



The battery that changes the world:  
the first **solid state** energy storage  
system is here.

# The Race for Energy Independence has begun.

*Final case design subject to change.*

## AMPTRICITY: Powering the Electrification of Things™

The battery that changes the world: the first solid state energy storage system in the world. Introducing **Amptricity 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, Amptricity'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. Amptricity 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	<b>Lifetime Warranty *</b>
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)

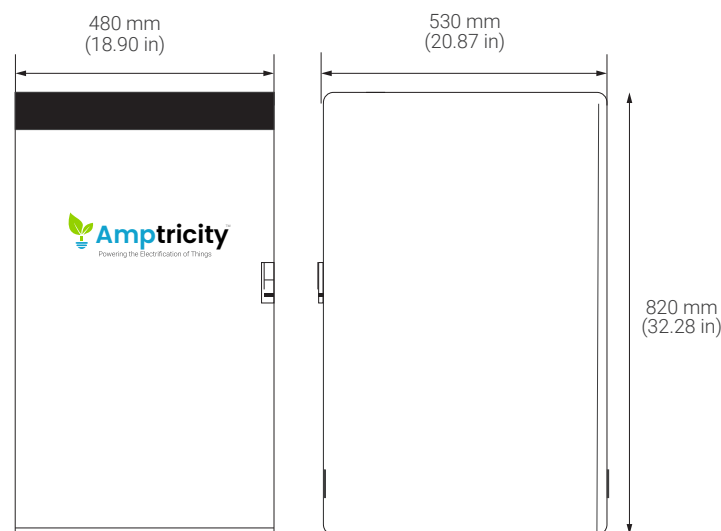
\* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

#### 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	820 mm x 480 mm x 530 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)

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

\*\*\* For the battery pack, excluding the PCS



## 24 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	820 mm x 960 mm x 530 mm
Weight	240 Kg (529.1 lbs)
Mounting Options	Floor

## 36 kWh

### Solid State Energy Storage System

#### 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	820 mm x 1440 mm x 530 mm
Weight	360 Kg (793.65 lbs)
Mounting Options	Floor

## 48 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	820 mm x 1920 mm x 530 mm
Weight	480 Kg (1000.2 lbs)
Mounting Options	Floor

## 60 kWh

### Solid State Energy Storage System

#### 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	820 mm x 2400 mm x 530 mm
Weight	600 Kg (1322.75 lbs)
Mounting Options	Floor

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

## AMPTRICITY: Powering the Electrification of Things™

The battery that changes the world: the first solid state energy storage system in the world. Introducing **Amptricity 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, Amptricity'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. Amptricity 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	<b>Lifetime Warranty *</b>
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)

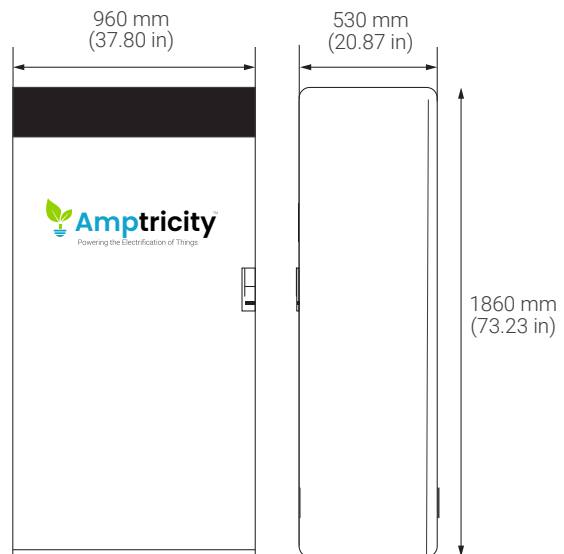
\* Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

#### 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

## 120 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	<a href="#">Lifetime Warranty *</a>
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

## 180 kWh

### Solid State Energy Storage System

#### 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	<a href="#">Lifetime Warranty *</a>
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.

## AMPTRICITY: Powering the Electrification of Things™

The battery that changes the world: the first solid state energy storage system in the world. Introducing **Amptricity 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, Amptricity'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. Amptricity 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**.

