



The TLM-1550HP is ideal for Military and Aerospace applications.

So Much Power, So Little Battery

High Power Lithium Model TLM-1550HP

Tadiran's new high voltage/high rate AA-sized lithium battery, the TLM-1550HP, packs a punch with 2Wh of energy, an open circuit voltage of 4.0 volt, and the ability to handle pulses of up to 15A, with 5A maximum continuous load at above 3.0V.

The TLM-1550HP is specifically designed for applications requiring high power, long life and extended storage. Typical applications include:

- **Military & Aerospace systems**
- **Automatic External Defibrillators**
- **Portable Medical Devices**
- **Communications systems**
- **Telematics**



Tadiran's TLM series of cells are also extremely safe, as its solvents are non-toxic and non-pressurized and its anode material is less reactive than that found in other lithium cells. The batteries have performed well in a variety of safety tests, including nail penetration, crush tests, high temperature chambers, short circuit and charge tests. Two families, High Power and Medium Power are currently available in 3 different sizes.

High Power Series

Model Data Sheet	Catalog No.	Nominal Voltage (V)	Discharge Capacity (mAh)	Maximum Pulse Current (A)	Temperature Range (°C)	Maximum Dimensions				Available Terminations (drawings)
						Diameter		Height		
						(mm)	(in)	(mm)	(in)	
TLM-1550HP	72-1556-YYYYY	4	550	15	-40° to +85°	15.1	0.595	51	2.008	I TP PT2
TLM-1530HP	72-1536-YYYYY	4	240	6.5	-40° to +85°	15.1	0.595	27.4	1.079	S I TP PT2
TLM-1520HP	72-1526-YYYYY	4	135	3.5	-40° to +85°	15.1	0.595	20	0.787	S I TP PT2

Medium Power Series

Model Data Sheet	Catalog No.	Nominal Voltage (V)	Discharge Capacity (mAh)	Maximum Pulse Current (A)	Temperature Range (°C)	Maximum Dimensions				Available Terminations (drawings)
						Diameter		Height		
						(mm)	(in)	(mm)	(in)	
TLM-1550MP	72-1557-YYYYY	4	800	15	-40° to +85°	15.1	0.595	51	2.008	S T TP PT2
TLM-1530MP	72-1537-YYYYY	4	340	5	-40° to +85°	15.1	0.595	27.4	1.079	S T TP PT2
TLM-1520MP	72-1527-YYYYY	4	200	2.5	-40° to +85°	15.1	0.595	20	0.787	S T TP PT2

TERMINATION SUFFIX	/S	/T	/P	/TP	/PT	/PT2
yyyyy	22000	22150	N/A	32000	N/A	35000

NOTES:

