

# Tadiran Lithium Batteries

Electronic  
Product  
Catalogue



## Lithium Thionyl Chloride (LTC) Batteries

Model	Terminations	Catalogue number	Size	Nominal voltage	Nominal capacity	Nominal current	Max. cont. discharge current	Temperature range	Dimensions
									mm
<b>SL-300 series: for standard use and stand-by</b>									
SL-350	/S /T /P /PR /PT	11 1 0350x 00	½AA	3.6 V	1.2 Ah	0.6 mA	6 mA	-55...+85 °C	Ø 14.5 × 25
SL-361	/S /T /P /PR /PT	11 1 0361x 00	¾AA	3.6 V	1.6 Ah	1 mA	10 mA	-55...+85 °C	Ø 14.5 × 33
SL-360	/S /T /P /PR /PT	11 1 0360x 00	AA	3.6 V	2.4 Ah	2 mA	20 mA	-55...+85 °C	Ø 14.5 × 50
<b>SL-500 series: for extended temperature range</b>									
SL-550	/S /T /P /PR /PT	11 1 0550x 00	½AA	3.6 V	0.8 Ah	0.6 mA	6 mA	-55...+130 °C	Ø 14.5 × 25
SL-561	/S /T /P /PR /PT	11 1 0561x 00	¾AA	3.6 V	1.0 Ah	1 mA	10 mA	-55...+130 °C	Ø 14.5 × 33
SL-560	/S /T /P /PR /PT	11 1 0560x 00	AA	3.6 V	1.7 Ah	2 mA	20 mA	-55...+130 °C	Ø 14.5 × 50
<b>SL-700 / SL-2700 series: for enhanced start</b>									
SL-750	/S /T /P /PR /PT	11 1 0750x 00	½AA	3.6 V	1.1 Ah	0.6 mA	20 mA	-55...+85 °C	Ø 14.5 × 25
SL-761	/S /T /P /PR /PT	11 1 0761x 00	¾AA	3.6 V	1.5 Ah	1 mA	30 mA	-55...+85 °C	Ø 14.5 × 33
SL-760	/S /T /P /PR /PT	11 1 0760x 00	AA	3.6 V	2.2 Ah	2 mA	60 mA	-55...+85 °C	Ø 14.5 × 50
SL-2770	/S /T /P	11 2 1770x 00	C	3.6 V	8.5 Ah	3 mA	100 mA	-55...+85 °C	Ø 26 × 50
SL-2780	/S /T /P	11 2 1780x 00	D	3.6 V	19 Ah	5 mA	200 mA	-55...+85 °C	Ø 33 × 60
SL-2790	/S /T	11 2 1790x 00	DD	3.6 V	35 Ah	10 mA	300 mA	-55...+85 °C	Ø 33 × 123
<b>SL-800 / SL-2800 series: XOL for extended operating life</b>									
SL-840	Solder pins	11 1 18404 00	BEL	3.6 V	0.42 Ah	0.5 mA	5 mA	-55...+85 °C	Ø 18.5 × 7
SL-889	Solder pins	11 1 18894 00	¼D	3.6 V	1 Ah	0.5 mA	10 mA	-55...+85 °C	Ø 33 × 6
SL-850	/S /T /P /PR /PT	11 1 0850x 00	½AA	3.6 V	1.2 Ah	0.5 mA	20 mA	-55...+85 °C	Ø 14.5 × 25
SL-861	/S /T /P /PR /PT	11 1 0861x 00	¾AA	3.6 V	1.6 Ah	0.5 mA	30 mA	-55...+85 °C	Ø 14.5 × 33
SL-860	/S /T /P /PR /PT	11 1 0860x 00	AA	3.6 V	2.4 Ah	1 mA	60 mA	-55...+85 °C	Ø 14.5 × 50
SL-2870	/S /T /P	11 2 1870x 00	C	3.6 V	8.5 Ah	3 mA	75 mA	-55...+85 °C	Ø 26 × 50
SL-2880	/S /T /P	11 2 1880x 00	D	3.6 V	19 Ah	4 mA	100 mA	-55...+85 °C	Ø 33 × 60

