

AC2DC STORAGE

LEADING THE CHARGE IN BATTERY STORAGE SOLUTIONS

Powering the Electricification of Things™

The Race for Energy Independence has Begun

**Solid State Battery Technologies and Energy
Storage Systems**

For more information, call our
office at (813) 212-7457
Email:
Support@AC2DCStorage.com
www.AC2DCStorage.com

The Race for Energy Independence has begun.

Final case design subject to change.

Powering the Electrification of Things

The battery that changes the world: the first solid state energy storage system in the world. Introducing AC2DC Storage All-In-One 12 kWh, 24 kWh, 36 kWh, 48 kWh and 60 kWh solid state batteries for residential use. Our solid state energy storage systems provide energy storage for peak shaving, self-consumption, time-based control, and backup.

Unlike the current lithium-ion technologies in the marketplace, AC2DC Storage solid state battery technology can charge and discharge simultaneously. There is no thermal runoff, zero toxicity and it's 100% recyclable while operating under extreme low and high temperatures. AC2DC Storage has the highest energy storage efficiency with annual retention rate of more than 96%. And let us not forget to mention they last more than 25 years.

Our batteries last 3 times longer than the current lithium-ion batteries. Now, everyone can afford energy storage no matter what size home. Financing available up to 25 years. Lifetime Warranty.

12 kWh

Solid State Energy Storage System

PERFORMANCE SPECIFICATIONS

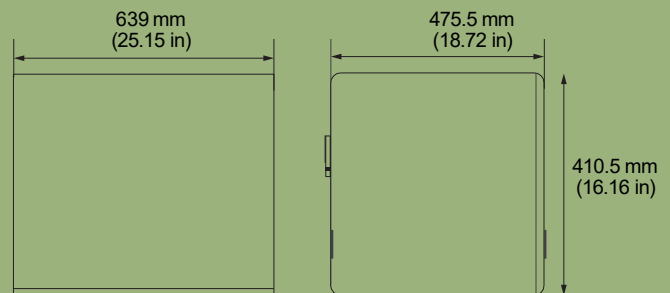
Nominal Voltage	48.3V
Voltage Range (DC)	35V ~ 58.3V
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	12.07 kWh
Usable Energy	12.07 kWh
Real Power, max continuous	3 kW (charge & discharge)
Real Power, peak (10s, off-grid/backup)	5 kW (charge & discharge)
Apparent Power, max continuous	3.35 kVA (charge & discharge)
Apparent Power, peak (10s, off-grid/backup)	5.56 kVA (charge & discharge)
Maximum Supply Fault Current	63 A
Maximum Output Fault Current	26.4 A
Overcurrent Protection Device	26.4 A
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	48.3 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	3 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	14S1P
Number of Energy Storage Systems	1 (Max. Combination of 5 ESS)

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

MECHANICAL SPECIFICATIONS

Dimensions	410.5 mm x 639 mm x 475.5 mm
Weight	120 Kg (264.55 lbs)
Mounting Options	Floor



ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

** As long as the low pressure is no less than 11.6Kpa

*** For the battery pack, excluding the PCS



AC2DC STORAGE

LEADING THE CHARGE IN BATTERY STORAGE SOLUTIONS

24 kWh

Solid State Energy Storage System

36 kWh

Solid State Energy Storage System

PERFORMANCE SPECIFICATIONS

Nominal Voltage	48.3V * 2
Voltage Range (DC)	35V ~ 58.3V * 2
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	24.15 kWh
Usable Energy	24.15 kWh
Real Power, max continuous	3 kW (charge & discharge) * 2
Real Power, peak (10s, off-grid/backup)	5 kW (charge & discharge) * 2
Apparent Power, max continuous	3.35 kVA (charge & discharge) * 2
Apparent Power, peak (10s, off-grid/backup)	5.56 kVA (charge & discharge) * 2
Maximum Supply Fault Current	80 A
Maximum Output Fault Current	26.4 A * 2
Overcurrent Protection Device	26.4 A * 2
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	48.3 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah * 2
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	6 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	14S1P * 2
Number of Energy Storage Systems	2 (Max. Combination of 5 ESS)

* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS

MECHANICAL SPECIFICATIONS

Dimensions	(410.5 mm x 639 mm x 475.5 mm) * 2
Weight	240 Kg (529.1 lbs)
Mounting Options	Floor

PERFORMANCE SPECIFICATIONS

Nominal Voltage	48.3V * 3
Voltage Range (DC)	35V ~ 58.3V * 3
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	36.22 kWh
Usable Energy	36.22 kWh
Real Power, max continuous	3 kW (charge and discharge) * 3
Real Power, peak (10s, off-grid/backup)	5 kW (charge and discharge) * 3
Apparent Power, max continuous	3.35 kVA (charge & discharge) * 3
Apparent Power, peak (10s, off-grid/backup)	5.56 kVA (charge & discharge) * 3
Maximum Supply Fault Current	140 A
Maximum Output Fault Current	26.4 A * 3
Overcurrent Protection Device	26.4 A * 3
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	48.3 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah * 3
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	9 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	14S1P * 3
Number of Energy Storage Systems	3 (Max. Combination of 5 ESS)

* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS

MECHANICAL SPECIFICATIONS

Dimensions	(410.5 mm x 639 mm x 475.5 mm) * 3
Weight	360 Kg (793.65 lbs)
Mounting Options	Floor



AC2DC STORAGE

LEADING THE CHARGE IN BATTERY STORAGE SOLUTIONS

48 kWh

Solid State Energy Storage System

60 kWh

Solid State Energy Storage System

PERFORMANCE SPECIFICATIONS

Nominal Voltage	48.3V * 4
Voltage Range (DC)	35V ~ 58.3V * 4
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	48.3 kWh
Usable Energy	48.3 kWh
Real Power, max continuous	3 kW (charge & discharge) * 4
Real Power, peak (10s, off-grid/backup)	5 kW (charge & discharge) * 4
Apparent Power, max continuous	3.35 kVA (charge & discharge) * 4
Apparent Power, peak (10s, off-grid/backup)	5.56 kVA (charge & discharge) * 4
Maximum Supply Fault Current	160 A
Maximum Output Fault Current	26.4 A * 4
Overcurrent Protection Device	26.4 A * 4
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	48.3 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah * 4
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	12 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	14S1P * 4
Number of Energy Storage Systems	4 (Max. Combination of 5 ESS)

* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS

MECHANICAL SPECIFICATIONS

Dimensions	(410.5 mm x 639 mm x 475.5 mm) * 4
Weight	480 Kg (1000.2 lbs)
Mounting Options	Floor

PERFORMANCE SPECIFICATIONS

Nominal Voltage	48.3V * 5
Voltage Range (DC)	35V ~ 58.3V * 5
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	60.37 kWh
Usable Energy	60.37 kWh
Real Power, max continuous	3 kW (charge & discharge) * 5
Real Power, peak (10s, off-grid/backup)	5 kW (charge & discharge) * 5
Apparent Power, max continuous	3.35 kVA (charge & discharge) * 5
Apparent Power, peak (10s, off-grid/backup)	5.56 kVA (charge & discharge) * 5
Maximum Supply Fault Current	200 A
Maximum Output Fault Current	26.4 A * 5
Overcurrent Protection Device	26.4 A * 5
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	48.3 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah * 5
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	15 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	14S1P * 5
Number of Energy Storage Systems	5 (Max. Combination of 5 ESS)

* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS

MECHANICAL SPECIFICATIONS

Dimensions	(410.5 mm x 639 mm x 475.5 mm) * 5
Weight	600 Kg (1322.75 lbs)
Mounting Options	Floor



The Future of Energy Storage is Solid State. We have it.

