

# Super Capacitor

## Smart Energy Storage

### Wall Mount

#### Why use a Super Capacitor?

Super Capacitors (Super Caps) are the next generation energy storage with advanced performance where it matters most. They have a lifespan of more than 30 years with no capacity degradation.

A high charge and discharge rate with more than 98% round trip efficiency at a 100% depth of discharge make Super Caps the most efficient way to store energy.

#### How do Super Caps work?

Unlike batteries, Super Caps are manufactured by using a Graphene based composite to store energy electrostatically.

Super Caps store more energy and have higher outputs than batteries. Combined with high performance and long-term stability, they are the ideal safe energy storage technology.

Power For Peace Of Mind



#### 10 YEAR WARRANTY

- Model: Super Cap Wall Mount 5 kWh
- Model: Super Cap Wall Mount 15 kWh 100A
- Model: Super Cap Wall Mount 15 kWh 200A



Ultra-Long Cycle Life



30 Years Life Expectancy



High Charge and Discharge Rate



100% Depth of Discharge



>98% Round Trip Efficiency



No Capacity Degradation during Lifespan



Maintenance Free

A Magneto™ Super Capacitor has the lowest total cost of ownership over its lifespan and is guaranteed, backed and serviced by our national network and distribution centres.

**Let's compare...**

**General Performance**

	Lead Acid Batteries	Lithium	Super Capacitors
Charging time	5 - 10 Hours	1 - 5 hours	<30 min
Life Cycles	700 to 1200	3000 to 6000	Min 50 000
Efficiency	30%	85%	>98%
Design Life	18 Months to 3 Years	5 to 15 Years	30 to 40 Years
Lifespan Capacity loss	>80%	>25%	0%
Installation requirements	Ventilation and Cooling	Ventilation and Cooling	No Ventilation or Cooling
Safety	Toxic and Flammable	Toxic and Flammable	Non-Toxic, Non-Flammable

Comparisons are based on an average 1 full cycle per day



# Super Capacitor Energy Storage

Model Type: Wall Mount

## PERFORMANCE SPECIFICATIONS

Model	Wall Mount 5KWh	Wall Mount 15KWh 100A	Wall Mount 15KWh 200A
Total capacity	5KWh	15KWh	15kWh
Nominal Voltage	48V/DC		
Maximum Charge Voltage	58V/DC		
Discharge Cut-off Voltage	37.8V/DC	39.2V/DC	37.8V/DC
ESR/AC @1KHz 50% SOC	<10mΩ	<6mΩ	<10mΩ
Max. Continuous Charge Current	100A		200A
Max. Continuous Discharge Current	100A		200A
Cells Self-discharge Rate	2% per month		
Projected Cycle Life (25°C)	50,000 times		
Round Trip Efficiency	98%		95%
Recommended Depth of Discharge	≤90%		
Maximum Depth of Discharge	100%		
Cooling Method	Natural		
Shell Material	Metal and ABS plastic		
Parallel Connection	Up to 5 sets		
Monitoring Data	System Voltage, Current, Temperature, SOC, SOH, Cycle, Cell's Voltage		
Warranty	10 Years		

## COMPLIANCE INFORMATION

Safety	IEC62619, IEC62040
Transport	UN38.3, MSDS
CE	EN 62133:2013, EN 55032:2015+AC:2016, EN 55035:2017, EN 61000-3-2:2014, EN 61000-3-3:2013
Environmental	RoHS
Compatible Inverters	Magneto Hybrid, SMA, Sungrow, Goodwe