## Available Terminations



Termination	/S	/T	/P	/PR	/PT
x	1	2	3	6	8

**EXAMPLE:** for termination /PT is x = 8 and SL-850/PT has catalogue number 11 1 08508 00

## PulsesPlus™ Batteries

Model	Termination	Catalogue number	Configuration		Nominal voltage	Nominal capacity	Maximum pulse current <sup>1)</sup>	Dimensions
			Primary cell	HLC				
TLP-91111/A/SM	Flying leads	14 1 5761 001	AA	1550	3.6 V	2.40 Ah	3 A	55 × 32 × 16
TLP-91311/A/SM	Pressure contacts	14 1 5763 001	AA	1520	3.6 V	2.40 Ah	1 A	Ø 16.5 × 75
TLP-91311/A/ST	Solder tags	14 1 5763 002	AA	1520	3.6 V	2.40 Ah	1 A	Ø 16.5 × 75
TLP-92111/A/SM	Flying leads	14 1 5771 001	C	1550	3.6 V	8.50 Ah	3 A	55 × 44 × 28
TLP-92311/A/SM	Flying leads	14 1 5773 001	C	1520	3.6 V	8.50 Ah	1 A	Ø 29 × 67
TLP-93111/A/SM	Flying leads	14 1 5781 001	D	1550	3.6 V	19.0 Ah	3 A	64 × 50 × 35
TLP-93311/A/SM	Flying leads	14 1 5783 001	D	1520	3.6 V	19.0 Ah	1 A	Ø 34 × 78
TLP-96111/A/SM	Flying leads	14 1 5751 001	½AA	1550	3.6 V	1.2 Ah	3 A	55 × 32 × 16
TLP-96311/A/SM	Pressure contacts	14 1 5753 001	½AA	1520	3.6 V	1.2 Ah	1 A	Ø 16.5 × 50
TLP-96311/A/ST	Solder tags	14 1 5753 002	½AA	1520	3.6 V	1.2 Ah	1 A	Ø 16.5 × 50
TLP-97111/A/SM	Flying leads	14 1 5721 001	¾AA	1550	3.6 V	1.65 Ah	3 A	55 × 32 × 16
TLP-97311/A/SM	Pressure contacts	14 1 5723 001	¾AA	1520	3.6 V	1.65 Ah	1 A	Ø 16.5 × 58
TLP-97311/A/ST	Solder tags	14 1 5723 002	¾AA	1520	3.6 V	1.65 Ah	1 A	Ø 16.5 × 58

<sup>1)</sup> pulse duration 1 s to 3 V

## Hybrid Layer Capacitors (HLC) for use in PulsesPlus Batteries

Model	Maximum charge voltage	Maximum charging current	Max. cont. discharge current	Max. pulse discharge current	Maximum capacity (3.6 V)	Maximum capacity (3.9 V)	Discharge end voltage	Cell impedance	Dimensions
									mm
HLC-1520A	3.95 V	25 mA	0.5 A	2 A	39 mAh	58 mAh	2.5 V	≤ 250 mΩ	Ø 15 × 20
HLC-1530A	3.95 V	50 mA	0.75 A	3 A	70 mAh	105 mAh	2.5 V	≤ 140 mΩ	Ø 15 × 27
HLC-1550A	3.95 V	100 mA	2 A	5 A	155 mAh	236 mAh	2.5 V	≤ 100 mΩ	Ø 15 × 50

## TLM Batteries

Model	Nominal voltage	Max. cont. discharge current	Max. pulse discharge current	Maximum capacity	End voltage	Cell impedance	Capacity retention <sup>2)</sup>	Dimensions
								mm
<b>Medium power lithium metal oxide cells</b>								
TLM-1520MP	4.1 V	1 A	2.5 A	200 mAh	2.8 V	≤ 300 mΩ	92.5 %	Ø 15 × 20
TLM-1530MP	4.1 V	2 A	5 A	340 mAh	2.8 V	≤ 200 mΩ	92.5 %	Ø 15 × 27
TLM-1550MP	4.1 V	4 A	15 A	800 mAh	2.8 V	≤ 100 mΩ	92.5 %	Ø 15 × 50
<b>High power lithium metal oxide cells</b>								
TLM-1520HP	4.1 V	1.25 A	3.5 A	135 mAh	2.8 V	≤ 250 mΩ	89 %	Ø 15 × 20
TLM-1530HP	4.1 V	2.25 A	6.5 A	240 mAh	2.8 V	≤ 175 mΩ	89 %	Ø 15 × 27
TLM-1550HP	4.1 V	5 A	15 A	550 mAh	2.8 V	≤ 100 mΩ	89 %	Ø 15 × 50

<sup>2)</sup> after 10 years storage at RT

Any values given here are for information purposes only. They also depend on actual conditions of use and are not warranties of future performance. Subject to change.

