We	Th	Fr	Sa
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	1	2
3	4	5	6	7	8	9

Select start time

- 11:00 +

Select the duration 03:00

Save Cancel

Remote assistance with direct and automatic monitoring of system data in real time.

Easily consultable data, weather forecast included, charts that help keep track of system operation.



▲ **Comprehensive feature guide** available on every screen of the **ATON** app

Push notification

Automatic alerts in the event of a malfunction of the storage system or photovoltaic system. The lack of the national electricity grid, the poor cleaning of photovoltaic panels, the internet connection loss are all reported promptly, as is the end of charging of electric vehicles.


The **ATON** app also allows the insertion, viewing and management of multiple systems.

X.Store series

Single-phase solution for new and existing photovoltaic systems with modular floor installation

Space-saving energy storage system with a modular structure built to match the home's requirements.

- Modular storage capacity from **4,8** to **19,2** kWh, maintaining the external dimensions.
- Possibility to **connect several systems in parallel** to reach higher powers and capacities.
- **Anti-blackout** function.
- **Weather Alert** in case of adverse conditions, automatic or programmable.
- **Silent**.
- **Easy** to install.
- **Electric mobility**.
- **Energy Sharing Integrated** collective consumption and REC management system.
- **CHAIN 2**
- Connectivity with notifications. **ATON Storage App** included.
- Amazon **Alexa** embedded.
- Made in **Italy**
- **10-years** guarantee.

Cover  **COBALT BLUE / NICKEL GREY**



New and Existing Systems

Configuration B

Dimensions (WxHxD):
571 x 1775 x 367 mm
Weight: **122 kg**
(with 2 batteries)
Weight: **204 kg**
(with 4 batteries)

Data Sheet

X.STORE Series

BATTERY

Battery type	LiFePO4			
Nominal voltage	48 V			
Minimum No. of batteries in standard configuration A	1			
No. of batteries at max capacity - configuration C	8			
Max storable energy at max capacity	38,4 kWh			

EFFICIENCY

Max conversion efficiency	3K	4K	5K	6K
Maximum conversion efficiency - battery side	97,60%			
	95,50%			

PROTECTIONS

Anti-islanding	Yes			
Overcharge	Yes			
Output short-circuit	Yes			
Overheating protection	Yes			
Battery protection	Magnetothermal switch			

GENERAL DATA

Operating temperature	3K	4K	5K	6K
Relative humidity	-5°C ÷ +45°C			
Cooling	0% ÷ 95%			
Noise	Natural convection			
Weight without batteries // with batteries in standard configuration	< 30 dB			
Dimensions WxHxD (mm) configuration B	48 kg / 85 kg			
Installation	571 x 1775 x 367			
Protection degree	Floor			
	IP20			

COMPLIANCES

Markings
CE, ROHS, REACH
RED Directive
ETSI EN 300 328; ETSI EN 301 489-1;
ETSI EN 301 489-2; ETSI EN 301 511

EMC Directive
EN61000-6-2; EN61000-6-3; EN IEC
61000-3-2; EN 61000-3-3; EN IEC
61000-3-11; EN IEC 61000-3-12

LVD Directive
IEC62109-1; IEC62109-2; EN 60204-1;
IEC 61439-1; IEC 61439-2; EN 62619

Grid Codes
EN 50549-1; Italy; France; Germany;
Spain; Ireland; UK

Transport
UN38.3

INTERFACES

Wi-Fi (standard)	3K	4K	5K	6K
Cellular modem (optional)	2.4 GHz IEEE Std. 802.11 b/g/n			
LAN (standard)	2G / 4G			
Controller and Gateway for aggregation and energy-sharing systems (standard)	10/100 Mbps			
	CM4 Linux based quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz - 16GB - 2GB ram			

Single module



from **4,8** to **9,6** kWh **A** - from **4,8** to **9,6** kWh **B** - up to **19,2** kWh **C** - up to **38,4** kWh
• (WxHxD) mm: **571 x 535 x 367** **571 x 1240 x 367** **571 x 1775 x 367** **1142 x 1775 x 367**

	MG. STORE			
	ZN. STORE		GG. STORE	
	3K	4K	5K	6K
Battery type	LiFePO4			
Nominal voltage	48 V			
Minimum No. of batteries in standard configuration A	1			
No. of batteries at max capacity - configuration C	8			
Max storable energy at max capacity	38,4 kWh			
EFFICIENCY	3K	4K	5K	6K
Max conversion efficiency	97,60%			
Maximum conversion efficiency - battery side	95,50%			
PROTECTIONS	3K	4K	5K	6K
Anti-islanding	Yes			
Overcharge	Yes			
Output short-circuit	Yes			
Overheating protection	Yes			
Battery protection	Magnetothermal switch			
GENERAL DATA	3K	4K	5K	6K
Operating temperature	-5°C ÷ +45°C			
Relative humidity	0% ÷ 95%			
Cooling	Natural convection			
Noise	< 30 dB			
Weight without batteries // with batteries in standard configuration	48 kg / 85 kg			
Dimensions WxHxD (mm) configuration B	571 x 1775 x 367			
Installation	Floor			
Protection degree	IP20			
INTERFACES	3K	4K	5K	6K
Wi-Fi (standard)	2.4 GHz IEEE Std. 802.11 b/g/n			
Cellular modem (optional)	2G / 4G			
LAN (standard)	10/100 Mbps			
Controller and Gateway for aggregation and energy-sharing systems (standard)	CM4 Linux based quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz - 16GB - 2GB ram			

ATON Battery
Lithium AL48-100-3U



MG.Store

Single-phase solution for new photovoltaic systems, LITE GG.Store version with reduced charging-discharging capacity

