

MP 174565 ise

Rechargeable Li-ion cell

3.65 V high energy Li-ion cell with high performance and intrinsic safety

3.65V MP 174565 ise cell is comparable with top commercial grade cylindrical cells, having superior performance under extreme conditions and operating with a very high cycle life, meeting long end-user requirements from 0.1C to 10C.

Benefits

- Excellent operating lifetime in calendar and cycling with a very stable internal resistance
- High level of safety, comparable with safety lithium cells, operating at 100°C
- Low internal resistance, allowing high capacity operation
- Easy connection and assembly into batteries
- Strong safety performance, designed to meet the highest standards

Key features

- High energy density (2.75Wh/cm³)
- Cycle life of 2300 cycles at 100% DoD at C/2 discharge, C charge
- Standard configuration
- Pressure compensated
- Overvoltage protection
- Operating temperature range
- Wide temperature range
- Monitored in the field

It is qualified for all major quality schemes and standards, including:

- ISO 9001 (certified) and ISO 14001 (certified)
- IEC 60079-1 (ATEX) (EHG) (EHL)
- ATEX[®]/IEC 60079-11 (10.5.2, 10.5.3 (b)) compatible component
- Quality Management System Address program
- ISO 9001:2015 (certified) and ISO 14001:2015 (certified)

Typical applications

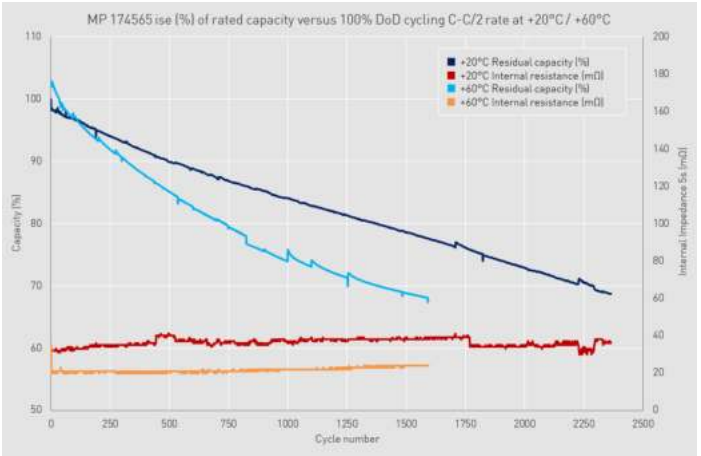
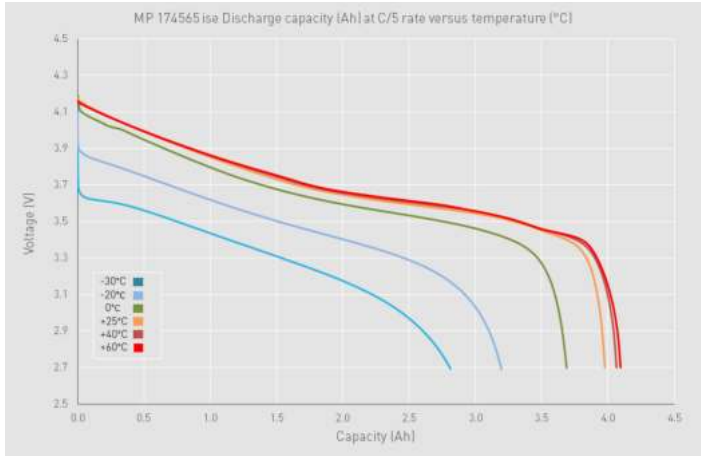
- Gas turbine engine, engine power
- Control systems
- Logging
- Oil & Gas operations
- Emergency lighting
- Standby power systems
- Instrumentation
- Agriculture



Typical performance			
Discharging rate (at 25°C) (100% DoD)			2.0Ah
Standard voltage			3.65V
Standard charge			2.0Ah
Working temperature range (discharging current)	Operating temperature	0.1C to 10C (typ.)	
	Storage temperature	-40°C to 60°C (typ.)	
Electrochemical characteristics			
Internal resistance			13 mΩ
Weight			2.0 g (typ.)
Internal height (excluding terminals)			31 mm
Terminal width			7 mm
Volume (including terminals)			0.06 l
100% discharge			14.5Wh/cm ³
Self-discharge (at 25°C) (1 year)			10% (typ.) (at 25°C)
Self-discharge (at 60°C)			20% (typ.)
Self-discharge (at 75°C)			40% (typ.)
Operating conditions			
Discharging rate (at 25°C)			10C
Operating methods	Constant current/Constant voltage		
Operating voltage			2.75V to 4.2V
Maximum continuous operating current			2.0A (typ.) (at 25°C)
Operating temperature range	Charge	0°C to 45°C	
	Discharge	0°C to 45°C	
Storage & long-term storage temperature range	Working temperature	0°C to 45°C	
	Allowable	-45°C to 45°C	

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- High temperature**
- not recommended to be used for high capacity and wide cycle number range in the system to ensure proper operation
 - The battery system should not be used for discharge to improve the battery capacity to improve the efficiency of the application
 - High temperature may cause the application to fail

- Cell surface temperature and spark action**
- The cell should be connected with the temperature measurement system in ambient temperature of 25°C
 - The temperature of the cell should be monitored during the operation of the system. The temperature of the cell should be monitored during the operation of the system.
 - The operation of the battery should be monitored during the operation of the system. The operation of the battery should be monitored during the operation of the system.

- Shorting**
- The shorting should be avoided. The shorting should be avoided. The shorting should be avoided.

- Warning**
- The battery should be used in the system. The battery should be used in the system.
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