Powering the Electrification of Things

The battery that changes the world: the first solid state energy storage system in the world. Introducing AC2DC Storage All-In-One 60 kWh, 120 kWh and 180 kWh solid state batteries for light commercial use. Our solid state energy storage systems provide energy storage for peak shaving, self-consumption, time-based control, and backup. Unlike the current lithium-ion technologies in the marketplace, AC2DC Storage's solid state battery technology can charge and discharge simultaneously. There is no thermal runoff, zero toxicity and it's 100% recyclable while operating under extreme low and high temperatures. AC2DC Storage has the highest energy storage efficiency with annual retention rate of more than 96%. And let us not forget to mention they last more than 25 years. Our batteries last 3 times longer than the current lithium ion batteries. Now, everyone can afford energy storage. Lifetime Warranty.

60 kWh

Solid State Energy Storage System

PERFORMANCE SPECIFICATIONS

Nominal Voltage	241.5V
Voltage Range (DC)	175V ~ 294V
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	60.37 kWh
Usable Energy	60.37 kWh
Real Power, max continuous	9.5 kW (charge & discharge)
Real Power, peak (10s, off-grid/backup)	9.5 kW (charge & discharge)
Apparent Power, max continuous	11 kVA (charge & discharge)
Apparent Power, peak (10s, off-grid/backup)	11 kVA (charge & discharge)
Maximum Supply Fault Current	40 A
Maximum Output Fault Current	15.9 A
Overcurrent Protection Device	15.9 A
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	241.5 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	9.5 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	70S1P
Number of Energy Storage Systems	1 (Max. Combination of 3 ESS)

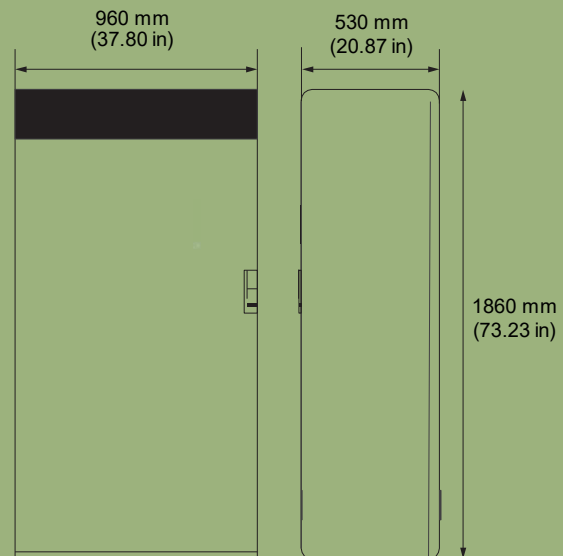
* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

MECHANICAL SPECIFICATIONS

Dimensions	1860 mm x 960 mm x 530 mm
Weight	550 Kg (1212.54 lbs)
Mounting Options	Floor



ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa

*** For the battery pack, excluding the PCS



AC2DC STORAGE

LEADING THE CHARGE IN BATTERY STORAGE SOLUTIONS

120 kWh

Solid State Energy Storage System

180 kWh

Solid State Energy Storage System

PERFORMANCE SPECIFICATIONS

Nominal Voltage	241.5V * 2
Voltage Range (DC)	175V ~ 294V * 2
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	120.74 kWh
Usable Energy	120.74 kWh
Real Power, max continuous	9.5 kW (charge & discharge) * 2
Real Power, peak (10s, off-grid/backup)	9.5 kW (charge & discharge) * 2
Apparent Power, max continuous	11 kVA (charge & discharge) * 2
Apparent Power, peak (10s, off-grid/backup)	11 kVA (charge & discharge) * 2
Maximum Supply Fault Current	63 A
Maximum Output Fault Current	15.9 A * 2
Overcurrent Protection Device	15.9 A * 2
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	241.5 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah * 2
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	19 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	70S1P * 2
Number of Energy Storage Systems	2 (Max. Combination of 3 ESS)

*Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS

MECHANICAL SPECIFICATIONS

Dimensions	1860 mm x 1920 mm x 530 mm
Weight	1100 Kg (2425 lbs)
Mounting Options	Floor

PERFORMANCE SPECIFICATIONS

Nominal Voltage	241.5V * 3
Voltage Range (DC)	175V ~ 294V * 3
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	180.11 kWh
Usable Energy	180.11 kWh
Real Power, max continuous	9.5 kW (charge & discharge) * 3
Real Power, peak (10s, off-grid/backup)	9.5 kW (charge & discharge) * 3
Apparent Power, max continuous	11 kVA (charge & discharge) * 3
Apparent Power, peak (10s, off-grid/backup)	11 kVA (charge & discharge) * 3
Maximum Supply Fault Current	100 A
Maximum Output Fault Current	15.9 A * 3
Overcurrent Protection Device	15.9 A * 3
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	241.5 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah * 3
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	28.5 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	70S1P * 3
Number of Energy Storage Systems	3 (Max. Combination of 3 ESS)

*Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS

MECHANICAL SPECIFICATIONS

Dimensions	1860 mm x 2880 mm x 530 mm
Weight	1650 Kg (3637 lbs)
Mounting Options	Floor



The Future of Energy Storage Has Arrived.

Powering the Electrification of Things™

The battery that changes the world: the first solid state energy storage system in the world. Introducing All-In-One 150 kWh, 310 kWh and 470 kWh solid state energy storage systems for commercial use. Our solid state energy storage systems provide energy storage for peak shaving, self-consumption, time-based control, and backup. Unlike the current lithium-ion technologies in the market- place, solid state battery technology can charge and discharge simultaneously. There is no thermal runoff, zero toxicity and it's 100% recyclable while operating under extreme low and high temperatures. Our Solid-State Batteries have the highest energy storage efficiency with annual retention rate of more than 96%. And let us not forget to mention they last more than 25 years. Our batteries last 3 times longer than the current lithium ion batteries. Now, everyone can afford energy storage. Lifetime Warranty.

150 kWh

Solid State Energy Storage System

PERFORMANCE SPECIFICATIONS

Nominal Voltage	627.9V
Voltage Range (DC)	455V ~ 764V
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	156.98 kWh
Usable Energy	156.98 kWh
Real Power, max continuous	30 kW (charge & discharge)
Real Power, peak (10s, off-grid/backup)	30 kW (charge & discharge)
Apparent Power, max continuous	33 kVA (charge & discharge)
Apparent Power, peak (10s, off-grid/backup)	33kVA (charge & discharge)
Maximum Supply Fault Current	80 A
Maximum Output Fault Current	43 A
Overcurrent Protection Device	43 A
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	627.9 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	30 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	182S1P
Number of Energy Storage Systems	1 (Max. Combination of 3 ESS)

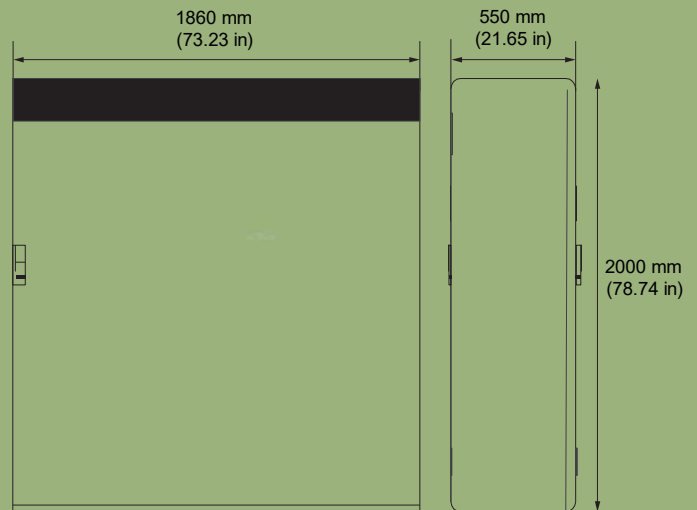
*Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

