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## Small aluminum shell/soft pack series of sodium-ion battery cells

NFPP50160118-EA60/NFM19161124-EA24

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Technical parameters



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**Ultra-safe**  
 Passed TÜV SÜD safety tests including projectile fire test, overcharge/overdischarge, short circuit, thermal abuse, and nail penetration  
 Maximum battery cell surface temperature  $\leq 60^{\circ}\text{C}$  during nail penetration test
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**Ultra-low temperature endurance**  
 $-20^{\circ}\text{C}$ , 94% capacity retention rate  
 $-60^{\circ}\text{C}$ , 81% capacity retention rate
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**Ultra-high rate**  
 8C discharge capacity retention rate  $\geq 90\%$   
 Customizable solutions supporting 20C+ rates for specific applications
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**Ultra-long life**  
 Projected cycle life exceeds 2,500 cycles at 80% SOH (NFM)  
 Projected cycle life exceeds 6,000 cycles at 80% SOH (NFPP)
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**Convenient and safe storage and transportation**  
 Capable of 100% capacity recovery after discharging to 0V, allowing safe storage and transportation at zero-voltage state  
 Maintains 40% SOC at shipment with self-discharge to zero voltage in up to 2.5 years

Technical parameters:	NFM19161124-EA24	NFPP50160118-EA60
Standard capacity	24Ah	60Ah
Operating voltage	1.5~3.95V ( $\geq 0^{\circ}\text{C}$ ), 1.2~3.95V ( $< 0^{\circ}\text{C}$ )	1.5~3.4V ( $\geq 0^{\circ}\text{C}$ ), 1.2~3.4V ( $< 0^{\circ}\text{C}$ )
Nominal voltage	2.95V@0.5P	2.83V@0.5P
Internal resistance of battery	$< 1.2\text{m}\Omega$	$< 0.5\text{m}\Omega$
Monthly self-discharge	$\leq 5.0\%$ /month	$\leq 5.0\%$ /month
Operating temperature (charging)	$-10\sim 60^{\circ}\text{C}$	$-10\sim 60^{\circ}\text{C}$
Operating temperature (discharging)	$-60\sim 60^{\circ}\text{C}$	$-60\sim 60^{\circ}\text{C}$
Battery weight	570 $\pm$ 30g	1580 $\pm$ 100g
Storage temperature	$-60\sim 60^{\circ}\text{C}$	$-60\sim 60^{\circ}\text{C}$
Battery size	Thickness: 19mm Width: 161mm Height: 124mm	Width: 160 $\pm$ 0.3mm Height: 118.6 $\pm$ 0.5mm Thickness: 50 $\pm$ 0.3mm
Operating altitude	$< 5000\text{m}$	$< 5000\text{m}$
Cycle life	$\geq 2500$ Cycles, 80%SOH	$> 6000$ Cycles, 80%SOH

### Application areas:

The small aluminum shell / soft pack series of sodium-ion battery cells feature excellent safety performance, light weight, high energy density, flexible design, and long cycle life. They can be flexibly configured while offering an outstanding cost-performance ratio, making them highly valuable for applications in light-duty power or power-type fields.

### Application scenarios:

Two-wheelers, three-wheelers, low-speed electric vehicles, start-stop power supplies, and other applications requiring higher energy density and greater flexibility.



Two-wheelers



Three-wheelers



Low-speed electric vehicles



Start-stop power supply