

MC 8kVA Power Rack

Known for its exceptional flexibility, electrical conductivity, and mechanical strength, Graphene allows for fast charging, increased capacity, and extended battery life span. Graphene is the strongest material ever discovered, with an ultimate tensile strength of 130,000,000,000 Pascals. Unlike lithium and other types of batteries, Graphene does not lose its ability to charge over time. Since graphene is composed entirely of carbon, it's 100% biodegradable. This makes Graphene an environmentally-friendly option.

When used as a power source for cell towers or data centers, Graphene provides a superior alternative to other types of batteries.

- Allows for Unlimited Charges
- Charges & Discharges Faster than Lithium or Lead Acid Batteries
- 100% Capacity Possible – Charge & Discharge
- Environmentally Responsible – 95% Recyclable
- Long Life Span – 50 Years
- Solid State Battery – No Liquid
- Costs Less Than Other Solutions
- Can Be Used in Freezing Temperatures
- Scalable Solution – Scalable Up To 6 Megawatts



COMPARISON

MC 8kVA Power Rack		APC 8kVA Power Rack *		Our Solution Outperforms By:
Battery Type	Graphene - Solid State	Battery Type	Lead Acid - Liquid	
Lifespan	50 Years	Lifespan	3-5 Years	900%
Recharge Time	2 Hours	Recharge Time	7.5 Hours	275%
Efficiency – 100% Load	93%	Efficiency - 100% Load	89.9%	3.1%
Run Time – 100% Load	593.9 Min / 9.9 Hours	Run Time – 100% Load	49 Minutes	1,112.04%

When Compared to APC's Power Rack, Our Solution:

*Specs from www.apc.com

- Costs 50% Less in Year One
- Costs 10 Times Less Over the 50-Year Product Lifespan
- Charges 4 Times Faster
- Runs Approximately 10 Times Longer



UNIT SPECIFICATIONS

Total Rack Units	1	Peak DC Input Current (@ 25°C) (30 min)	201.6 ADC
Rack Space Units	45	Continuous DC Input Current (@ 25°C)	179.2 ADC
8kVA Inverter/Charger	1	Self-Usage Power Consumption	61.0 ADC
Graphene Supercapacitor Battery Bank 7,800	11	Typical Efficiency	93%
Battery Banks in Series	1	CEC Weighted Efficiency	92.5%
Battery Banks in Parallel	11	Rated Voltage	52.00 V
Instantaneous Power (100ms)	16,970 VA	Max Surge Voltage	55.25 V
Surge Power (5 sec)	12,000 VA	Max Continuous Voltage	54.60 V
Peak Power (30 min)	9,000 VA	Min Voltage	49.40 V
Continuous Power Rating (@ 25°C)	8,000 VA	Nominal Current A	1,760.00 ADC
Nominal Power Rating	8kVA	Continuous Current A	3,520.00 ADC
Nominal DC Input Voltage	48.0 VDC	Peak Current A	5,280.00 ADC
AC Output Phase	Split/Single	Capacitance in Farads	24,024,000.00f
AC Output Voltage (selectable)	120/240 (200-260) VAC	Total Capacitors	1,144
AC Output Frequency (selectable)	60 (50) Hz	Run Time (100% Load)	9.9 Hours
Instantaneous AC Output Current (@ 25°C) (100 MS)	70.7 AAC	VA Hours	85,800.00 VA
Surge AC Output Current (@ 25°C) (5 sec)	50.0 AAC	Nominal Energy Rating	85.80kVAh
Peak AC Output Current (@ 25°C) (30 min)	37.5 AAC	Assumed Power Factor	.80
Continuous AC Input Current (@ 25°C)	33.3 AAC	Energy Storage (Watt Hours)	68,640.00 Wh
Instantaneous DC Input Current (@ 25°C) (5 sec)	380.2 ADC	Energy Storage (Amp Hours)	1,650.00 Ah
Surge DC Input Current (@ 25°C) (5 sec)	268.8 ADC		

FEATURES

- Lockable Rack Enclosure
- Rapid Charge and Discharge Capabilities
- 8,000 VA Inverter with Sine Wave Output and Grid-Tie Tracking Capabilities
- Ventilated Mesh or Acrylic Door Options
- Up To 10 Battery Racks Can Be Used in Parallel to Increase Run-Time



DISCLAIMER

All specifications subject to change without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in data sheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Mint Controls' terms and conditions of purchase, including but not limited to the warranty expressed therein.