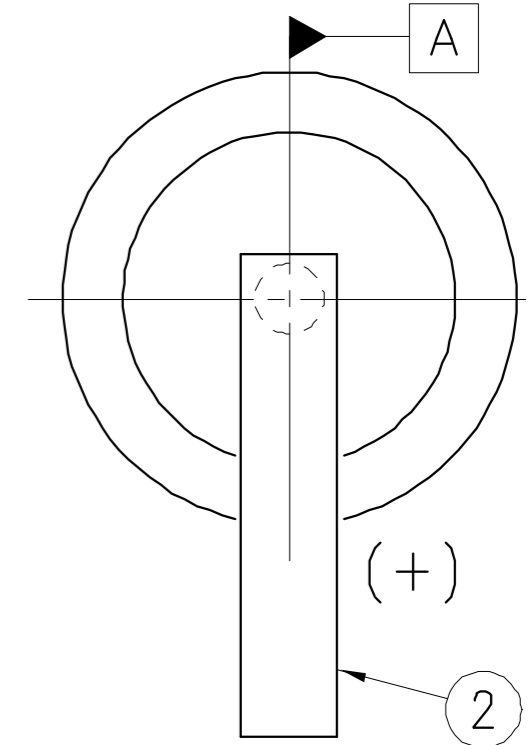
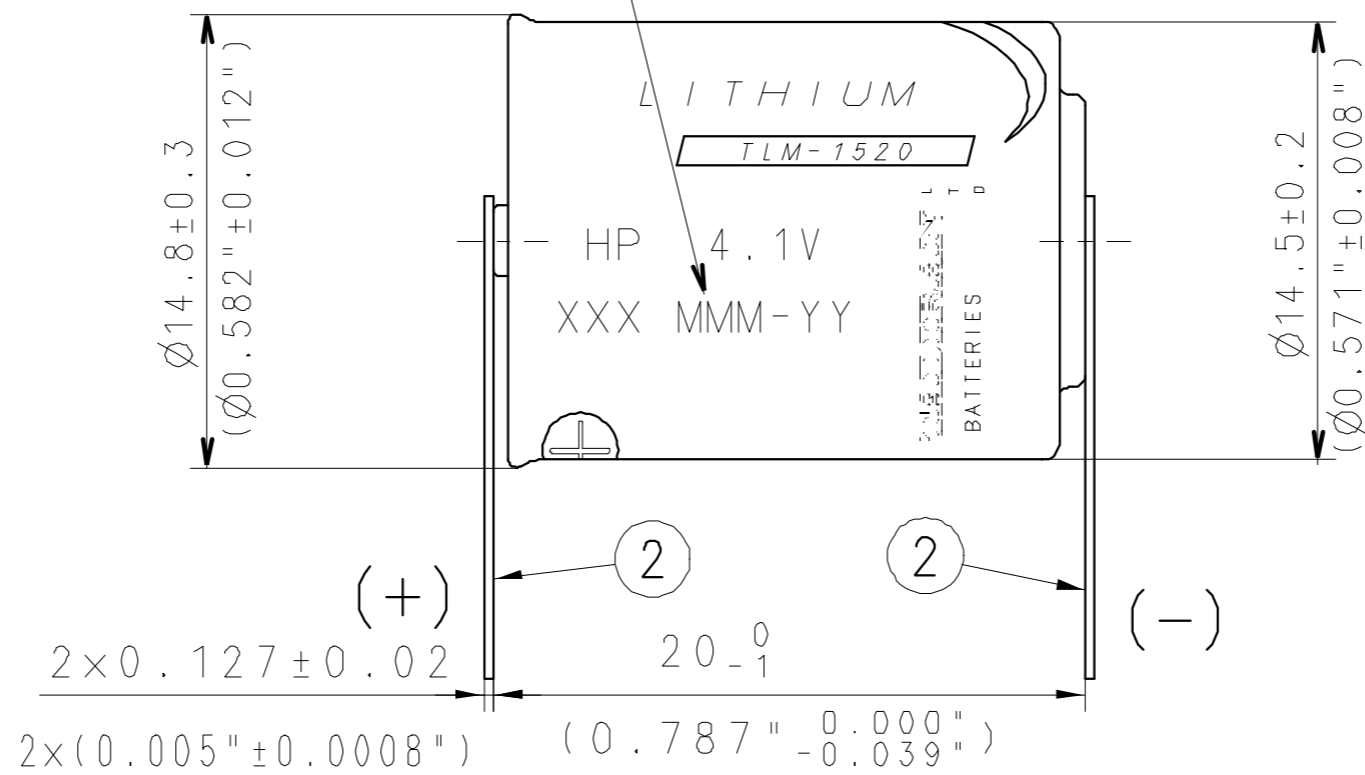
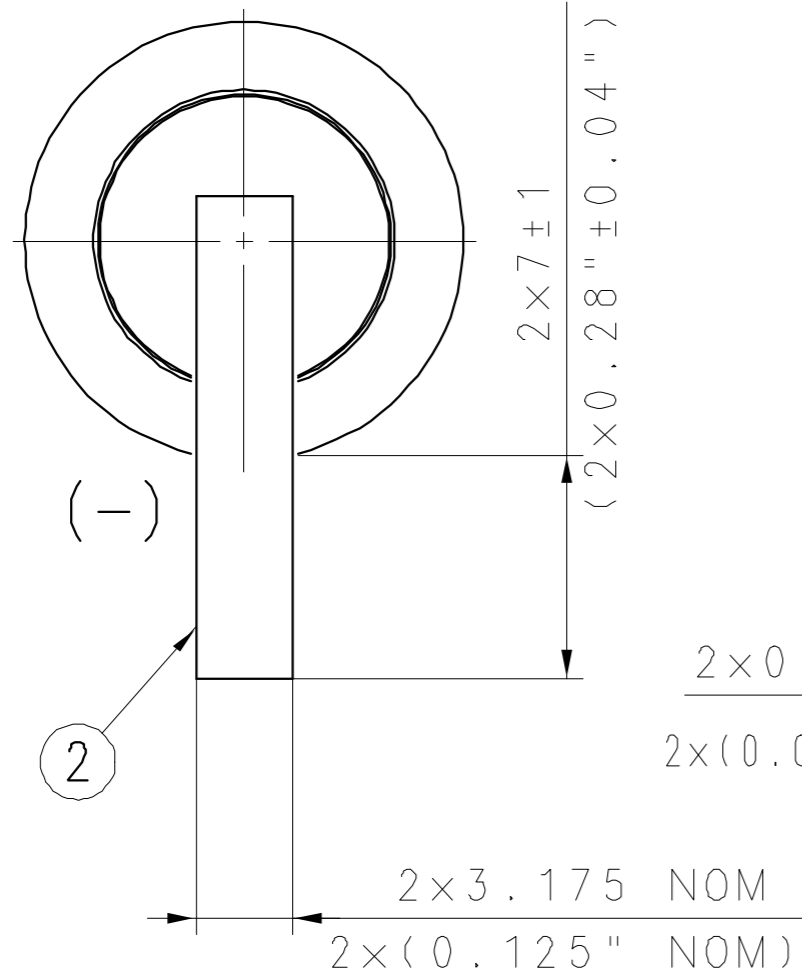
The standard termination codes are listed in the table above. Customized terminations are available upon request.



