GPET

New Generation Nickel-Zinc Battery Technology

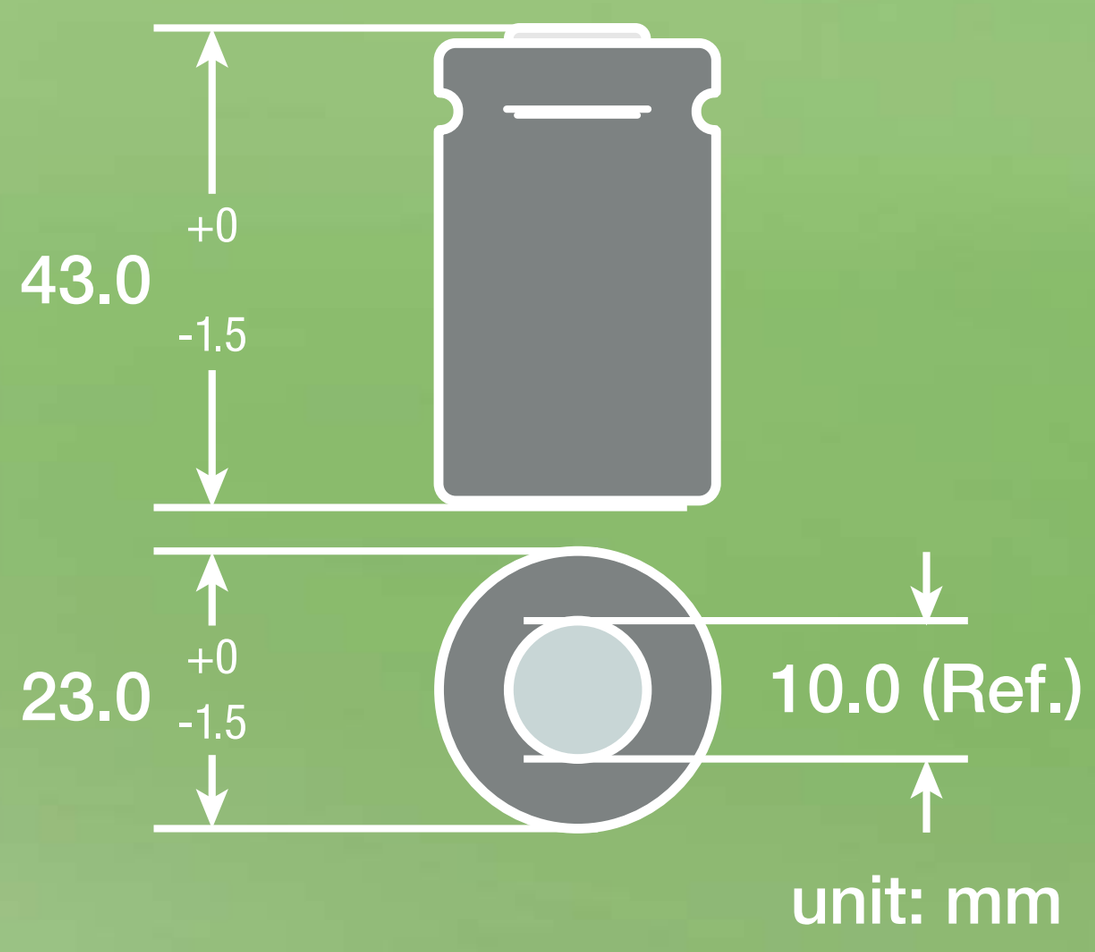
Powering a Greener Tomorrow

Nickel-Zinc Rechargeable Battery
The Battery Designed for Data Centers

Nickel-Zinc Rechargeable Battery

GPET's Nickel-Zinc Rechargeable Battery in Cylindrical Sub-C format is designed to be adaptable for various module formats and application requirements.

