

INFINIO 18650 3.05V Sodium-Ion Battery Datasheet

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BRAND
INFINIO

WEBSITE
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PRODUCT TYPE
18650 Sodium-Ion Rechargeable Cell

NOMINAL VOLTAGE
3.05 V

Product Overview

The INFINIO 18650 3.05V Sodium-Ion Battery is a rechargeable cylindrical cell designed for applications requiring high safety, long cycle life, and reliable low-temperature operation. Sodium-ion chemistry offers advantages through abundant raw materials, lower environmental burden, and stable performance in demanding operating conditions.

Key Features

- Up to 8,000 charge/discharge cycles.
- Operating range from -40°C to 60°C during discharge.
- High safety profile with lower thermal runaway risk compared with conventional lithium-ion systems.
- Suitable for export-oriented projects with CE and UN38.3
- Appropriate for industrial, backup, telecom, and off-grid energy applications.

Typical Applications

- Home and commercial solar battery systems.
- Industrial backup power and UPS systems.
- Telecom base stations and microgrids.
- Light electric vehicles and e-motorcycles.
- Solar streetlights and off-grid systems.

Technical Specifications

Item	Specification
Limited charge voltage	3.95 V
Nominal voltage	3.05 V
Rated capacity	1300 mAh
Standard charging current	650 mA
Maximum charging current	1300 mA
Standard discharging current	650 mA
Maximum discharge current	7800 mA at 25°C ± 2°C and 100% SOC
Discharge end voltage	1.8 V
Charging temperature	-20°C to 55°C, 65% ± 20% RH
Discharging temperature	-40°C to 60°C, 65% ± 20% RH
Storage temperature	15°C to 35°C

Cell weight	36.5 g $\pm$ 0.5 g
AC impedance	$\leq$ 30 m Ω
Cell height	65.2 mm $\pm$ 0.2 mm
Cell diameter	18.35 mm $\pm$ 0.15 mm

Chemistry Advantages

Sodium-ion battery technology offers broad raw material availability and cost advantages because sodium resources are significantly more abundant than lithium. The source document also highlights strong low-temperature behavior, improved operational safety under abuse conditions, and favorable environmental characteristics.

Compliance Notes

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