### 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	<b>Lifetime Warranty *</b>
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)

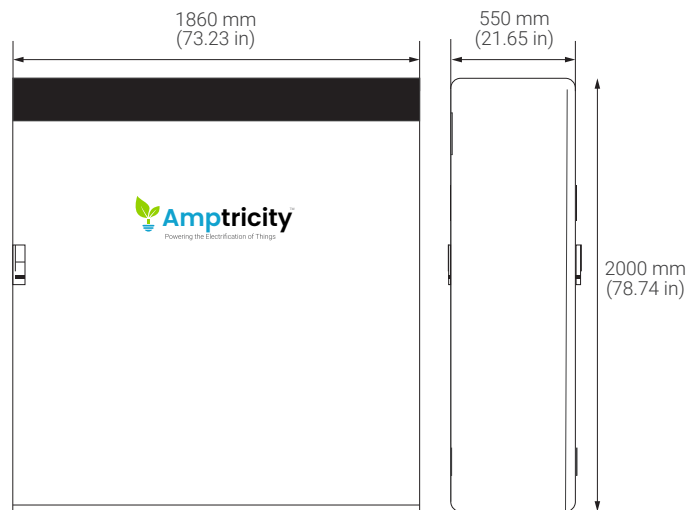
\*Battery Core has 25 years Life Expectancy. Other components have a lifetime maintenance and service (cost applied).

#### 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

## 310 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	<a href="#">Lifetime Warranty *</a>
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

## 470 kWh

### Solid State Energy Storage System

#### 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	<a href="#">Lifetime Warranty *</a>
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



Commercial • Industrial • Utilities

# The Holy Grail of Utility Storage is Found.

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

## AMPTRICITY: Powering the Electrification of Things™

The race for energy independence has begun. **Amptricity 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, Amptricity'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. Amptricity 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	95%
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).

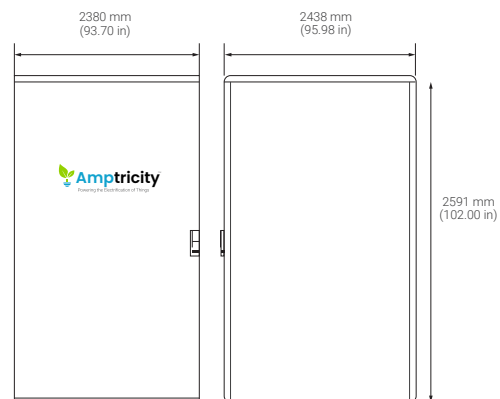
\*\* If operated at 25°C +/- 3°C

### COMPLIANCE INFORMATION (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	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



