



Lithium Iron Disulfide Battery Li-FeS₂



Cylindrical lithium iron disulfide batteries have Lithium for the anode, iron disulfide for the cathode, and a lithium salt in an organic solvent blend as the electrolyte. They deliver a voltage of 1.5 V and are designed for superior performance. They are compatible in any application using 1.5 volt battery types AA and AAA. Some of the advantages of those batteries are: work at low temperature extremes where other types will not, excellent performance even after 15 year storage at ambient conditions and longer service than other primary battery types.

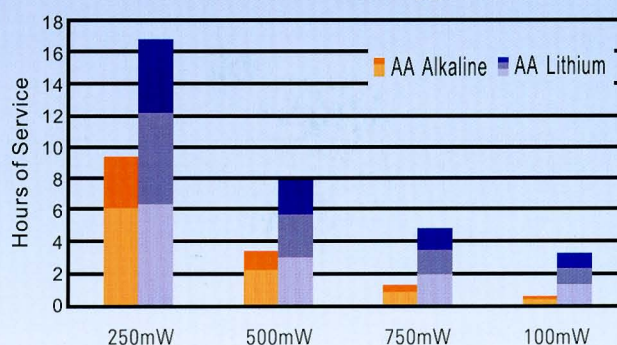
Applications

- Wireless mouse or keyboard
- Medical equipment
- Electronic dictionaries
- Measuring instrument
- Radio transceiver
- Other electronic equipments
- Digital cameras
- GPS
- Calculators
- Digital Video
- Electronic clocks
- Sensors

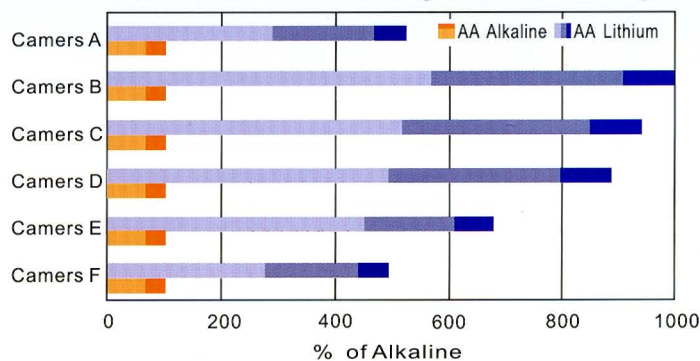
Key Feature

- Direct drop-in compatibility in applications using 1.5 volt "AA" and "AAA" battery sizes.
- Far greater power than other battery types.
- Provides longer service than other battery types in moderate to heavy drain applications.
- Greater service advantage over other battery types at low temperature extremes operating at -40°C .
- Higher operating voltage and flatter discharge curve than other 1.5V battery types.
- Superior leakage resistance compared to other 1.5V battery types.
- Outstanding service maintenance when stored at ambient conditions.
- Considerably lighter than other 1.5V battery types.
- Good service maintenance after high temperature storage up to $+60^{\circ}\text{C}$.
- No added mercury, cadmium, or lead.

AA Lithium VS. AA Alkaline
Continuous Constant Power Testing @ 20°C 0.9V Cut off



AA Lithium vs. AA Alkaline
% of Alkaline in-Device Digital Camera Testing

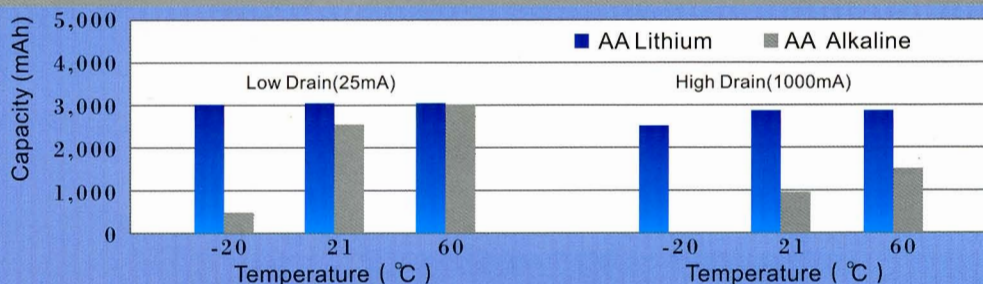


10 pictures per hour / 1 picture every 30 seconds

NOTE: Camera selection based on top selling brands in China at the time of testing.

AA Lithium VS AA Alkaline

Temperature Performance / Continuous Discharge to 0.9Volts



Comparison of capacity between Li-FeS₂ battery and alkaline battery at different temperature and discharge current

Characteristics

Characteristics	Lithium	Alkaline	Ni / MH
Temperature	Superior	Good	Superior
Weight	33%<Alkaline	33%>Lithium	33%<Alkaline
Shelf Life	10 to 15 Years	5 to 7 Years	3 to 5 Years
Leakage Resistance	Superior	Good	Good
Discharge Curve	Flat	Sloping	Flat
High Rate Capability	Superior	Fair	Superior

AA Specifications

Items	Specifications	Remarks
Nominal Voltage(V)	1.5	
Max Continuous Current(mA)	2000	
Max Pulse Current(mA)	3000	2 sec on; 8 sec off
Operating Voltage(V)	1.5	Discharged at 200mA
Nominal Capacity(mAh)	3000	Discharged at 1000mA to 0.8 Volt at 20 ± 2°C
Operating Temp(°C)	-40~60	
Typical Weight(g)	15.6	
Typical Li Content(g)	0.98	
Storage Temp(°C)	10~30	Battery self-discharge rate increases with the rise of environmental temperature and humidity, so recommended temperature at 5°C~30°C and humidity less than 70%RH
Shelf Life	15 Years	

AAA Specifications

Items	Specifications	Remarks
Nominal Voltage(V)	1.5	
Max Continuous Current(mA)	1000	
Max Pulse Current(mA)	2000	2 sec on; 8 sec off
Operating Voltage(V)	1.5	Discharged at 100mA
Nominal Capacity(mAh)	1250	Discharged at 350mA to 0.8 Volt at 20 ± 2°C
Operating Temp(°C)	-40~60	
Typical Weight(g)	7.0	
Typical Li Content(g)	0.5	
Storage Temp(°C)	10~30	Battery self-discharge rate increases with the rise of environmental temperature and humidity, so recommended temperature at 5°C~30°C and humidity less than 70%RH
Shelf Life	15 Years	