

**ZmartecTechnology (Shenzhen) Ltd**  
**Sodium-ion start-stop battery H5-12610**

**1. Product features**

- (1) Utilize cutting-edge technology and processes to manufacture sodium batteries, ensuring high reliability;
- (2) Under standard conditions, it can achieve 100% DOD charging and discharging, with a cycle count exceeding 3000 times;
- (3) Equipped with an internal BMS device to enhance safety;
- (4) Light weight, about 35% to 40% of the weight of lead-acid batteries;
- (5) Replaceable lead-acid batteries and lithium batteries;
- (6) Wide operating temperature range, from -40°C to 100°C;
- (7) Maintenance-free.

**2. Performance parameters**

**2.1 Electrical performance**

part	category	Specifications
Electrical performance	Product Model	H5- 12610
	Rated voltage (V)	12
	Power parameter / W	610
	Internal resistance / mΩ	≤5
	Cycle life/duration	≥3000 cycles (0.2°C, 100 charge-discharge cycles until the capacity drops to 70%)
	Cca/a	700
	self-discharge	≤3.5% (monthly @25°C)
Standard loading	Charging voltage / V	12~ 16±0.5
	Charging mode (CC/CV)	Under the environment of 0~55°C, first charge at a constant current of 0.2C until reaching 14.4V, then continue charging at a constant voltage of 14.4V until the current drops to 0.05C, and then stop.
	Standard charging current / A	9
The standard allows... to leave	Standard discharge current (in A)	50~ 100
	Maximum pulse current / A	700 (<5s)
	Discharge cut-off voltage/V	7.2V
environment	Charging Temperature	0°C~80°C at 60±25% humidity
	Discharge temperature	-40°C~ 100°C
	Storage temperature	0°C~45°C
Material and Size	unit	Sodium-ion battery (NFPP)
	Shell material	PC+ABS
	Size (Length*Width*Height) / mm	242* 175* 190

	Weight / Kg	/
	fatal	T2 (coarse)

### 3. Product appearance