MECHANICAL SPECIFICATIONS

Dimensions	2000 mm x 1860 mm x 550 mm
Weight	1560 Kg (1212.54 lbs)
Mounting Options	Floor



ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS



AC2DC STORAGE

LEADING THE CHARGE IN BATTERY STORAGE SOLUTIONS

310 kWh

Solid State Energy Storage System

470 kWh

Solid State Energy Storage System

PERFORMANCE SPECIFICATIONS

Nominal Voltage	627.9V * 2
Voltage Range (DC)	455V ~ 764V * 2
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	313.95 kWh
Usable Energy	313.95 kWh
Real Power, max continuous	30 kW (charge & discharge) * 2
Real Power, peak (10s, off-grid/backup)	30 kW (charge & discharge) * 2
Apparent Power, max continuous	33 kVA (charge & discharge) * 2
Apparent Power, peak (10s, off-grid/backup)	33 kVA (charge & discharge) * 2
Maximum Supply Fault Current	160 A
Maximum Output Fault Current	43 A * 2
Overcurrent Protection Device	43 A * 2
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	627.9 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah * 2
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	60 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	182S1P * 2
Number of Energy Storage Systems	2 (Max. Combination of 3 ESS)

* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS

MECHANICAL SPECIFICATIONS

Dimensions	2000 mm x 3720 mm x 550 mm
Weight	3120 Kg (6878 lbs)
Mounting Options	Floor

PERFORMANCE SPECIFICATIONS

Nominal Voltage	627.9V * 3
Voltage Range (DC)	455V ~ 764V * 3
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	470.85 kWh
Usable Energy	470.85 kWh
Real Power, max continuous	30 kW (charge & discharge) * 3
Real Power, peak (10s, off-grid/backup)	30 kW (charge & discharge) * 3
Apparent Power, max continuous	33 kVA (charge & discharge) * 3
Apparent Power, peak (10s, off-grid/backup)	33 kVA (charge & discharge) * 3
Maximum Supply Fault Current	200 A
Maximum Output Fault Current	43 A * 3
Overcurrent Protection Device	43 A * 3
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96 adjustable
Power Factor Output (full-rated power)	+/- 0.96 adjustable
Internal Battery DC Voltage	627.9 V
Round Trip Efficiency	95%
Warranty	Lifetime Warranty *
Battery Capacity	250 Ah * 3
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles
Rated Power Output of Integrated Converter	90 kW
Intelligent Monitoring	BMS (cell level)
Heat Dissipation Mode	Natural Heat Dissipation
Serial Parallel	182S1P * 3
Number of Energy Storage Systems	3 (Max. Combination of 3 ESS)

* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

COMPLIANCE INFORMATION (Certification in Progress)

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°C (-40°F to 131°F)
Recommended Temperature	-20°C - 40°C (-4°F to 104°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-25°C to 30°C (-13°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 30% to 50%
Maximum Elevation	≤4500 m (14763 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	NEMA 4
Noise Level @ 1M	<40 dBA at 30°C (86°F)

** As long as the low pressure is no less than 11.6Kpa
*** For the battery pack, excluding the PCS

MECHANICAL SPECIFICATIONS

Dimensions	2000 mm x 5580 mm x 550 mm
Weight	4680 Kg (10317 lbs)
Mounting Options	Floor



1 MWh Energy Storage System



AC2DC STORAGE

LEADING THE CHARGE IN BATTERY STORAGE SOLUTIONS

The Holy Grail of Utility Storage is Found.

8-Hour Discharge, 11,000 Cycles and 25 Lifetime Warranty is Now a Reality.

