

ME 4.2V GRAPHENE SUPERCAPACITOR

Graphene allows for quick charge, increased capacity, improved performance, and extended battery life span. Unlike lithium-ion, lead acid, and other popular types of batteries, graphene does not lose its ability to charge over time.

- High Energy Density
- Quick Charge
- 100% Capacity Possible
- Environmentally Responsible Option
- Long Life Span – Outlives Most Devices
- Solid State Battery – No Liquid
- Long Lifespan
- Can Be Used in Freezing Temperatures
- Lower Fire Risk Than Lithium-Ion
- Does Not Produce Toxic Fumes While Charging

ME 4.2V SUPERCAPACITOR	VS.	LITHIUM-ION BATTERY
✓	HIGH ENERGY DENSITY	✓
✓	FAST CHARGE	✗
✓	SAFE - LOW FIRE RISK	✗
✓	ENVIRONMENTALLY-FRIENDLY	✗
✓	LONG LIFESPAN	✗
✓	HIGH POWER (LARGE CURRENT DISCHARGE)	✗

The Power Cell provides a safe and reliable solution for a wide range of applications:

- Military
- Electric Vehicles (EVs)
- Boats/Trains/Buses
- Forklifts
- Farm Equipment
- Golf Carts
- Residential Energy Storage
- Commercial Energy Storage
- Data Centers
- And More!



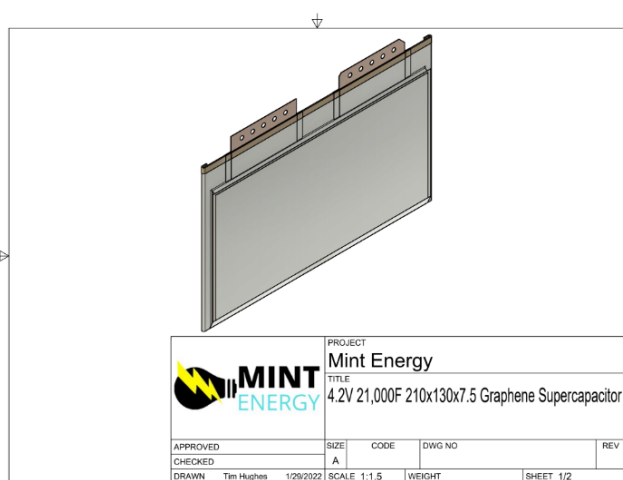
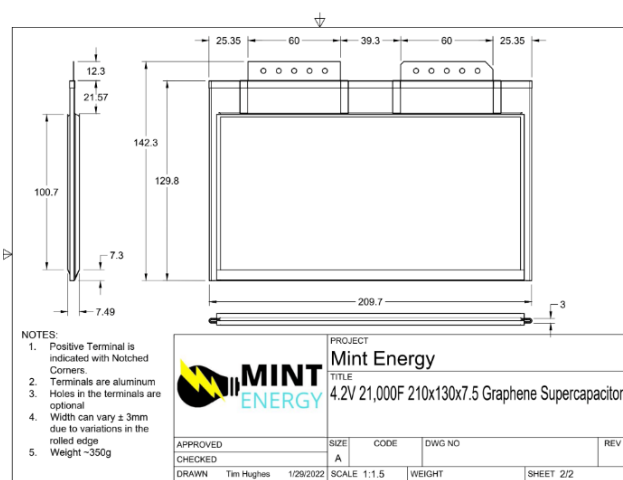
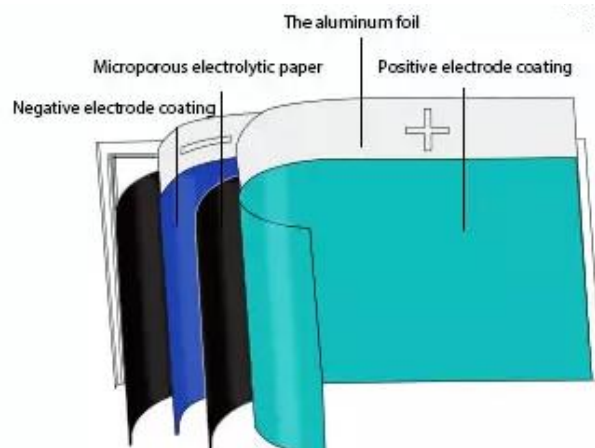
DISCLAIMER

All specification 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 Energy's terms and conditions of purchase, including, but not limited to the warranty expressed wherein.

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UNIT SPECIFICATIONS

Dimensions	220x128x7.5mm
Weight	350 grams
Nominal Voltage	4.00V
Max Surge Voltage	4.25V
Minimum Voltage	2.8V
Nominal Current	20.00A
Continuous Current	40.00A
Peak Current	60.00A
Capacitance	21,000f
Charge Rating	2C
Discharge Rating	2C
Energy Storage (Watt Hours)	75.00 Wh
Energy Storage (Amp Hours)	18.75 Wh
Internal Resistance	$\leq 1.50 \text{ m}\Omega$
Leakage Current	$\leq 0.278 \text{ mA/h}$
Leakage Current Per Month	$\leq 0.200 \text{ A/h}$
Leakage Rate Per Month	$\leq 1.067\%$
Expected Cycle Life	>43,000
Guaranteed Cycles	20,000
Operating Temperature Range	-20 to 60°C
Storage Temperature Range	-20 to 55°C
Protection Class	IP30



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