- Available with 4 different power outputs
- **Anti-blackout** function also capable to give continuity to photovoltaic production

GG.Store

Single-phase solution for new photovoltaic systems with modular floor installation

- Available with 3 different power outputs
- **Anti-blackout** function also capable to give continuity to photovoltaic production

ZN.Store

Single-phase solution for existing photovoltaic systems with modular floor installation

- Available in 1 power output
- **Anti-blackout** function

Data Sheet

MG.STORE MODEL	3K	4K	5K	6K
PV INPUT				
Max DC input power	4.500 W	5.400 W	7.500 W	9.000 W
Max DC input voltage	600 Vdc			
Max current for each DC input	16 A			
Maximum short circuit current for each DC input	23 A			
No. of independent MPPT inputs / No. of strings	1/1	2/2	2/2	2/2
AC OUTPUT DATA (ON-GRID)				
Max output power	3.000 W	3.680 W	5.000 W	6.000 W
Nominal voltage	230 V			
Nominal frequency	50/60 Hz			
AC OUTPUT DATA (EPS-BACK UP)				
Max apparent output power	3.000 VA	3.680 VA	5.000 VA	5.000 VA
BATTERY				
Max current input	60 A			
Max current output				

GG.STORE MODEL	4K	5K	6K
PV INPUT			
Max DC input power	5.400 W	7.500 W	9.000 W
Max DC input voltage	600 Vdc		
Max current for each DC input	16 A		
Maximum short circuit current for each DC input	23 A		
No. of independent MPPT inputs / No. strings	2/2		
AC OUTPUT DATA (ON-GRID)			
Max output power	3.680 W	5.000 W	6.000 W
Nominal voltage	230 V		
Nominal frequency	50/60 Hz		
AC OUTPUT DATA (EPS-BACK UP)			
Max output power	3.680 W	5.000 W	
BATTERY			
Max current input	75 A	100 A	
Max current output			

ZN.STORE MODEL	4K
AC OUTPUT DATA (ON-GRID)	
Max output power	3.680 W
Nominal voltage	230 V
Nominal frequency	50/60 Hz
AC OUTPUT DATA (EPS-BACK UP)	
Max apparent discharge power	3.450 W
BATTERY	
Max current input	75 A
Max current output	

New System

Existing System

Output power up to:
6.000 W

Output power up to:
6.000 W

Output power up to:
4.000 W

RA.Store-K

The solution for new single-phase photovoltaic systems

Ideal for the home, Ra.Store-K is equipped with cutting-edge technologies and contains everything needed to quickly connect to a new photovoltaic system.

- Available with 4 different power outputs
- Modular storage capacity from **4,8 a 19,2 kWh**
- Possibility to connect several **systems in parallel** to reach higher powers and capacities
- Anti-blackout** function also capable to give continuity to photovoltaic production.
- Weather Alert** in case of adverse conditions, automatic or programmable
- Silent**
- Easy to install**
- Integrated protection devices**
- Electric mobility**
- Energy Sharing**
Prepared for collective consumption and REC management
- CHAIN 2**
- Connectivity with notifications. **ATON Storage App** included
- Amazon **Alexa** embedded
- Made in **Italy**
- 10-years** guarantee

Cover  ABS Polymer - 2 Colors
LED Column  ABS Polymer - CARBON BLACK



New Systems

Output power up to:
6.000 W
Dimensions (WxHxD):
650 x 1400 x 550 mm
Weight:
85 kg - 232 kg



Data Sheet

RA.STORE-KG MODEL	3K	4K	5K	6K
PV INPUT				
Max DC input power	4.500 W	5.400 W	7.500 W	9.000 W
Max DC input voltage	600 Vdc			
Max current for each DC input	16 A			
Maximum short circuit current for each DC input	23 A			
No. of independent MPPT inputs / No. of strings	1/1	2/2	2/2	2/2
AC OUTPUT DATA (ON-GRID)				
Max output power	3.000 W	3.680 W	5.000 W	6.000 W
Nominal voltage	230 V			
Nominal frequency	50/60 Hz			
AC OUTPUT DATA (EPS-BACK UP)				
Max output power	3.000 W	3.680 W	5.000 W	5.000 W
BATTERY				
Battery type	LiFePO4			
Nominal voltage	48 V			
Max current input	60A	75A		100A
Max current output				
No. of batteries in standard configuration	1			2
No. of batteries at max capacity		4		
Max storable energy at max capacity	19,2 kWh			
EFFICIENCY				
Max conversion efficiency	3K	4K	5K	6K
Maximum conversion efficiency - battery side		97,60%		
		95,50%		
PROTECTIONS				
Anti-islanding	Yes			
Overcharge / Output circuit / Overheating protection	Yes			
AC lines protection	Magnetothermal switch			
Battery protection	Disconnecter + SPD			
PV generator side protection	Disconnecter + SPD			
GENERAL DATA				
Operating temperature	-5°C ÷ +45°C			
Relative humidity	0% ÷ 95%			
Cooling	Natural convection			
Noise	< 30 dB			
Weight	85 kg - 232 kg		122 kg - 232 kg	
Dimensions WxHxD (mm)	650 x 1400 x 550			
Installation	Floor			
Protection degree	IP20			
INTERFACES				
Wi-Fi (standard)	3K	4K	5K	6K
Cellular modem (optional)	2.4 GHz IEEE Std. 802.11 b/g/n			
LAN (standard)	2G / 4G			
	10/100 Mbps			
Controller and Gateway for aggregation and energy-sharing systems (standard)	CM4 Linux based quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz - 16GB - 2GB ram			

COMPLIANCES

Markings
CE, ROHS, REACH
RED Directive
ETSI EN 300 328; ETSI EN 301 489-1; ETSI EN 301 489-52; ETSI EN 301 511
EMC Directive
EN61000-6-2; EN61000-6-3; EN IEC 61000-3-2; EN 61000-3-3; EN IEC 61000-3-11; EN IEC 61000-3-12
LVD Directive
IEC62109-1; IEC62109-2; EN 60204-1; IEC 61439-1; IEC 61439-2; EN 62619
Grid Codes
EN 50549-1; Italy; France; Germany; Spain; Ireland; UK
Transport
UN38.3

ATON Battery
Lithium AL48-100-3U



RA.Store-3

The solution for new or existing three-phase photovoltaic systems

RA.Store-3 is the only photovoltaic ESS on the market with a three-phase hybrid inverter also connectable on the AC side. It is the ideal solution for users with significant energy needs.

