

## About Us

Mint Energy develops energy generation and energy storage solutions to meet the ever-changing needs of modern-day consumers and businesses. Mint Energy strives to provide safe, environmentally-friendly, cost-effective, and reliable solutions.

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## 4.8 kVAh Back-Up Power Supply

### Smart Battery Back-Up

The Back-Up Power Supply is an integrated battery back-up. The system collects and stores energy for access when and where it is needed most. Mint Energy's Graphene based solution reduces electricity costs while providing a safety net during blackouts for homes and businesses.

During power outages, the right energy storage solution allows businesses to avoid costly disruptions and continue business as normal. For homeowners, the Back-Up Power Supply can help prevent spoiled food and keep important appliances and medical devices running, even during extended outages. This helps consumers prevent temperature-related illness during rolling blackouts and outages caused by other factors.

### Why Graphene?

Unlike standard batteries which store energy chemically, The Mint Energy Graphene Supercapacitor stores energy electrostatically. The chemical reactions used to charge regular batteries work slowly and eventually cause the electrode materials to breakdown, our Supercapacitor is different. It can be recharged multiple times without wearing out.

- **Long lasting solution**
- **Quick charge/discharge**
- **Scalable solution**
- **Safer than lithium-ion**

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## Contact us



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BATTERY SPECIFICATION	UNIT	VALUE
Power Pack Banks	-	1
Bank Series Capacitors	-	16
Bank Parallel Capacitors	-	4
Bank Total Capacitors	-	64
Total Power Pack Series Capacitors	-	16
Total Power Pack Parallel Capacitors	-	4
Total Power Pack Capacitors	-	64
Nominal Voltage	V	59.20
Rated Voltage	V	57.60
Max Surge Voltage	V	68.00
Max Continuous Voltage	V	67.20
Min Voltage	V	48.00
Nominal Current	A	40.00
Continuous Current	A	80.00
Peak Current (5 sec)	A	120.00
Maximum Continuous Discharging Current	A	80.00
Maximum Continuous Charging Current	A	80.00
Full to Empty Discharge Time at Maximum	Minutes	62.50
Empty to Full Charge Time at Maximum	Minutes	62.50
Maximum Inter-Cell Balance Discharge Current	mA	200.00
Overcharge Protection Cutoff Voltage Per Cell	V	4.25
Overcharge Protection Release Voltage Per Cell	V	4.18
Over-discharge Protection Cutoff Voltage Per Cell	V	3.80
Over-discharge Protection Release Voltage Per Cell	V	3.90
Low Temperature Cutoff Temperature	°F (°C)	5 (-15)
Low Temperature Release Temperature	°F (°C)	9 (-13)
High Temperature Cutoff Temperature	°F (°C)	131 (55)
High Temperature Release Temperature	°F (°C)	127 (53)
Total Cells Capacitance	f	2,988,144
Nominal Energy Rating	kVAh	4.80
Estimated Energy Storage (Watt Hours)	wh	4,800.00
Estimated Energy Storage (Amp Hours)	Ah	83.33
Self-Usage Power Consumption	VA	1.02
Internal Resistance	mΩ	6.00
Leakage Current	mA/h	17.778
Cycle Life	-	20,000



INVERTER SPECIFICATION	UNIT	VALUE
6 kVA (2 X 3 kVA) Inverter/Charger	-	2
Instantaneous Power (100 ms)	VA	12,000
Surge Power (5 sec)	VA	9,000
Peak Power (30 min)	VA	6,600
Continuous Power Rating (@ 25°C)	VA	6,000
Nominal Power Rating	kVA	6
Nominal DC Input Voltage	VDC	48.0
DC Input Voltage Range	VDC	48 - 67.2
Waveform	-	Pure Sine Wave
AC Output Phase	-	Split/Single
AC Output Voltage (selectable)	VAC	120/240 (200-260)
AC Output Frequency (selectable)	Hz	60 (50)
Inverter Type	-	Transformerless
Instantaneous AC Output Current (@ 25°C) (100ms)	AAC	50.0
Surge AC Output Current (@ 25°C) (5 sec)	AAC	37.5
Peak AC Output Current (@ 25°C) (30 min)	AAC	27.5
Continuous AC Output Current (@ 25°C)	AAC	25.0
Instantaneous DC Input Current (@ 25°C) (5 sec)	ADC	218.0
Surge DC Input Current (@ 25°C) (5 sec)	ADC	163.5
Peak DC Input Current (@ 25°C) (30 min)	ADC	119.9
Continuous DC Input Current (@ 25°C)	ADC	109.0
Self-Usage Power Consumption	VA	39.0
Typical Efficiency	-	93.0%
CEC Weighted Efficiency	-	92.5%
Total Harmonic Distortion	-	Typical: <2% Maximum: <5%
Output Voltage Regulation	-	±2%
AC Input Voltage Range	VAC	L1-N / L2-N: 85 to 140 or L1-L2: 170 to 280
AC Input Frequency Range	Hz	@ 60Hz: 54 to 66 @ 50Hz: 45 to 55
Grid-Interactive Voltage Range	-	L1-N or L2-N: 85 to 140VAC L1-L2: 170 to 280
Grid-Interactive Frequency Range	-	@ 60Hz: 59.3 to 60.5Hz
Maximum AC Input Current (@ 240VAC)	AAC	30.0
Maximum Utility Interactive Current	AAC	30.0
Continuous Battery Charge Output	ADC	80.0
Estimated Run Time 100% Load	Minutes	44.3
Estimated Run Time 50% Load	Minutes	88.7
Estimated Run Time 10% Load	Minutes	443.4

UNIT SPECIFICATIONS	UNIT	VALUE
Operating Temperature Range	°F (°C)	-4 to 140 (-20 to 60)
Storage Temperature Range	°F (°C)	-4 to 131 (-20 to 55)
Protection Class	-	Not Rated
Product Weight	Lbs. (kg)	156 (70.7)
Dimensions	in (mm)	57.56 (1462) x 15.75 (400) x 5.79 (147)