Primary lithium battery LS 17500

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

Benefits

- High voltage response, stable during most of the lifetime of the application
- Wide operating temperature range (-60/+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
- Underwriters Laboratories (UL) Component Recognition
- Compliant with IEC 60086-4 safety standard and IEC 60079-11 intrinsic safety standard (class T3 assignment)

 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

Main applications

- Utility metering
- Automatic meter reading
- Alarms and security devices
- Tollgate systems
- Identification tags
- Tracking systems
- Automotive electronics
- Professional electronics

Cell size reference

Electrical characteristics

(typical values relative to cells stored for one year or less at + 30°C max.)

Nominal capacity (at 3 mA + 20°C 2.0 V cut-off. The capacity restored by the cell varies according to current drain, temperature and cut-off)

Open circuit voltage	(at + 20°C)	3.67 V
Nominal voltage	(at 0.3 mA + 20°C)	3.6 V
Nominal energy		12.96 Wh

Pulse capability: Typically up to 250 mA

 $(250 \text{ mA/O.1} \text{ second pulses}, drained every 2 \text{ mn at } + 20^{\circ}\text{C}$ from undischarged cells with 10 μ A base current, yield voltage readings above 3.0 V. The readings may vary according to the pulse characteristics, the temperature, and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions. Consult Saft)

Maximum recommended continuous current (Higher currents are possible. Consult Saft)		100 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 characteristics

Diameter (max)			17.13 mm (0.67 in)	
			17.10 1111 (0.07 11)	
Height (max)			50.9 mm (2.00 in)	
Typical weight			21.9 g (O.8 oz)	
Li metal content			approx. 0.9 g	
Available termination suffix				
	CN, CNR	radial tabs		
	2 PF, 3 PF, 3 PF RP, 4 PF	radial pins		
	CNA (AX)	axial leads		
	FL	flying leads <i>etc.</i>		



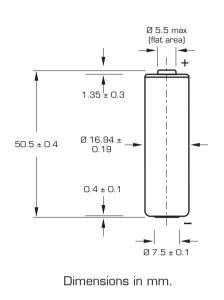


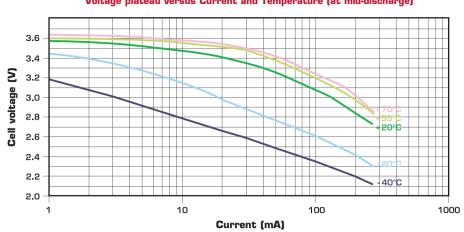
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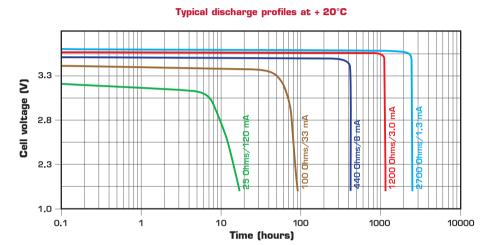
3.6 Ah

LS 17500

Voltage plateau versus Current and Temperature (at mid-discharge)







Storage

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

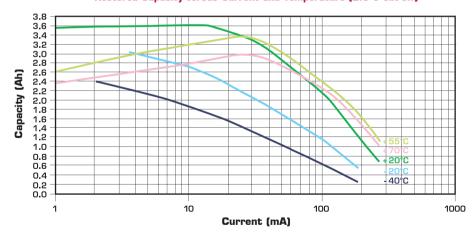
Warning

- 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).



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



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