- Available with **3** different power outputs
- Modular storage capacity from **9,6 to 24 kWh**, expandable up to **576 kWh**
- Possibility of **connection** to an **existing inverter** in AC post-production mode
- Possibility to **connect several systems in parallel** to reach higher powers and capacities
- Anti-blackout** function also capable to give continuity to photovoltaic production
- Weather Alert** in case of adverse conditions, automatic or programmable
- Silent**
- Easy** to install
- Integrated protection** devices
- Electric mobility**
- Energy Sharing**
Prepared for collective consumption and REC management
- CHAIN 2**
- Connectivity with notifications. **ATON Storage App** included
- Amazon **Alexa** embedded
- Made in **Italy**
- 10-years** guarantee



Cover Metal Alloy
LED Column ABS Polymer - Carbon BLACK / Solid Grey

New and Existing Systems

Output power up to:
10.000 W
Dimensions (WxHxD):
1045 x 1345 x 545 mm
Weight:
271 kg - 415 kg



Data Sheet

RA.STORE-3T MODEL	5K	8K	10K
PV INPUT			
Max DC input power	7.500 W	12.000 W	15.000 W
Max DC input voltage	1.000 Vdc		
Max current for each DC input	16 A		
Maximum short circuit current for each DC input	21,2 A		
No. of independent MPPT inputs / No. of strings	2		
AC OUTPUT DATA (ON-GRID)			
Max output power	5.000 W	8.000 W	10.000 W
Nominal voltage	400-380 V		
Nominal frequency	50/60 Hz		
AC OUTPUT DATA (EPS-BACK UP)			
Max output power	5.000 W	8.000 W	10.000 W
Maximum output power (peak @ 60sec)	10.000 W	16.000 W	16.500 W
BATTERY			
Battery type	LiFePO4		
No. of batteries in standard configuration	4		5
No. of batteries at max capacity	10		
Max storable energy at max capacity	24 kWh		
Number of battery modules with expansion	24		
Maximum accumulable energy with expansion	576 kWh		
EFFICIENCY			
Max conversion efficiency	98,0 %		98,2 %
Maximum conversion efficiency - battery side	97,5 %		
PROTECTIONS			
Anti-islanding	5K	8K	10K
Overcharge / Output circuit / Overheating protection	Yes		
AC lines protection	Magnetothermal switch		
Battery protection	Disconnecter + SPD		
PV generator side protection	Disconnecter + SPD		
GENERAL DATA			
Operating temperature	5K	8K	10K
Relative humidity	-5°C ÷ +45°C		
Cooling	0% ÷ 95%		
Noise	Natural convection		
Weight	271 kg - 415 kg		295 kg - 415 kg
Dimensions WxHxD (mm)	1045x1345x545		
Installation	Floor		
Protection degree	IP20		
INTERFACES			
Wi-Fi (standard)	5K	8K	10K
Cellular modem (optional)	2.4 GHz IEEE Std. 802.11 b/g/n		
LAN (standard)	2G / 4G		
Controller and Gateway for aggregation and energy-sharing systems (standard)	10/100 Mbps		
	CM4 Linux based quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz - 16GB - 2GB ram		

COMPLIANCES

Markings
CE, ROHS, REACH
RED Directive
ETSI EN 300 328; ETSI EN 301 489-1;
ETSI EN 301 489-2; ETSI EN 301 511
EMC Directive
EN61000-6-2; EN61000-6-3; EN IEC
61000-3-2; EN 61000-3-3
LVD Directive
IEC62109-1; IEC62109-2; EN 60204-1;
IEC 61439-1; IEC 61439-2; EN 62619
Grid Codes
EN 50549-1; Italy; France; Germany;
Spain; Ireland; UK
Transport
UN38.3

Share Power

Storage system for joint self-consumption

Ideal for managing joint self-consumption in condominiums and renewable energy communities, it can be combined with new or existing systems PV plants.

- Modular - units with sizes and functions adaptable to different needs
- Modular storage capacity from **9,6 kWh**, expandable up to **576 kWh**
- Possibility to **connect several systems in parallel**
- **Anti-blackout** function also capable to give continuity to photovoltaic production
- **Weather Alert** in case of adverse conditions, automatic or programmable.
- **Silent**
- **Easy to install**
- **Integrated protection devices**
- **Electric mobility**
- Connectivity with notifications. **ATON Storage App** included
- **Energy Sharing** and optimization of energy consumed by 2 to 20 individual users. Prepared for collective consumption and REC management
- **CHAIN 2**
- Made in **Italy**
- **10-years** guarantee

Cover  Ice WHITE
Glass 



New and Existing Systems

Single unit output power up to:
10.000 W
Dimensions (WxHxD):
700 x 2200 x 625 mm
Weight:
375 kg - 575 kg