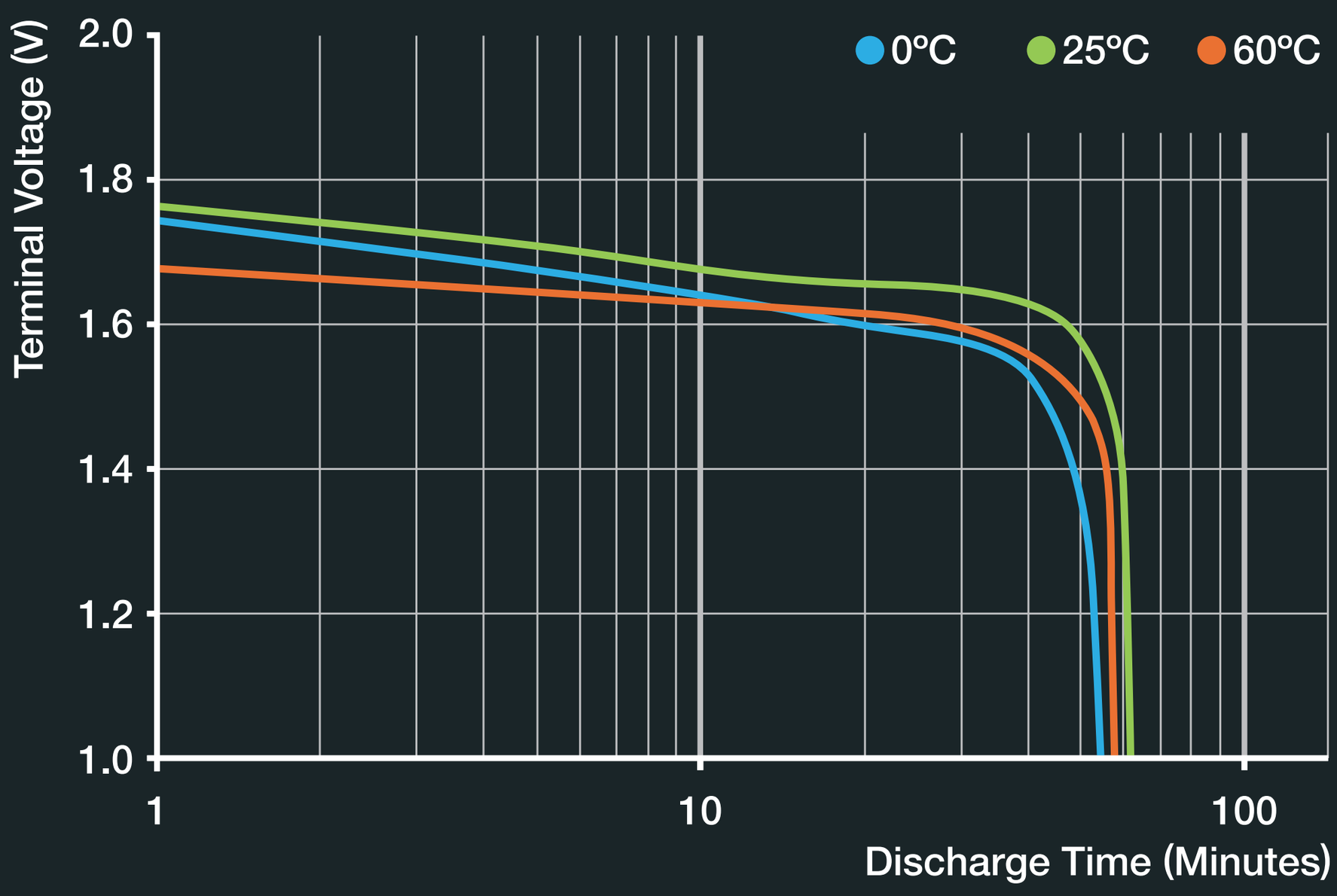




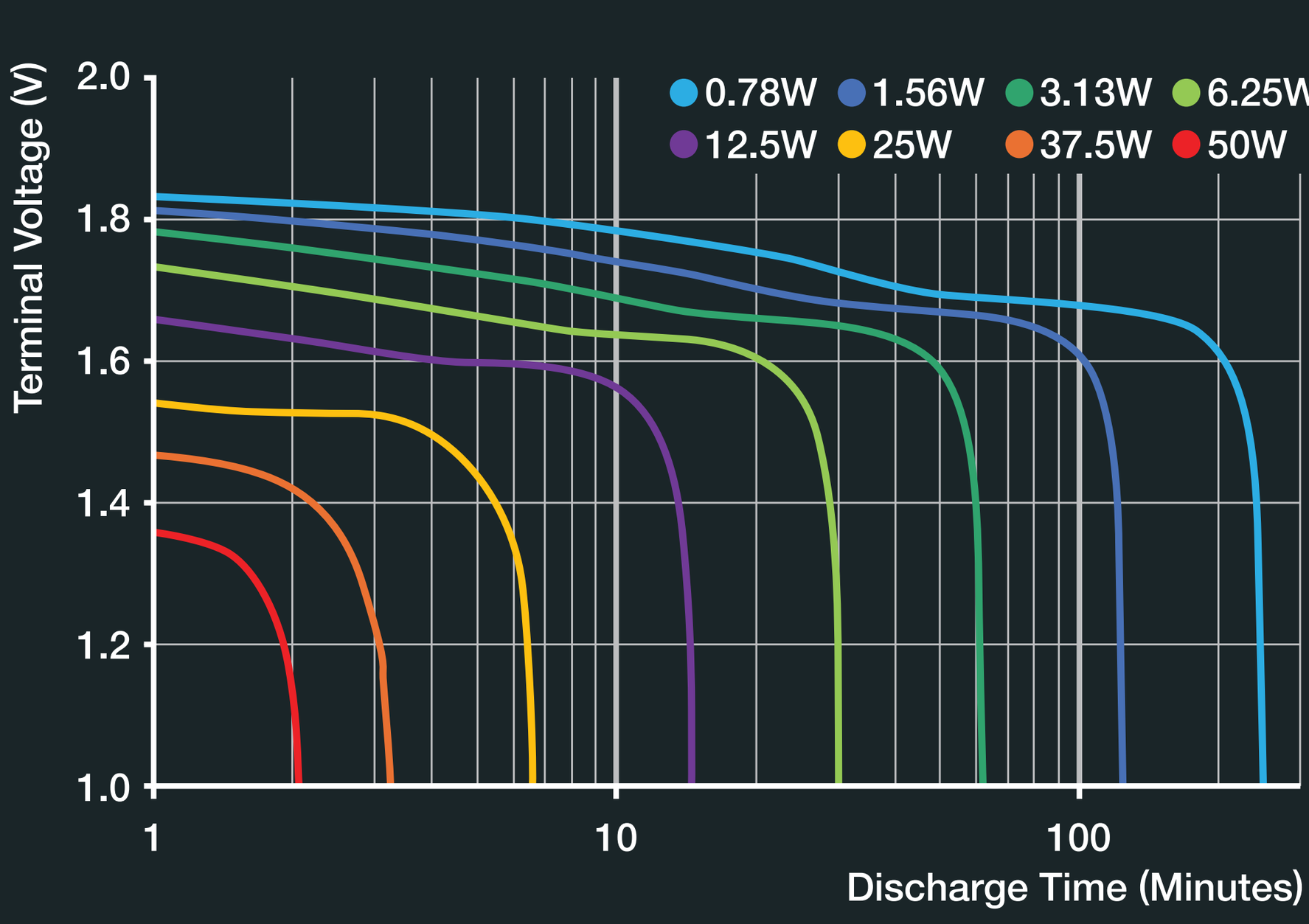
The Nickel-Zinc rechargeable battery utilizes an aqueous electrolyte, creating a battery that is chemically non-flammable and non-reactive, as verified through independent UL9540A testing. Consequently, there is no need for costly or complex safety infrastructure.