## User Information

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### References

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## Tadiran Batteries GmbH

Tadiran Batteries GmbH is one of the leading manufacturers of primary (non rechargeable) lithium batteries in Europe. The company was founded as a Joint Venture between Tadiran and Sonnenschein in 1984 and – under the name of Sonnenschein Lithium – has successfully served the market for more than 20 years. Together with its parent company **Tadiran Batteries Ltd.**, the company is continuously improving its performance with regard to products, highest quality and customer service. Tadiran Batteries Ltd. is fully owned by Saft groupe S.A. (Euronext: SAFT).

The main focus of the company is to achieve a maximum customer satisfaction. Thus the guide line is to be the best in design-in, in full technical support and logistics. The company is committed to the world class philosophy. The management system is certified to ISO 9001 and – since 1999 – to ISO 14001.

Tadiran Batteries GmbH employs approx. 100 people and has its production facilities in Büdingen, close to Frankfurt, Germany.

The company is a leader in the development of lithium batteries for industrial use. Its **Lithium Thionyl Chloride (LTC) technology** is well established for more than 25 years. Tadiran LTC-Batteries are suitable where a 3.6 Volt high energy primary battery is required for up to ten years and more stand alone operation.

Major Advantages of Tadiran LTC Batteries:

- ◆ High and stable voltage 3.6 V
- ◆ Highest capacity (up to 19 Ah per D size cell)
- ◆ Wide temperature range (-40 °C to +85 °C or 130 °C respectively)
- ◆ High reliability (hermetic laser sealing, glass-to-metal seal)
- ◆ Outstanding storage capability (up to 10 years)
- ◆ Recognized safety (UL)
- ◆ Very low self discharge (less than 1 % per year)

The **PulsesPlus™ technology**, providing high current pulses in combination with high energy, has been successfully introduced into the market and plays a significant role especially in the asset tracking and monitoring market segment.

Major Advantages of PulsesPlus Batteries:

- ◆ High and stable voltage 3.6 V (optional 3.9 V)
- ◆ High pulse current capability
- ◆ Immediate response, no passivation effect
- ◆ Highest capacity (up to 19 Ah per D size cell)
- ◆ Wide operating temperature range (-40 °C to +85 °C)
- ◆ High reliability (hermetic laser sealing, glass-to-metal seal)
- ◆ Outstanding storage capability (up to 10 years)
- ◆ Recognized safety (UL)
- ◆ Very low self discharge (less than 2 % per year)

The **TLM technology** has been developed recently for applications requiring high power discharge after a long storage time, e.g. as a back up battery for emergency call devices in automotive telematic systems.

Major Advantages of TLM High and Medium Power Batteries:

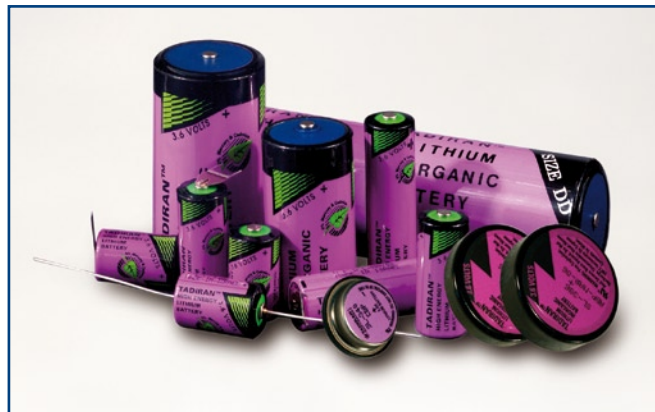
- ◆ High voltage 4.1 V
- ◆ Very high pulse current capability
- ◆ Immediate response, no passivation effect
- ◆ Wide operating temperature range (-40 °C to +85 °C)
- ◆ High reliability (hermetic laser sealing, glass-to-metal seal)
- ◆ Outstanding storage capability (up to 10 years)
- ◆ Recognized safety (UL)
- ◆ Low self discharge
- ◆ **NEW:** Medium power version with more capacity

### Tadiran Batteries GmbH

Industriestr. 22  
63654 BÜDINGEN  
GERMANY

Phone: +49 (0) 60 42 / 9 54 - 0  
Fax: +49 (0) 60 42 / 9 54 - 190

e-mail: [info@tadiranbatteries.de](mailto:info@tadiranbatteries.de)  
[www.tadiranbatteries.de](http://www.tadiranbatteries.de)



Lithium Thionyl Chloride (LTC) Batteries



PulsesPlus Batteries



TLM High Power Batteries

Distributor