COMPLIANCES

Markings
CE, ROHS, REACH
RED Directive
ETSI EN 300 328; ETSI EN 301 489-1;
ETSI EN 301 489-2; ETSI EN 301 511
EMC Directive
EN61000-6-2; EN61000-6-3; EN IEC
61000-3-2; EN 61000-3-3
LVD Directive
IEC62109-1; IEC62109-2; EN 60204-1;
IEC 61439-1; IEC 61439-2; EN 62619
Grid Codes
EN 50549-1; Italy; France; Germany;
Spain; Ireland; UK
Transport
UN38.3

Data Sheet

	10K (B1.U)	20K (B1.M+1xB2)
SHARE POWER MODEL		
No. of basic units	1	2
No. of units with battery expansion	2	4
PV INPUT		
Max DC input power	15.000 W	30.000 W
Max DC input voltage		1.000 Vdc
Max current for each DC input		16 A
Maximum short circuit current for each DC input		21,2 A
No. of independent MPPT inputs		2
AC OUTPUT DATA (ON-GRID)	10K (B1.U)	20K (B1.M+1xB2)
Max output power	10.000 W	20.000 W
Nominal tension		400-380 V
Nominal frequency		50/60 Hz
AC OUTPUT DATA (EPS-BACK UP)	10K (B1.U)	20K (B1.M+1xB2)
Max output power	10.000 W	-
Maximum output power (peak @ 60sec)	16.500 W	-
BATTERY	10K (B1.U)	20K (B1.M+1xB2)
Battery type		LiFePO4
No. of batteries in standard configuration	8	16
No. of batteries at maximum capacity without expansion	10	20
Max storable energy at max capacity without expansion	24 kWh	48 kWh
Number of battery modules with expansion	16/24	24/.../48
Maximum accumulable energy with expansion	38,4/57,6 kWh	57,6/.../115,2 kWh
EFFICIENCY	10K (B1.U)	20K (B1.M+1xB2)
Max conversion efficiency		98,2 %
Maximum conversion efficiency - battery side		97,5 %
PROTECTIONS	10K (B1.U)	20K (B1.M+1xB2)
Anti-islanding		Yes
Overcharge / Output circuit / Overheating protection		Yes
AC lines protection		Magnetothermal switch + SPD
Battery protection		Magnetothermal switch
PV generator side protection		Disconnecter + SPD
GENERAL DATA	10K (B1.U)	20K (B1.M+1xB2)
Operating temperature		-5°C ÷ +45°C
Relative humidity		0% ÷ 95%
Cooling		Natural convection (fans + thermostat if IP54 or IP55)
Noise		< 30 dBA (<65 dBA se IP54 o IP55)
Total weight in standard configuration	375 kg	575 kg
Dimensions of each unit WxHxD (mm)		700 x 2200 x 625
Overall width of the basic units side by side (mm)	700	1400
Installation		Floor
Protection degree		IP20 (IP54 o IP55 optional)
INTERFACES	10K (B1.U)	20K (B1.M+1xB2)
HMI		Graphic display + membrane keyboard
Wi-Fi (standard)		2.4 GHz IEEE Std. 802.11 b/g/n
Cellular modem (optional)		2G / 4G
LAN (standard)		10/100 Mbps
Controller and Gateway for aggregation and energy-sharing systems (standard)		CM4 Linux based quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz - 16GB - 2GB ram

DESCRIPTION	CODE	DETAILS
Units equipped with AC input line protections:		
GENERAL MV, SPI, UPS, SPD, M2 LINE	B1.M	Main unit connectable in parallel to a maximum of 3 secondary units. Up to 40 kW of power.
	B3	AC input line protection unit, replacing the B1.M unit in case the system has a total power higher than 40 kW and up to 100kW.

DESCRIPTION	CODE	DETAILS
Units NOT equipped with AC input line protections:		
externally provide the MV devices GENERAL, SPI, UPS, SPD, LINE M2	B1.U	Stand alone unit equipped with hybrid inverter, which can only be associated with battery expansion units. Up to 10 kW of power.
	B2	Secondary unit with 10 kW hybrid inverter, to be associated with a protections equipped unit.
	B6.A	Unit with string inverter up to 20 kW, dedicated to photovoltaic production only, to be associated with a protections equipped unit.
	B6.B	Unit with string inverter up to 20kW and with the possibility of placing batteries that can be associated with the B1.M or B2 units, to be associated with a protections equipped unit.

DESCRIPTION	CODE	DETAILS
Battery expansion units	B5.1	8 batteries expansion unit, 1 built-in BMS.
	B5.2	16 batteries expansion unit, 2 built-in BMS.

Share Power

Configurator available on www.atonstorage.com Client Portal



New and Existing Systems

Residential building with balconies equipped with e.versus system



ATON battery

Lithium AL48-100-3U

Produced in exclusive collaboration with Ampace / CATL group

The new 48 V 4.8 kWh Lithium-Iron-Phosphate battery module, developed by ATON Green Storage in collaboration with Ampace, offers **increased performance and reliability**, maintaining the typical flexibility of ATON systems. Batteries with **optimized performance, extended longevity and guaranteed quality**. This is also thanks to a high control over the supply chain, allowing ATON to ensure service continuity to its customers.

Ampace was born as a spin-off of CATL, one of the world leaders in the production of lithium batteries, and ATL and specializes in the production of batteries for the residential sector. **ATON Green Storage has exclusivity on the Italian market for Ampace solutions.**








Nominal voltage:
48 V
Dimensions (WxHxD):
442 x 132 x 420 mm
Weight:
37 kg



Axis.T



The residential charging station for electric vehicles

Axis.T is a wall-box for electric vehicles home recharge, with increasing levels of management and integration that can be combined exclusively with ATON Green Storage systems.