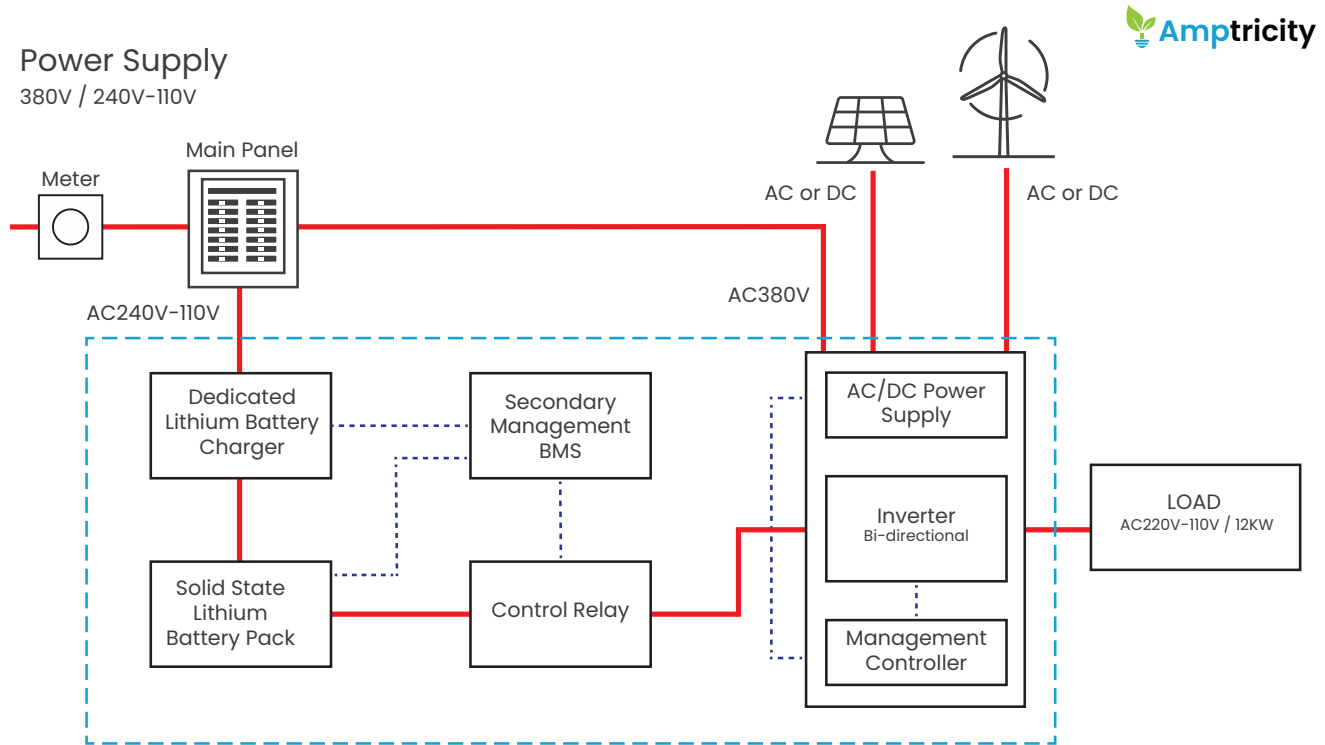
### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C - 55°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

## TYPICAL SYSTEM LAYOUT



Note: The system is equal to or greater than either the national standards, regional standards or client standards.

## Ampricity 250KW PCS Specifications

DC	
Battery Voltage Range	420V-850V
Maximum Current	673A
AC (Grid-Connected)	
Maximum Apparent Power	275kVA
Rated Output Power	250KW
Rated Voltage	400V
Voltage Range	320V-460V
Rated Current	361A
Maximum Output Current	400A
Rated Frequency	50/60Hz
Frequency Range	45-55/55-65Hz
THDI	<3%
Power Factor	1 override ~ 1 Lag (configurable)
AC Standard	3W + N + PE
Communication (Off-Grid)	
Rated Voltage	400V
THDU	<1% linear, < 5% non-linear
Rated Frequency	50/60 Hz
Overload Capacity	110% Long-Term

General Data	
Maximum Efficiency	0.973
Protection Class	IP21
Noise Rating	<65db
Ambient Temperature	-30°C - 55°C (-22°F to 131°F)
Cooling Method	Temperature-controlled intelligent air-cooling
Relative Humidity	0~95% Non-condensing
Altitude	5000m (3000m above reduction)
Dimension (W/D/H)	1200 X 800 X 2050mm
Weight	1350Kg
Isolation Transformer	Yes
Self-Consumption of Power for Shutdown	<10W
Grid Connected & Off-Grid Switching	Manual (default) / Automatic (optional)
Display and Communication	
Display	Touch Screen / LCD Display
BMS Communication Interface	RS485/CAN
Local Communication	RS485 • TCP/IP
Certification	CE • UL



# Our Goal



**Ampttricity's** goal is to accelerate the race to energy independence across the world at warp speed, enabling the planet to decarbonize faster than imagined possible.

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 in order to decarbonize our planet. The current market trajectory is not fast enough. 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.**

## **Snowmageddon Survivor**

Ilijana, a three-year-old Texan, survived the chaos of Snowmageddon. She did not understand why her warm, safe home was unbearably cold and dark. Millions of Texas children experienced the future of energy uncertainty that week. Most people don't realize the Texas energy infrastructure came to within a few minutes from total shut down, which would have lasted for several weeks or months. That's how close it got.



**Ampttricity**  
Powering the Electrification of Things™

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