The #1 choice in Lithium

WARNING!
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REV	DESCRIPTION	CHNGD SHEET	E.C.N	DATE	DRAWN	CHECKED
A	NEW DRAWING		00515		KATYA	AYA



≡	0.2(.008")	A
//	0.2(.008")	A

SEE THE LEGEND

TECHNICAL DATA @25 °C :

- 1) OPEN CIRCUIT VOLTAGE: 3.95V TO 4.07V.
- 2) CLOSE CIRCUIT VOLTAGE (@0.250A @0.1 SEC): 3.78V MIN.
- 3) CAPACITY TO 2.8V (@0.012A) : 0.135 Ah.
- 4) CAPACITY TO 2.8V (@0.125A): 0.125 Ah.
- 5) MAXIMUM 1 SEC PULSE TO 3V: 3.5A.
- 6) OPERATING TEMPERATURE: -40 °C TO +85 °C.
- 7) WEIGHT MAX.: 9 GRAMM.

LEGEND :

XXX - BATCH CODE
MMM-YY PRODUCTION DATE

2	61000012007	FLAT TAB	Ni200, 1/8"x0.005"	PC	2	
1	61152622020	TLM-1520HP		PC	1	
NO.	PART NO.	NAME	DESCRIPTION	U/M	QTY	NOTES
UNLESS OTHERWISE SPECIFIED:			PROCESSING LEVEL			
ALL DIMENSIONS ARE IN MM.			OPERATION		CATALOG NO.	
TOLERANCES: LINEAR : 0.5 ANGLES :			TLM-1520HP/T			
ROUGHNESS:			P/N:72152622150			
SCALE : N.S.			PRD/PROJ: 700		DRAWN KATYA	
					DESIGNED KATYA	
					CHECKED S.HAZUT	
					APPROVED A.DANIEL	
					SHEET / OF 01 / 01	
			72152622151			



Tadiran High Power Lithium Organic Cell Model TLM-1520HP

1. Scope

This data sheet describes the mechanical design and performance of Tadiran high power lithium organic cell model TLM-1520HP.

2. Characteristics

2.1. Physical

- 2.1.1. Length: 20 -1 mm.
- 2.1.2. Diameter: 14.8 ±0.3 mm.
- 2.1.3. Weight: 9 gr. max.

2.2. Electrical

- 2.2.1. Open Circuit Voltage (for batteries stored at RT for 1 year or less) 3.95 to 4.07 V
- 2.2.2. Closed Circuit Voltage (at 0.1 sec) at 0.25 A load 3.78 minimum
- 2.2.3. Discharge
 - Discharge capacity at 12 mA @ RT to 2.8 V 135 mAh
 - Discharge capacity at 125 mA @ RT to 2.8 V 125 mAh
 - Maximum discharge current
 - Continuous to 2.8 V: 1.25 A
 - 1 second pulse to 3 V: 3.5 A

2.3. Operating Temperature Range: -40 °C to 85 °C

2.4. Accumulated Capacity Loss*:

Storage Temperature	22 °C	55 °C	72 °C	85 °C
Storage Time [Y]				
1	3 %	6 %	10 %	TBD
5	7 %	22 %	40 %	N/A
10	11 %	32 %	N/A	N/A
15	15 %	42 %	N/A	N/A
20	18 %	N/A	N/A	N/A

* When tested at RT under 12 mA to 2.8 V

2.5. Cell impedance: Less than 250 mOhm @ 1kHz at room temperature.