-  **Smart** management of the charging process according to the selected scenario via the **ATON Storage App**. Possibility of combining the powers of photovoltaic, storage and electricity grid to speed up recharging.
-  Power output up to **7.4 kW** (single phase) or **22 kW** (three phase)
-  Recharge at **zero cost** and from renewable sources only
-  It allows recharging the electric vehicles while ensuring the **continuity of power supply** to the building
-  **CHAIN 2**
-  Made in **Italy**
-  **10-years** guarantee

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Cover  ABS Polymer - CARBON REFLEX
 Customizable stickers 

EV Charging



Output power up to:
22 kW
 Dimensions (WxHxD):
340 x 650 x 172 mm
 Weight:
10 kg

Dimensions (WxHxD):
 with column:
391 x 1480 x 259 mm

Data Sheet

AXIS.T MODEL	L - SINGLE-PHASE	L - THREE-PHASE
GENERAL CHARACTERISTICS		
Main voltage	230 Vac	400 Vac
Network frequency	50 / 60 Hz	
No. of connectors	1	
MID energy meter	Optional	
RCM sensor for grid safety	Optional	
Electrical protection rating	IP55	
Impact protection rating	IK09	
Installation	Indoor, outdoor, residential use	
Operating temperature	-5°C +50°C	
Dimensions WxHxD (mm)	340x650x172	
Weight	10 kg	
RECHARGING FEATURES		
Maximum output power	L-MONOPHASE 7,4 kW	L-TRIFASE 22 kW
Maximum output power setting	Via App	
Recharge management by the user	Type 2 model Plug (Cases A, B) Type 2 model Socket with cable (Case C)	
Connector type	Mode 2 / Mode 3	
Charging mode	Yes	
Self-limitation of maximum power supplied	Yes	
Electrical protection of the connector	IPXXB	
Mechanical retention of the connector	Yes	
PWM protocol	IEC 61851-1	
Start charging	Automatic on connector insertion	
ACCESSORIES		
SUPPORT PEDESTAL		
EV Charger dimensions WxHxD (mm)	340 x 650 x 172	
Dimensions with pedestal WxHxD (mm)	391 x 1480 x 259	
Weight	10 kg	

ECO

Recharges the vehicle only from the storage batteries and from the photovoltaic plant (if in production state) at a defined maximum charging power up to a defined minimum energy of the storage battery.

NORMAL

Recharges the vehicle from the storage system's batteries, and possibly from the photovoltaic plant, and from the grid at a defined recharging power, with self-limitation of power feed from the grid according to the power absorbed by the other loads and to the power limit in connection agreement.

ECO +

Recharges the vehicle as in ECO mode and once the energy in storage batteries reaches the minimum defined value, it continues to charge the vehicle according to the power absorbed by the other loads and the contractual withdrawal power (1.4 kW if single-phase, 4.2kW if three-phase).

FULL

Recharges the vehicle from the storage system's batteries, and possibly from the photovoltaic panels, and from the grid at the maximum possible recharging power, with self-limitation of power feed from the grid according to the power absorbed by the other loads and to the power limit in connection agreement.

COMPLIANCES

Markings

CE, ROHS, REACH

EMC Directive

IEC 61851-1; EN 60204-1;

IEC 61439-1; IEC 61439-2

LVD Directive

EN61000-6-2; EN61000-6-3; EN

IEC 61000-3-2; EN 61000-3-3;

EN IEC 61000-3-11; EN IEC

61000-3-12



e.versus 23R

Photovoltaic System
with oriented modules

Integrated with a modular structure
that can be positioned on parapets
or balconies irradiated by the sun.

**e.versus-23R is equipped
with courtesy night backlight.**



Available in 2 colors:

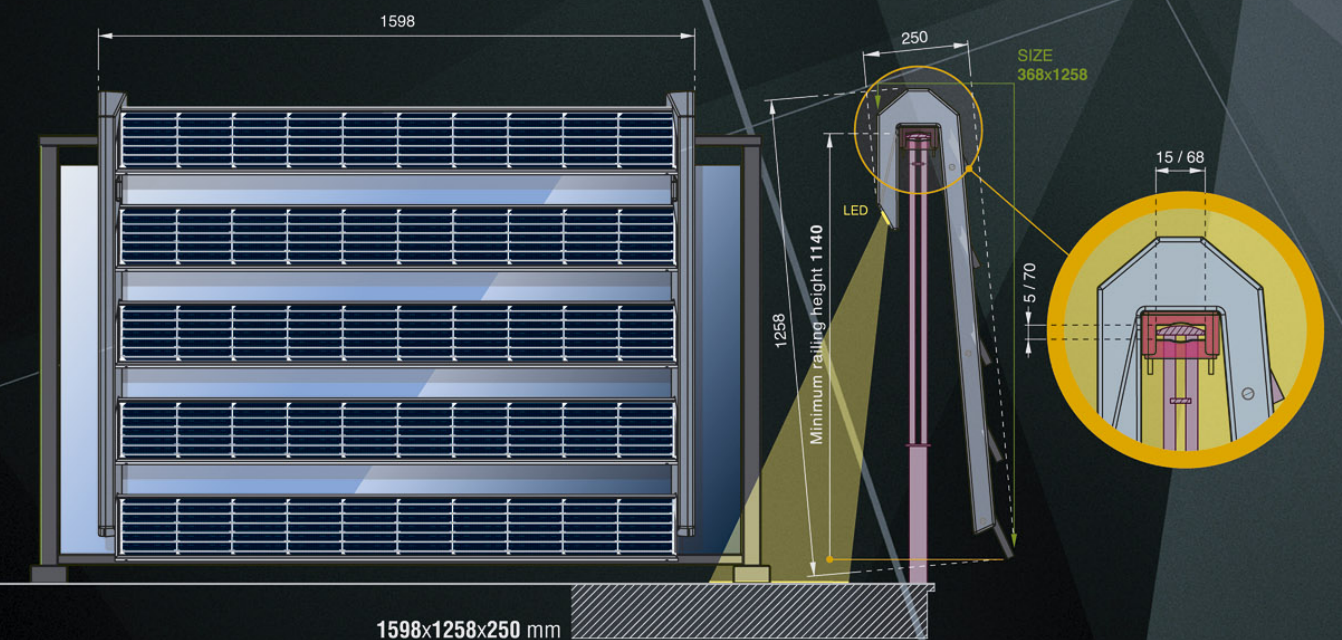
RAL 7004

RAL 7005

Peak power:
250 Wp
Dimensions (WxHxD):
1598 x 1258 x 250 mm
Weight:
22 kg

Solar Panels

It is possible to use any handrail profile with a section compatible with dimensions shown below.



- ▶ Plug and play
- ▶ Easy to install
- ▶ Different colours
- ▶ Silent
- ▶ Modular
- ▶ Integrated protections
- ▶ LED backlight
- ▶ Green and cost-saving
- ▶ 10-years guarantee
- ▶ Made in Italy

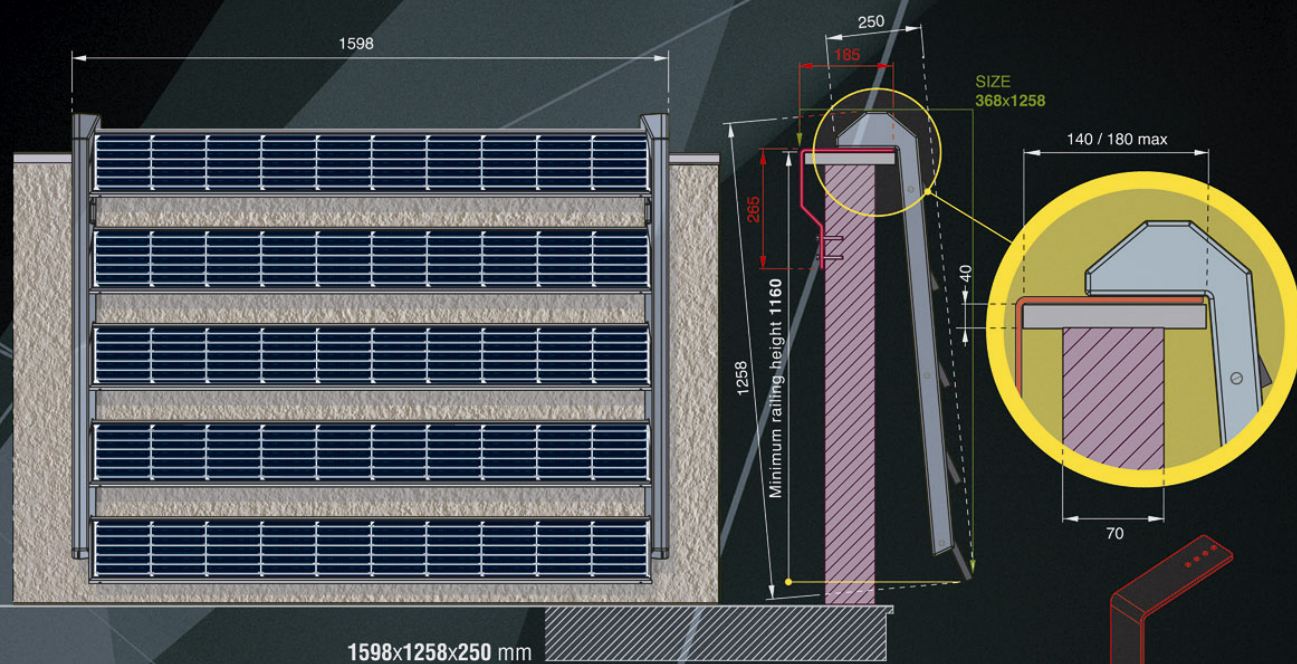
▶ **Product supplied with an accessory KIT
for assembly and maintenance.**

e.versus 23M

Photovoltaic System
with oriented modules

Integrated with a modular structure
that can be positioned on parapets
or balconies irradiated by the sun.