Nickel-Zinc Rechargeable Battery
The Battery Designed for Data Centers

Typical 3W Constant Power Discharge



Typical 3W Constant Power Discharge at +25ºC



Nickel-Zinc Rechargeable Battery
The Battery Designed for Data Centers

Type	Critical Power Rechargeable Nickel-Zinc Cylindrical Cell
Nominal Dimension (with Case)	Diameter = 23.0mm Height = 43.0mm
Applications	Recommended discharge current 400mA to 20000mA
Nominal Voltage	1.65V
Capacity	Rated: 2000mAh Minimum: 1900mAh When discharged at 400mA to 1.3V at 25°C
Available Energy (Beginning of Life)	3.2Wh
Max. Continuous Discharge Current	40A (100% Depth of Discharge)
Continuous Charge Current	1000 – 2000mA
Max. Charging Voltage	1.9V
Recommended Float	1.85 – 1.9V
Charge Time @max rate	60 minutes@1C
Standard Charging Condition	Two Step Charging Constant Current: 1000mA CC to 1.9V Constant Voltage: 1.9V CV to 200mA cut off
Weight	~46g
Internal Resistance	Less than 6mΩ upon fully charged at 1000Hz
Ambient Temperature Range	Standard Charging: 0 to +40°C Fast Charging: +10°C to +40°C Discharging: -30°C to +80°C Storage: -20°C to +35°C Storage (1 week): -20°C to +60°C

Nickel-Zinc Rechargeable Monobloc
Modular Power Solution

Nickel-Zinc Rechargeable Monobloc

GPET's modular solutions, featuring the durable and intrinsically safe cylindrical Sub-C cells, are well-suited for single-phase UPS units as well as compact system racks that require agility for future expansion.



