Primary lithium battery LS 14500

3.6 V Primary lithium-thionyl chloride (Li-SOCl₂) High energy density AA-size bobbin cell



Benefits

- Enhanced capacity
- High voltage response, stable during most of the lifetime of the application
- Wide operating temperature range (-60°C/+85°C)
- Low self-discharge rate (less than 1 % after 1 year of storage at +20°C)
- Easy integration into compact systems
- Superior resistance to atmospheric corrosion

Key features

- Stainless steel container and end caps (low magnetic signature)
- Hermetic glass-to-metal sealing
- Non-flammable electrolyte
- Compliant with IEC 60086-4 safety standard and IEC 60079-11 intrinsic safety standard (class T3 assignment)
- Underwriters Laboratories (UL)
 Component Recognition
- Non-restricted for transport/ Non-assigned to Class 9 according to the UN Recommendations on the transport of dangerous goods
 Model Regulations
- Manufactured in France, UK, China

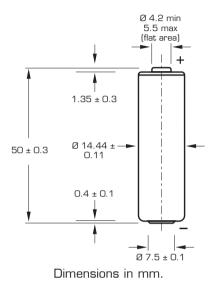
Main applications

- Utility metering
- Automatic meter reading
- Alarms and security devices
- Tollgate systems
- Memory back-up
- Tracking systems
- Automotive electronics
- Professional electronics

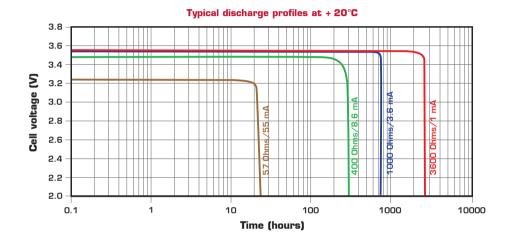
Cell size refer	ences		R6 - AA
Electrical charac			
(typical values relativ	e to cells stored for one year or	less at +30°C max.)
	O V cut-off. The capacity restored drain, temperature and cut-off)		2.6 Ah
Open circuit voltage	(at +20°C)		3.67 V
Nominal voltage (at 0.2 mA +20°C)		3.6 V	
Nominal energy			9.36 Wh
undischarged cells w 3.0 V. The readings temperature, and the	cally up to 250 mA nd pulses, drained every 2 mn at with 10 µA base current, yield vol may vary according to the pulse e cell's previous history. Fitting the ad in severe conditions. Consult	ltage readings above c characteristics, the ne cell with a capacit	
Maximum recommer (Higher currents pos	nded continuous current ssible, consult Saft)		50 mA
Storage	(recommended) (for more severe conditions,	consult Saft)	+30°C (+86°F) max
Operating temperature range [Operation above ambient T may lead to reduced capacity and lower voltage readings at the beginning of pulses. Consult Saft]			-60°C/+85°C (-76°F/+185°F)
Physical charact	eristics		
Diameter (max)			14.55 mm (0.57 in)
Height (max)			50.3 mm (1.98 in)
Typical weight			16.7 g (~ 0.6 oz)
Li metal content			approx. 0.7 g
Available termination	suffix CN, CNR 2 PF, 3 PF, 3 PF RP, 4 PF CNA (AX) FL	radial tabs radial pins axial leads flying leads <i>etc</i> .	



LS 14500



Voltage plateau versus Current and Temperature (at mid-discharge) 3.8 3.6 3.4 Cell voltage (V) 3.2 3.0 - 20°C 2.8 2.6 2.4 40°C 22 0.1 10 100 1000 Current (mA)



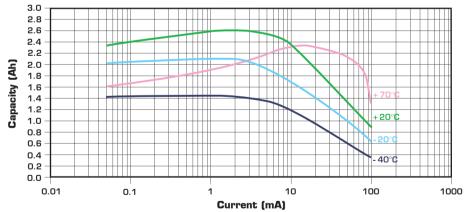
Storage

 The storage area should be clean, cool (preferably not exceeding +30°C), dry and ventilated.

Warning

- Fire, explosion and burn hazard.
- Do not recharge, short circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.
- Do not solder directly to the cell (use tabbed cell versions instead).

Restored Capacity versus Current and Temperature (2.0 V cut-off)



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Information in this document is subject to change without notice and becomes contractual only after written confirmation by Saft.

For more details on primary lithium technologies please refer to Primary Lithium Batteries Selector Guide Doc N $^\circ$ 31048-2.

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