

# 12V Sodium-Ion Batteries



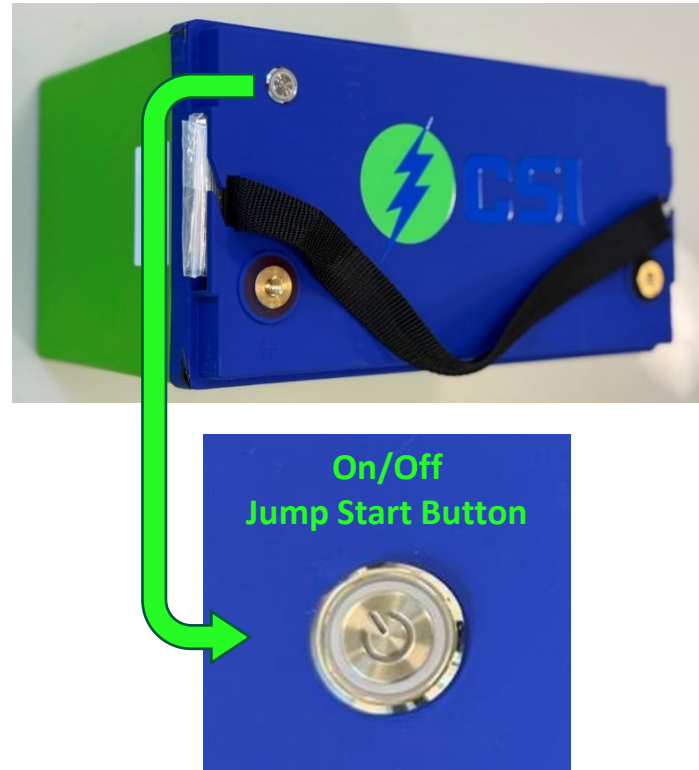
## Powerful & Tough

- 12 Volts –Drop-in Replacement for Lead-Acid and AGM (60% lighter)
- High Starting Cold Cranking Amps (CCA) 1500A
- Ideal for Heavy-Duty and Medium-Duty trucks, Construction, Agriculture
- Off-Road, Commercial Generators, Data Centers, RV's and Marine
- Weight ~ 24 lbs. (Group 31)
- Operating range: -30°C / -22°F to 70°C / 158°F
- Advanced Battery Management System (BMS)
- Reserve Capacity 140 – 160 min @ 25A
- Threaded Stud or SAE Terminal
- 3-Year Warranty
- US Operations and Support

## GENERAL SPECIFICATIONS

Parameter	Group 31	Group H8
Nominal Voltage	12V	12V
Chemistry	Sodium-Ion	Lithium-Ion
Cold Cranking Amps (CCA)	1500A	1200A
Reserve Capacity (min)	160min @25A	125min @25A
Weight	~24 lbs	~22 lbs
Dimensions (LxWxH)	13" x 6.8" x 9.4"	13.5" x 6.8" x 7.5"
Terminal Type	Threaded Stud/SAE	Threaded Stud/SAE

# 12V Sodium-Ion Batteries - Features



## Built-in Jump Start Button

- The battery's BMS reserves 10% capacity specifically for this function, thanks to the software integrated inside the pack.
- If an operator accidentally leaves the lights on and drains the battery, they can simply press the Jump Start button and the truck will start again—no jumper cables required.

## Key Comparisons between Sodium-Ion versus Lead-Acid and AGM

Characteristic	Sodium-Ion Battery	Lead-Acid Battery	AGM Battery
Chemistry	Sodium (No Lithium or Cobalt)	Lead plates and sulfuric acid	Valve-regulated lead-acid (VRLA) with Absorbent Glass Mat
Useable Capacity	90 – 95%	20% – 40%	40% – 50%
Cycle Life (80% DOD)	> 4,000 cycles / ~ 10 years	Typically, around 500 cycles	Typically, around 500 cycles
(BMS) Software Protection	Yes - battery can't fully deplete	No - battery fully depletes	No - battery fully depletes
Reset Button Feature	Yes - press and start the vehicle	No - jumper cables required	No - jumper cables required
Safety	Very stable chemistry	Acid spills and thermal events	Lower routine gas release
Weight (Group 31)	~28 lbs.	~60 lbs.	~73 lbs.
Operating Temperatures	-30°C to 70°C	-20°C to 50°C	-20°C to 60°C
Maintenance	Zero Maintenance	May require topping off	Zero Maintenance
Cold Cranking (Group 31)	1,500 CCA	700 – 950 CCA	800 – 1100 CCA