unit: mm

Product Ref. : RZ13V8-450SC

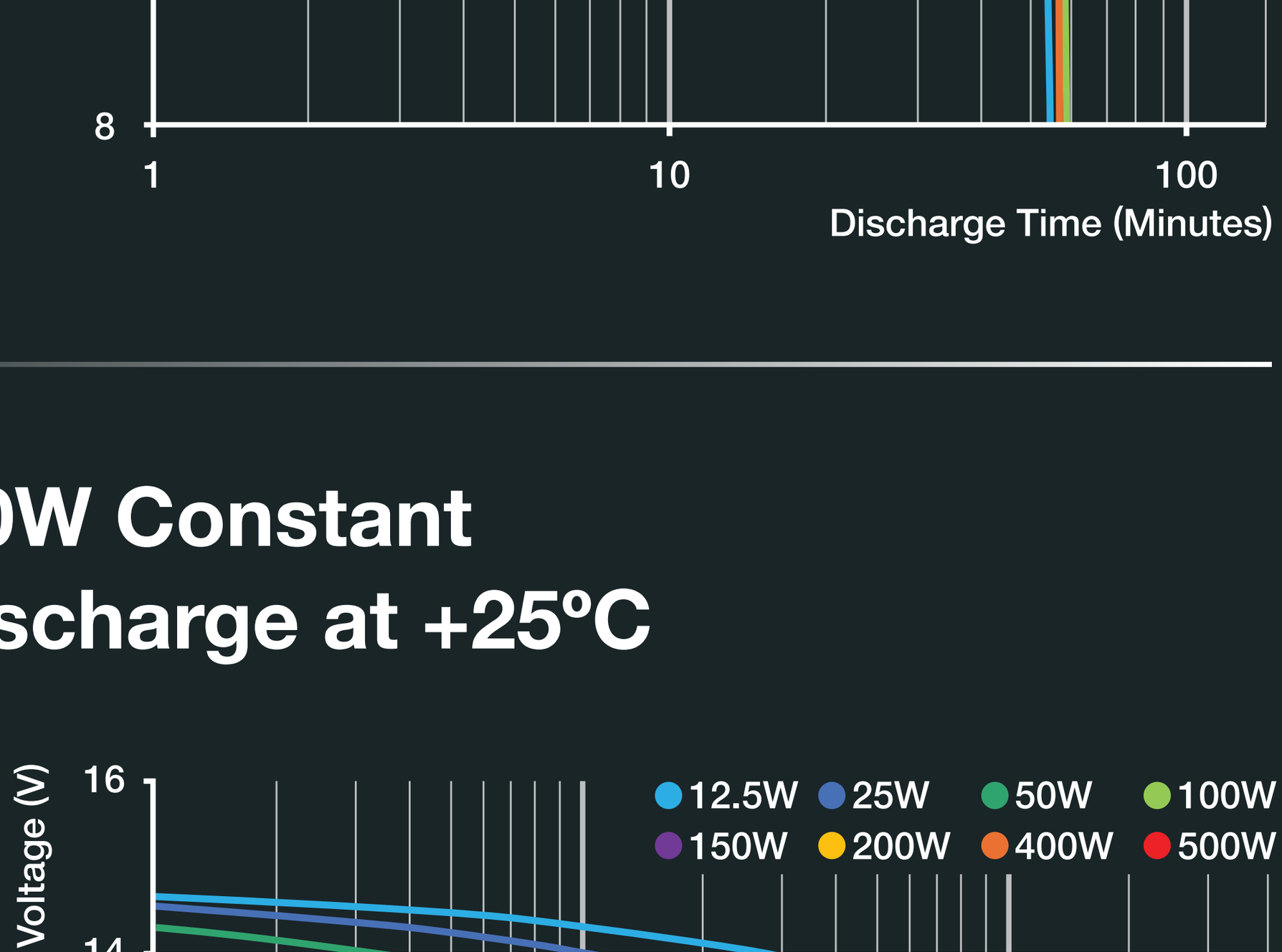


Nickel-Zinc Rechargeable Monobloc
Modular Power Solution

Typical 50W Constant Power Discharge



Typical 50W Constant Power Discharge at +25ºC



Nickel-Zinc Rechargeable Monobloc Modular Power Solution

Type	Critical Power Rechargeable Nickel-Zinc 13V8 Monobloc (8s2p)
Nominal Dimension (with Case)	Length = 151mm Width = 65mm Height = 93.5mm
Applications	Recommended discharge current 2A to 30A
Nominal Voltage	13.2V
Capacity	Rated: 3.8Ah Minimum: 3.6Ah When discharged at 2A to 10.5V at 25°C
Available Energy (Beginning of Life)	50Wh
Max. Continuous Discharge Current	60A (100% Depth of Discharge)
Continuous Charge Current	2 – 8A
Max. Charging Voltage	15.2V
Recommended Float	14.8 – 15.2V
Charge Time @max rate	60 minutes@1C
Standard Charging Condition	Two Step Charging Constant Current: 2A CC to 15.2V Constant Voltage: 15.2V CV to 600mA cut off
Weight	~1.0kgs
Internal Resistance	Less than 30mΩ upon fully charged at 1000Hz
Ambient Temperature Range	Standard Charging: 0 to +40°C Fast Charging: +10°C to +40°C Discharging: -30°C to +80°C Storage: -20°C to +35°C Storage (1 week): -20°C to +60°C

Applications

GPET’s Nickel-Zinc rechargeable battery offers flexibility and is well-suited to collaborate with mission-critical battery system manufacturers, providing safe, reliable, powerful, and sustainable power solutions.

1 Single-phase UPS for Edge Data Center and Computing

- Standardized monobloc to customized module options
- Scalable to match various DC voltage requirements



2 3-Phase UPS for Data Centers

- Non-flammable for absolute safety
- Quick turnaround time for less downtime risks



3 PSU/BBU Architecture for Open Compute Project (OCP)

- Highest, commercially available battery power-density
- Flexible cylindrical Sub-C format for adapability



4 DIN-rail mounted UPS for Industrial 4.0

- Scalable and lightweight data management security
- Scalable to match various DC voltage requirements

Connect with us

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