

NiCd High-Temperature Emergency Battery Pack

Product Datasheet

Battery Works Co., Ltd (苏格尔电子有限公司)

Company Profile

Battery Works Co., Ltd specializes in high-temperature rechargeable batteries for emergency lighting systems, serving clients across Europe and the USA. With over 180 factory workers, 20 R&D engineers, and 10 sales professionals, we deliver reliable power solutions that meet the most demanding international standards.

Manufacturing Center: Building 1-4, Dongcheng Industrial Zone, Fangxian, Shiyan, Hubei, China

Sales Office: Room 1003, Building A, Jiansheng Tower, No.1 Pingji Avenue, Nanwan Street, Longgang District, Shenzhen, Guangdong, China

Product Overview

Our NiCd (Nickel-Cadmium) battery packs are specifically engineered for European emergency lighting systems requiring compliance with EN 60598-2-22. The high-temperature design ensures reliable performance in enclosed luminaires where ambient temperatures can reach +70°C.

Key Features

Feature	Specification
Chemistry	Nickel-Cadmium (NiCd)
Nominal Voltage	1.2V per cell
Pack Voltage Range	3.6V - 6.0V
Capacity Range	1500mAh - 4000mAh
Operating Temperature	-20°C to +70°C
Cycle Life	800+ cycles @ 80% DOD
Self-Discharge	<20% per month
Charge Method	Constant current

Product Models & Specifications

SC Cell Series (Sub-C)

Model	Configuration	Voltage	Capacity	Dimensions (mm)	Weight	Application
HT-SC2000-3.6V	3×SC	3.6V	2000mAh	Ø23×130	150g	EN 60598-2-22 Exit Signs (1h)
HT-SC2000-4.8V	4×SC	4.8V	2000mAh	Ø23×172	200g	EN 60598-2-22 Luminaires (3h)
HT-SC2000-6.0V	5×SC	6.0V	2000mAh	Ø23×215	250g	EN 60598-2-22 Central Battery
HT-SC1500-3.6V	3×SC	3.6V	1500mAh	Ø23×130	135g	Compact Exit Signs (1h)
HT-SC1500-4.8V	4×SC	4.8V	1500mAh	Ø23×172	180g	LED Emergency Luminaires

D Cell Series

Model	Configuration	Voltage	Capacity	Dimensions (mm)	Weight	Application
HT-D4000-3.6V	3×D	3.6V	4000mAh	Ø33×183	380g	High-Power Luminaires (3h)
HT-D4000-6.0V	5×D	6.0V	4000mAh	Ø33×305	630g	Industrial Central Battery

Technical Specifications

Electrical Characteristics

Parameter	Value	Conditions
Nominal Voltage	1.2V/cell	
Charge Voltage	1.45-1.50V/cell	Standard charge
Discharge Cut-off	1.0V/cell	
Standard Charge	0.1C × 16h	20°C
Quick Charge	0.5C × 3h	20°C
Max Discharge Current	5C	Continuous
Internal Resistance	<30mΩ	Per cell, 1kHz AC

Temperature Performance

Parameter	Min	Typical	Max
Charge Temperature	0°C	20°C	+45°C
Discharge Temperature	-20°C	20°C	+70°C
Storage Temperature	-40°C	20°C	+60°C

High-Temperature Performance (Featured)

Our Hi-Temp series maintains excellent performance at elevated temperatures:

Temperature	Capacity Retention	Cycle Life
25°C	100%	1000+ cycles
45°C	95%	900+ cycles
60°C	90%	800+ cycles
70°C	85%	700+ cycles

Certifications & Compliance

Standard	Description
EN 60598-2-22	European emergency lighting standard
CE	European Conformity
RoHS	Restriction of Hazardous Substances
UN38.3	Transportation safety
IEC 62133	Safety requirements for portable batteries

Application Guidelines

Recommended Applications

- Emergency exit signs (1h/3h duration)
- Emergency luminaires in commercial buildings
- Hotel and hospitality emergency lighting
- Industrial facility emergency systems
- Central battery systems

Installation Notes

1. Ensure adequate ventilation in battery compartment
 2. Connect with correct polarity
 3. Use appropriate charging circuit per specifications
 4. Regular maintenance checks recommended every 6 months
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Ordering Information

Part Number	Description	MOQ
HT-SC2000-3.6V	3.6V 2000mAh SC Pack	100 pcs
HT-SC2000-4.8V	4.8V 2000mAh SC Pack	100 pcs
HT-SC2000-6.0V	6.0V 2000mAh SC Pack	100 pcs
HT-D4000-3.6V	3.6V 4000mAh D Pack	50 pcs
HT-D4000-6.0V	6.0V 4000mAh D Pack	50 pcs

Custom configurations available upon request. Contact us for OEM/ODM solutions.

Contact Information

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