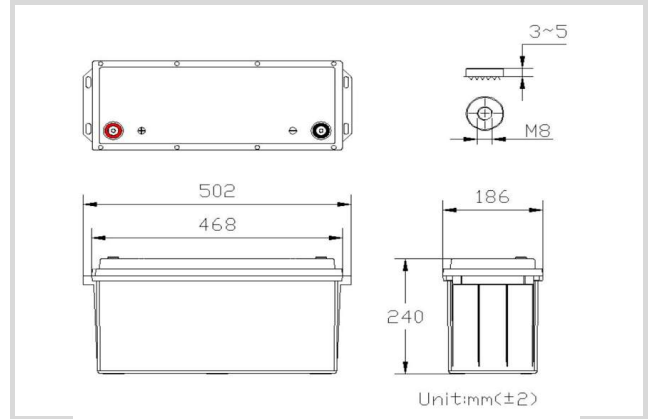




# HSD-NAR12160 (12V160Ah)

Sodium-ion batteries are able to provide you superior performance, durable life cycle, high safety and long lasting reliability under different situations. Highstar insists on using state-of-art of high quality sodiumcell and advanced BMS technology, our batteries are robustly designed for wide range applications. Highstar power 's 12V, 24V, 48V/51.2V series sodiumbattery, which are popularly used in industrial, residential, commercial and military fields, such as solar/wind energy storage power system, home ESS, telecommunication site, UPS/Data Center backup power, electric vehicle, golf cart, floor machines, forklifts, robotics, marine, RV, medical equipment etc.



## BATTERY SPECIFICATIONS

Nominal Voltage	12V
Nominal Capacity	160Ah@0.5C
Min.Capacity	155Ah@0.5C
Nominal Energy	1920Wh
Min.Energy	1860Wh
Internal Resistance	$\leq 8\text{m}\Omega$
Cycle Life	6000 cycles(32A Charging/Discharging ,80%DOD Until 70% Capacity)
Self Discharge	$\leq 2\%$ per month at 25°C&50%SOC
Bluetooth&Heat	NO

## Standard Charging &Discharge

Charging Voltage	13.8V
Charging Mode	CC-CV
Recommended Charging Current	$\leq 80\text{A}$
Max.Charging Current	160A Continuous charging with this current may trigger BMS temperature protection
Recommended Discharging Current	80A
Max. Continuous Discharging Current	160A
Max.Pulse Current	400A(<3S)
Discharging Cut-off Voltage	7.2V

## Operating Condition

Charge Temperature	0°C to 45°C(32°F to 113°F) @60±25% Relative Humidity
Discharge Temperature	-20°C to 60°C(-4°F to 140°F) @60±25% Relative Humidity
Storage Temperature	0°C to 45°C(32°F to 113°F) @60±25% Relative Humidity

## Structure

Casing	Plastic
Dimension(L*W*H*TH)	502*186*240*240mm
Weight	Approx. 20.5Kg
Terminal	M8
Water Dust Resistance	IP65

## Number of batteries used in series and parallel

Maximum number of series connections	4PCS
Maximum number of parallel connections	4PCS