**e.versus-23M is the wall version
of the 23R model, equipped
with a adaptable bracket
to any type of parapet.**



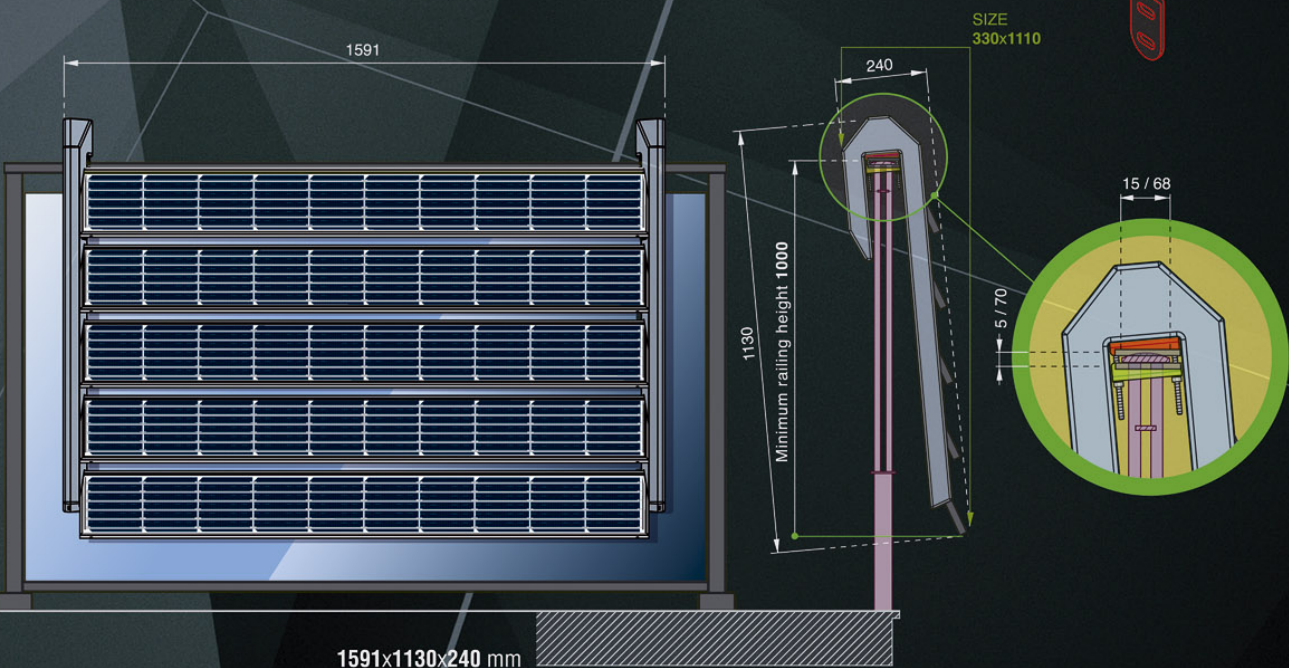
1598x1258x250 mm

e.versus 22R

Photovoltaic System
with oriented modules

Integrated with a modular structure
that can be positioned on parapets
or balconies irradiated by the sun.

**e.versus-22R has smaller
and more adaptable
height dimensions.**



1591x1130x240 mm

Data Sheet

e.versus	e.versus-23R	e.versus-23M	e.versus-22R
GENERAL CHARACTERISTICS			
Single photovoltaic unit dimensions (WxHxD)	1506x188x20 mm		
Units and frame dimensions (WxHxD)	1598x1258x250 mm	1591x1130x240 mm	
Packaging dimensions (WxHxD)	1653x1340x278 mm	1728x1151x279 mm	
Total weight	27 Kg	26,2 Kg	
Total weight including packaging	34 Kg		33,2 Kg
Min. operating temperature	- 20°C		
Max. operating temperature	+ 55°C		
Location	Outdoor, parapet or railing	Outdoor, parapet with brickwork	Outdoor, parapet or railing
Courtesy night light inside the balcony	Double LED	no	no
AC OUTPUT DATA (ON-GRID)			
Peak power	250 Wp		
Output voltage	230 Volt		
Output frequency	50 / 60 Hz		
ENVIRONMENTAL CHARACTERISTICS			
Protection degree	IP54		
Maximum wind speed	130 Km / H		
PANEL ANCHOR FEATURES			
Min free space under handrail	25 mm	N / A	25 mm
Min/max size of handrail	5 / 70 mm	N / A	5 / 70 mm
Min/max handrail width	15 / 68 mm	140 / 180 mm	15 / 68 mm

COMPLIANCES

Markings

CE, ROHS, REACH

Markings

IEC62109-1/-2; EN 60204-1;

IEC 61439-1/-2

EMC Directive

EN61000-6-1/-2/-3/-4;

EN IEC 61000-3-2/-3

Grid Codes

EN 50549-1; Italy; Germany

Available in 2 colors:

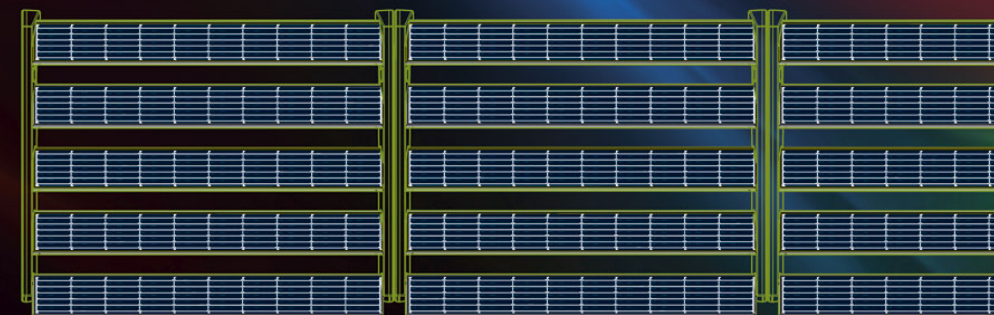
RAL 7004

RAL 7005

Peak power:
250 Wp
Dimensions (WxHxD):
23M
1598 x 1258 x 250 mm
22R
1591 x 1130 x 240 mm
Weight:
22 kg

It is possible to use any handrail profile with a section compatible with dimensions shown below.

Solar Panels



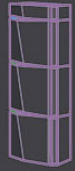
- Plug and play
- Easy to install
- Different colours
- Silent
- Modular
- Integrated protections
- Green and cost-saving
- 10-years guarantee
- Made in Italy

New Systems

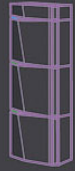
X.STORE
series

Page **7**

MG.STORE



GG.STORE



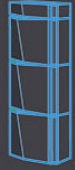
Output power up to (W):
Dimensions (WxHxD) mm:
Weight (Kg):
n. 2 Batteries
n. 4 Batteries

6.000
571 x 1775 x 367
122
204



Existing Systems

ZN.STORE



Output power up to (W):
Dimensions (WxHxD) mm:
Weight (Kg):
n. 2 Batteries
n. 4 Batteries

3.680
571 x 1775 x 367
122
204

RA.STORE-K

Page **11**



Output power up to (W):
Dimensions (WxHxD) mm:
Weight (Kg):
n. 2 Batteries
n. 4 Batteries

