



Visit our Website for a complete list of our products.
www.batteryholders.com
www.memoryprotectiondevices.com
We specialize in custom parts!
sales@memoryprotectiondevices.com

October 3, 2025

Introducing the 2 AA Surface Mount Battery Holder with strap cover.

MPD is introducing a low-profile, SMT-mount 2×AA holder designed for automated assembly. A separate snap-on (sold separately) keeps cells securely retained during vibration, shipping, and field use. BK-6284 and BK-6284-COVER

Pros

- **SMT assembly:** Compatible with pick-and-place and reflowable land patterns; reduces hand-solder steps and labor.
- **Lower profile & footprint:** Frees mechanical height compared to many through-hole cages.
- **Secure retention (with cover):** Better shock/vibration resistance; fewer field dropouts and shipping dislodgements.
- **Serviceable:** End users can replace cells without tools (or with simple screws, depending on cover).
- **Design flexibility:** Use alkaline or NiMH cells; series output suits 3.0 V (alkaline fresh) or ~2.4 V (NiMH) designs.
- **Inventory flexibility:** Optional cover = lower BOM on benign applications; add only when needed.
- **Cleaner cable-free design:** Board-level power, no leads or off-board holders to manage.
- **Aesthetics & branding:** Enclosed look with cover; helps meet consumer product expectations.



Cons (to plan for)

- **Thermal constraints:** Holders must be matched to the reflow profile/material rating; verify datasheet limits and avoid inserting cells until after reflowing.
- **Board stress:** Two AA cells add mass; use adequate pad area and mechanical keep-outs to control flex during drops.

Ideal applications

- **IoT & sensors:** Smart thermostats, leak/air-quality sensors, door/window sensors, PIR motion sensors, beacons.
- **Smart locks & access:** Residential locks, key safes, keypad modules.
- **Industrial/field gear:** Data loggers, asset trackers, handheld testers, meter interfaces.
- **Medical (non-implant):** Portable monitors, dosing aids, home-use diagnostic peripherals.
- **Retail & building systems:** ESL beacons, shelf talkers, occupancy counters, HVAC damper controllers.
- **Safety & emergency:** Alarms, strobes, battery-backup modules, remote call buttons.
- **Consumer devices & toys:** Remote controls, small audio devices, STEM kits, educational electronics.
- **Agri/utility:** Weather nodes, soil sensors, irrigation controllers.

Design & integration tips

- **Electrical:** Default series configuration yields ~3.0 V (alkaline fresh ~1.5 V×2) or ~2.4 V nominal for NiMH; size your regulator/LDO for both chemistries and brown-out thresholds (~1.0–1.1 V/cell knee for alkaline).
- **Mechanical:** Observe keep-outs for cover latch/screw bosses. For high-shock applications, specify the covered version and consider thread-forming screws if supported.
- **Assembly:** Use the recommended land pattern and reflow profile from the MPD datasheet; do not load cells until after all heat processes. If wave or hand soldering is used, maintain tip temps/time per spec.
- **Testing:** Provide accessible test pads near the holder for ICT/battery simulation; consider a temporary battery block or pogo fixture during production test.

Positioning snapshot (for marketing copy)

- **Why 2×AA vs. coin cell?** 5–10× more capacity, higher pulse current, better cold-temperature performance.
- **Why SMT vs. through-hole?** Faster automated assembly, lower labor/variation, sleeker industrial design.
- **Why optional cover?** Tailor retention to environment; pay for robustness only when needed.



Contact us for more details or samples:

Phone: (631)249-0001

Email: Sales@batteryholders.com