

# TLM-1550ES

## AA Size High Power High Energy Primary Lithium Battery

**TLM**  
LITHIUM



### Physical Characteristics

Length	53 mm. Max
Diameter	15.1 mm. Max
Weight	22 gr. Max

### Electrical Characteristics (for batteries stored at RT for 1 year or less)

Open Circuit Voltage	3.92 to 4.15 V
Closed Circuit Voltage @ 0.1 sec.	0.5A load, 3.88 V minimum

#### Discharge

Capacity @ 5 mA & RT to 2.0 V	1400 mAh (Typical)
Capacity @ 1 A & RT to 2.0 V	1200 mAh

#### Maximum Discharge Current

Continuous to 2.0 V	5 A
1 second pulse to 2.0 V	10 A

Discharge Temp. Range	-40 to +85 °C
Storage Temp. Range	-55 to +85 °C
Cell impedance	Less than 100 mΩ at 1 kHz

### Accumulated Capacity Loss \*

Storage Temp.	22 °C	55 °C	72 °C
<b>Storage Time [Y]</b>			
1	3 %	6 %	10 %
5	7 %	22 %	40 %
10	11 %	32 %	N/A
15	15 %	42 %	N/A
20	18 %	N/A	N/A

\* When tested at RT at 5 mA to 2.0 V

### Key Features

- High Power 4.1 V
- Hermetically sealed (glass-to-metal)
- Wide operating temperature range
- Low self discharge
- Long storage life
- High homogeneity
- End of life indication capability
- High reliability
- Lightweight
- Safe design
- Assembled in custom packs (per request)

### Main Applications

- Emergency Systems
- Telemetry
- Navigation systems
- Device for immobilizing an attacker
- Electronic warfare systems
- Ordnance fusing power source
- Medical Devices
- Automotive
- Internet of things (IOT)

### Ordering P/N:

TLM-1550ES/S

TLM-1550ES/T

\* Z2 - Indicates that the cell is equipped with PTC- SRP 200

### Safety Considerations

The cells successfully passed the following tests:

Shock & Vibration	UN
Short Circuit at RT, & +55 °C	UN
Heating at 130 °C	UN
Forced Discharge	UN
Crush & Impact	UN
Temperature Cycling	UN

*UN Manual of Tests & Criteria*

#### WARNING:

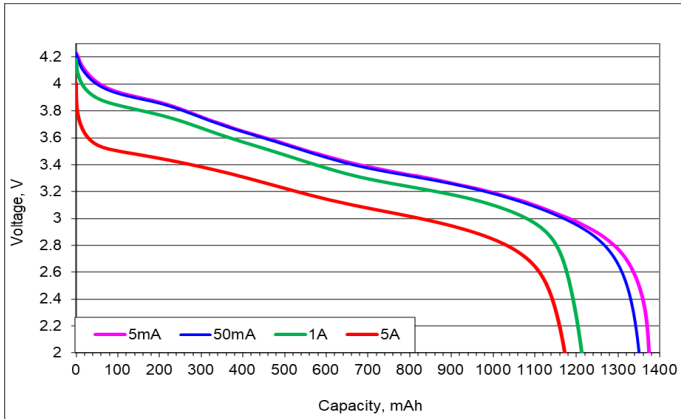
Fire, Explosion, And Severe Burn Hazard.  
Do Not Recharge, Crush, Disassemble,  
Heat Above 100 °C, Incinerate Or Short  
Circuit.

