

Safety is vitally important when working in hazardous conditions. Intrinsic safety is the globally recognized protection technique designed to ensure safe operation of electronic devices in potentially explosive environments by eliminating the potential for ignition.



Energizer[®] Application Support is proud to announce *Energizer*[®] Ultimate Lithium AA and AAA batteries are now certified as a component in intrinsic safety apparatus according to UL 913 and Directive 94/9/EC ATEX. This means that the world's longest lasting battery in high tech devices can readily be used in these applications.

For more information please consult your *Energizer*[®] sales representative, visit our technical information website data.energizer.com, or email us at <u>Application.Support@Energizer.com</u>.



- **Energizer**® Ultimate Lithium Batteries Designed and Manufactured for Safety
 - Temperature and pressure activated ball vent mechanism
 - Temperature responsive PTC acts as a resettable fuse
 - High tensile strength separator for improved physical abuse tolerance
 - Thermally responsive separator shuts down to limit temperature build-up
 - All-foil current collector resists shorting during physical abuse
 - Cathode particle size control prevents separator damage
 - More than twenty in-line inspections of every battery
 - Passes all industry standard tests for abuse and common misuse
 - Used by NASA and military agencies around the world



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Technical Specifications

	AA (L91)	AAA (L92)
Nominal Voltage	1.5 V	
Nominal Capacity	2900 mAh (@ 1000 mA to 1.0V) 3200 mAh (@ 100 mA to 1.0V)	1250 mAh (@ 100 mA to 1.0V) 1300 mAh (@10 mA to 1.0V)
Maximum Continuous Discharge Rate	3000 mA	1500 mA
Typical Weight	14.5 g	7.6 g
Operating Temperature	-40°C to +60°C	
Shelf Life	Demonstrated > 20 years at 21°C	
Internal Resistance	60 - 210 mΩ	140 - 300 mΩ



- The world's highest energy AA battery
- Works in extreme temperatures: -40°C to +60°C
- Holds power for up to 20 years
- Weighs 33% less than alkaline
- Leak-proof
- Certified for intrinsic safety

Intrinsically Safe User Instructions (UL 913)		
Product types	AA and AAA Primary Lithium Batteries	
Product description	AA and AAA Energizer ^B Ultimate Lithium	
Model numbers	L91 and L92	
Electrical ratings	AAA, 1.5V, 1250 mAh AA, 1.5V, 2900 mAh	
Standards tested	 UL 913 7th Edition Dated 7/31/06 Rev. 9/23/11 CAN/CSA-C22.2 No. 157-92 (R2012) +Upd1 +Upd2 	
Hazardous location	 1 - 2 AA cells in series or in parallel: Class 1, Division 1, Groups A-D, T4, -40°C to +60°C 1 - 2 AAA cells in series or in parallel: Class 1, Division 1, Groups A-D, T4, -40°C to +60°C 3 - 4 AA cells in series or in parallel: Class 1, Division 1, Groups C and D, T4, -40°C to +60°C 3 - 4 AAA cells in series or in parallel: Class 1, Division 1, Groups C and D, T4, -40°C to +60°C 3 - 4 AAA cells in series or in parallel: Class 1, Division 1, Groups C and D, T4, -40°C to +60°C 	

	Directive 94/9/EC ATEX
Provisions of the Directive fulfilled by the Equipment	1. 1 - 2 AA cells in series or in parallel: (x) IIG Ex ia IIC, T4, -40°C to +60°C 2. 1 - 2 AAA cells in series or in parallel: (x) IIG Ex ia IIC, T4, -40°C to +60°C