Powering the Electrification of Things™

The race for energy independence has begun. AC2DC Storage All-In-One 1 MWh is solid-state energy storage system for commercial, utility and industrial use. The rechargeable, solid-state battery system provides energy storage for peak shaving, self-consumption, time-based control, and backup. Unlike the current lithium-ion technologies in the marketplace, AC2DC Storage's solid-state technology allows for up to 8-hours of discharge, and can charge and discharge simultaneously. There is no thermal runoff, zero toxicity and it's 100% recyclable while operating under extreme low and high temperatures. AC2DC Storage has a high energy storage efficiency with annual retention rate of more than 96%. And let us not forget to mention they last more than 25-years. Lifetime Warranty.

PERFORMANCE SPECIFICATIONS

Nominal Voltage	110V, 220V, 230V, 240V, 380V, 500V, 800V
Feed-In Type	Split Phase
Grid Frequency	60 Hz / 50 Hz
Total Energy	1 MWh
Usable Energy	1 MWh
Real Power, max continuous	250 KW (charge & discharge)
Real Power, peak (10s, off-grid/backup)	300 KW (charge & discharge)
Apparent Power, max continuous	313 KVA (charge & discharge)
Apparent Power, peak (10s, off-grid/backup)	375 KVA (charge & discharge)
Maximum Supply Fault Current	500 A
Maximum Output Fault Current	600 A
Overcurrent Protection Device	0-600 A
Imbalance for Split-Phase Loads	100%
Power Factor Output Range	+/- 0.96
Power Factor Output (full-rated power)	+/- 0.95
Internal Battery DC Voltage	450-860 V
Round Trip Efficiency	96%
Warranty	Lifetime Warranty *
Battery Capacity	1100Ah
C Rate	Adjustable (0.125C-180C)
Cycle Life	11,000 Cycles (**)

*Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

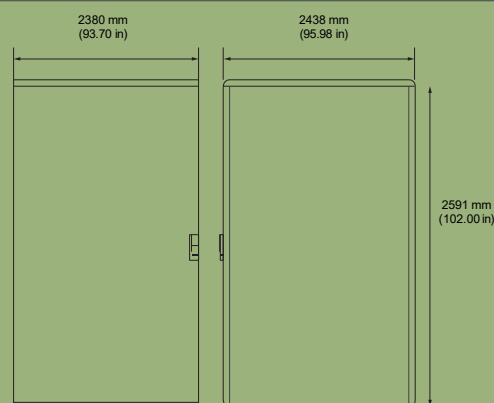
** If operated at 25°C +/- 3°C

COMPLIANCE INFORMATION

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, UL 9540A, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Seismic	AC156, IEEE 693-2005 (high)

MECHANICAL SPECIFICATIONS

Dimensions	2991 mm x 2438 mm x 2591 mm (without PCS) 4500 mm x 2438 mm x 2591 mm (with PCS)
Weight	14 Metric Tons (15.4 U.S. Tons) (without PCS) 17.5 Metric Tons (19.3 U.S. Tons) (with PCS)
Mounting Options	Floor



ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 60°C (-40°F to 131°F)
Recommended Temperature	0°C - 30°C (32°F to 86°F)
Operating Humidity	Up to 100%, condensing
Storage Conditions	-20°C to 30°C (-4°F to 86°F), Up to 95% RH, non-condensing State of Energy (SoE): 97% Initial
Maximum Elevation	≤3000 m (9843 ft) **
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 4 ***
Wet Location Rating	Yes
Noise Level @ 1M	<40 dBA at 30°C (86°F)****

** As long as the low pressure is no less than 11.6Kpa

*** For the battery pack, excluding the PCS

Our Mission

We are the first solid state energy storage system in the world. A game changer for power generation, renewable and environmental sectors. The Achilles' heel of the power industry is energy storage. Energy storage systems are critical to the adoption and success of renewable energy technologies and must be deployed in the next ten years. We have the solution today to store all the world's energy.

The future of our children and their children depends on us to decarbonize the planet as soon as possible.



AC2DC STORAGE

LEADING THE CHARGE IN BATTERY STORAGE SOLUTIONS

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