[www.tadiranbatteries.com](http://www.tadiranbatteries.com)

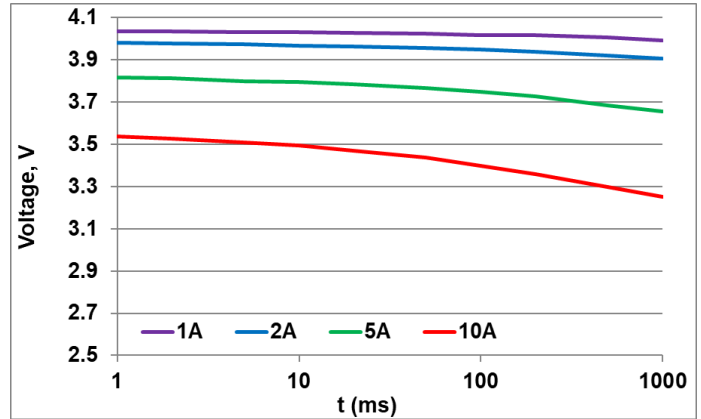
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## Performance Data

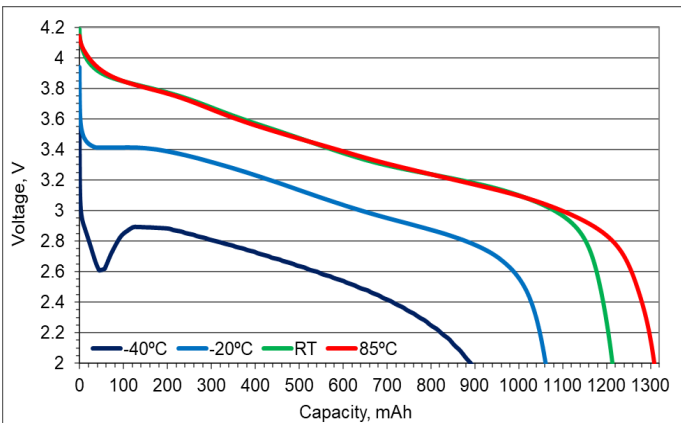
Discharge curves at Room Temperature



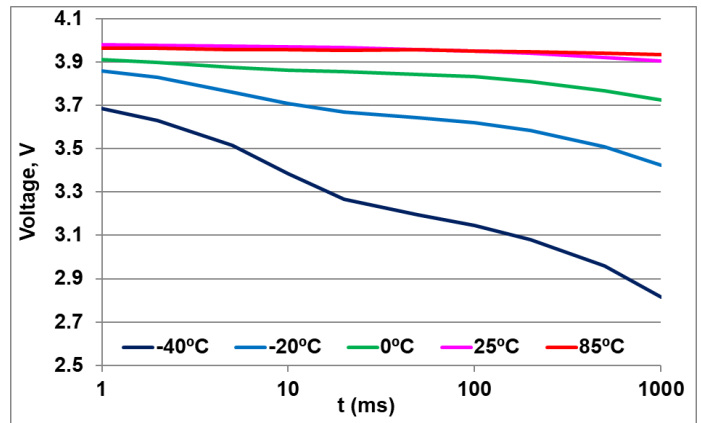
Pulse capability at Room Temperature



Discharge capability at various Temp. @ 1 A

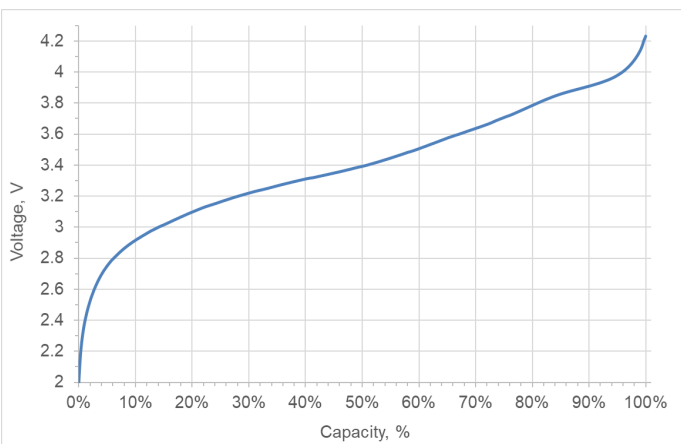


Pulse capability at several Temp. @ 2 A



### Capacity vs. OCV

OCV measurements can provide a good estimation for the remaining capacity as shown below:



\* When tested at RT at 5 mA to 2.0 V

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