## ENVIRONMENTAL SPECIFICATIONS

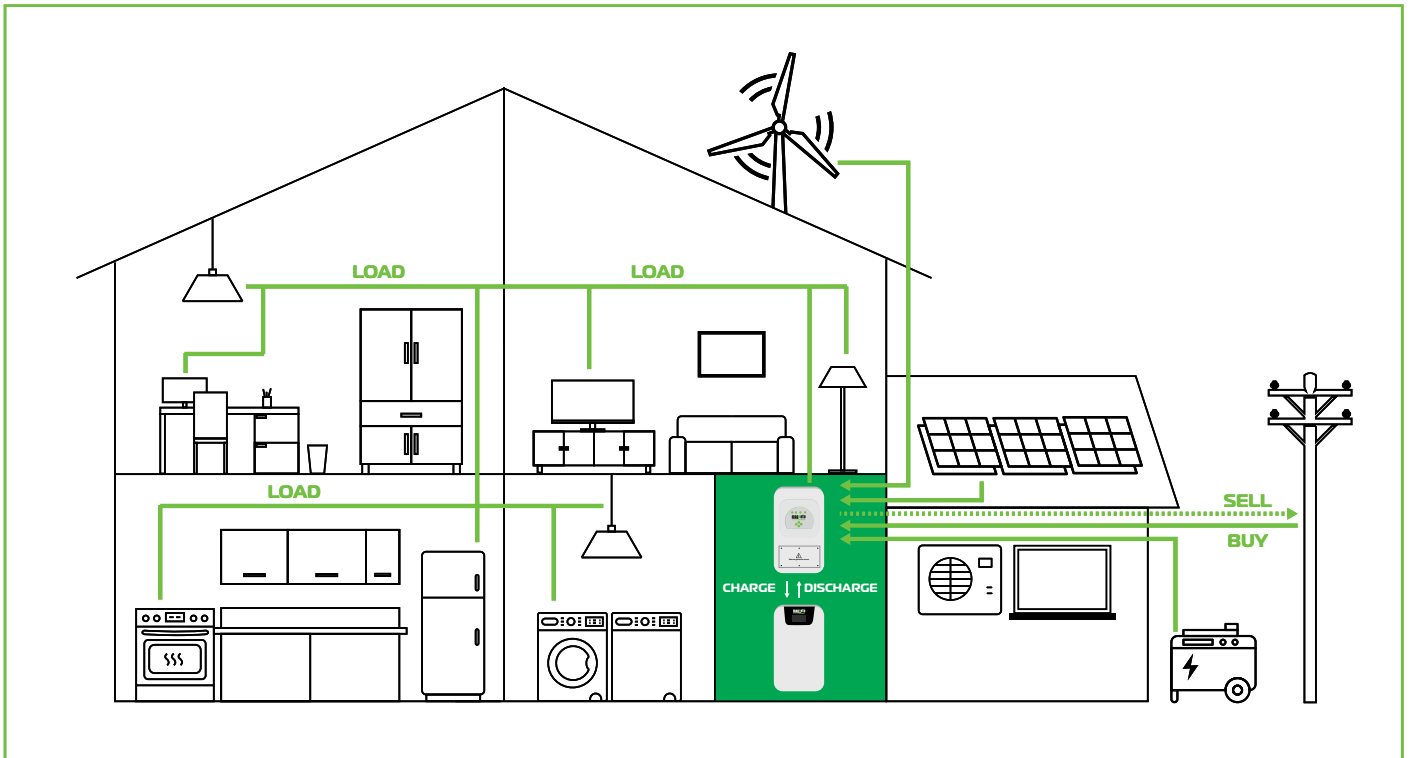
Environmental Protection	IP20
Operating Humidity	0~90% RH Non-condensing
Charge Temperature	0°C~+55°C
Discharge Temperature	-20°C~+60°C
Storage Conditions	-20°C~+40°C, 25% ~ 95%RH, SOC>30%, one full charge needed per two months

## MECHANICAL SPECIFICATIONS

Model	Wall Mount 5KWh	Wall Mount 15KWh 100A	Wall Mount 15KWh 200A
Weight	65kg	116kg	116kg
Dimensions	470 x 675 x 194 (mm)	700 X 174 X 765 (mm)	700 X 174 X 765 (mm)
Mounting Options	Wall / Floor		

# Energy solutions that work for you: Advanced, intelligent, compact and safe.

Magneto™ Super Capacitor units are scalable to any capacity energy storage requirement for domestic, commercial or industrial application.



## SCALABLE ENERGY STORAGE SOLUTIONS (ESS)



Contact our friendly and efficient team to discuss an energy solution that fits your lifestyle.