magneto™
RENEWABLE ENERGY

Super Capacitor

Smart Energy Storage

IMS101 - 5kWh Rack Mount
IMS110 - 5.5kWh Rack Mount
IMS110 - 7.6kWh Rack 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.

10 YEAR WARRANTY

- 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

Power For Peace Of Mind

Super Capacitor Energy Storage

Model Type: Rack Mount

PERFORMANCE SPECIFICATIONS

Model	Rack Mount 5kWh	Telecoms 5.5kWh	Telecoms 7.6kWh
Total capacity	5kWh	5.5kWh	7.6kWh
Nominal Voltage	48V/DC		
Maximum Charge Voltage	58.8V/DC		
Discharge Cut-off Voltage	37.8V/DC	39.2V/DC	39.2V/DC
ESR/AC @1KHz 50% SOC	<10mΩ	<10mΩ	<8mΩ
Max. Continuous Charge Current	200A	100A	
Max. Continuous Discharge Current	200A	100A	
Cells Self-discharge Rate	2% per month		
Projected Cycle Life (25˚C)	50,000 times		
Round Trip Efficiency	98%		
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, Deye

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	Rack Mount		
Weight	65kg	45kg	60kg
Dimensions	470 x 675 x 194 (mm)	475 x 475 x 177 (mm)	475 x 685 x 177 (mm)
Mounting Options	Rack Mount		

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

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