6.000
650 x 1400 x 550
159
232



RA.STORE-3

Page **13**



Output power up to (W):
Dimensions (WxHxD) mm:
Weight (Kg):
n. 4 Batteries
n. 10 Batteries

10.000
1045 x 1345 x 545
271
415



**SHARE
POWER**

Page **15**



Single unit output power up to (W):
Dimensions (WxHxD) mm:
Weight (Kg):
n. 4 Batteries
n. 10 Batteries

10.000
700 x 2.200 x 625
375
575



EV Charging

AXIS.T

Page **19**



Output power up to (W):
Dimensions (WxHxD) mm:
Weight (Kg):

22
340 x 650 x 172
10



Solar Panels

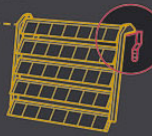
E.VERSUS
series

Page **21**

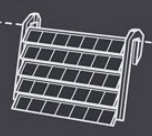
23R



23M



22R



Peak power (W):
Dimensions (WxHxD) mm:
23R
22R
Weight (Kg):

250
1598 x 1258 x 250
1591 x 1130 x 240
26,2 / 27



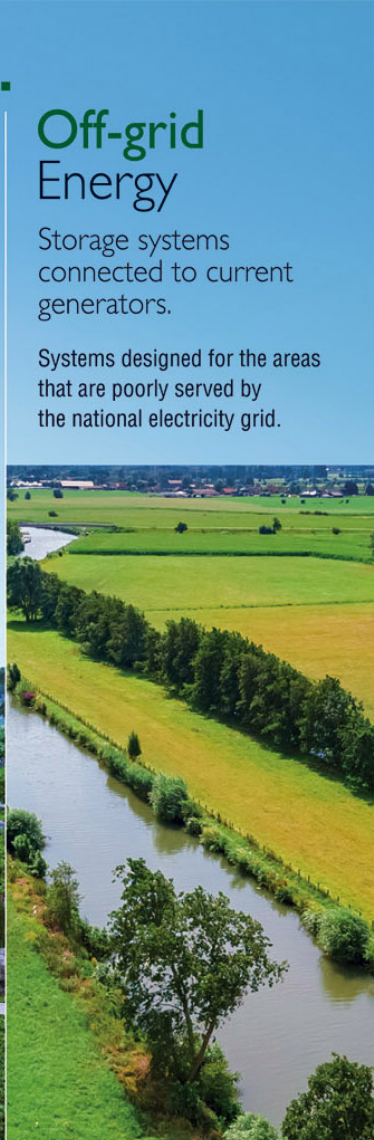
New Systems



On-grid Energy

Storage systems connected to the national electricity grid

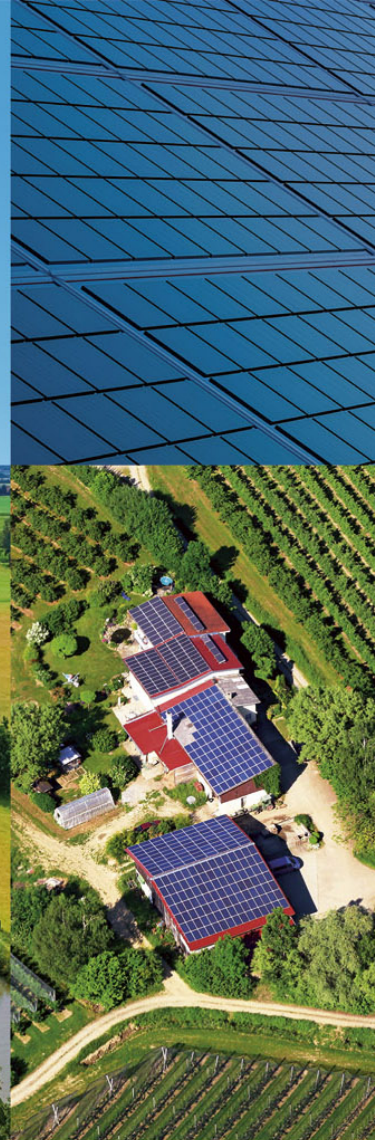
All systems can already communicate with any Smart and Micro Grid.



Off-grid Energy

Storage systems connected to current generators.

Systems designed for the areas that are poorly served by the national electricity grid.



On-storm Energy

Storage systems for extreme weather conditions.

Systems capable of powering important loads in difficult situations.



Energy Exchange

Stations that are able to exchange the energy stored between different active devices.

Software customization

Modification of the machine's control logic.

ATON management software is completely developed in-house, ensuring maximum flexibility and timeliness.

Products' branding

Customization of the external case's color and application of the customer's brand.

A tailored suit according to the best Italian style.



ATON Battery Lithium AL48-100-3U

Produced in collaboration with Ampace - CATL Group

The ATON batteries are characterized by optimized performance and extended longevity, as well as the quality guaranteed by one of the world leaders in the lithium batteries production.



Energy communities and collective self-consumption systems

ATON believes in new smart-grid models to encourage the electrification of devices, which is why it provides its customers with 360° support for the creation and management of new small and medium-sized energy communities.

Data science is our core business: all data is processed and stored entirely in Italy, in compliance with EU regulations and strict security standards.

ATON Green Storage develops and manufactures non-standard products capable of responding to the most particular needs.

The products' customization and the adaptability to individual needs in every aspect and environment are ATON's distinctive feature.

Design, modularity of components, software, colors and brands are adapted according to systems and customer needs in order to obtain absolute quality and maximum performance.

ATON Green Storage offers all of this, but not only. If you need a product or feature which is not here described, contact us and we will find the most suitable solution for you.