

POWER SYSTEMS

Power and Battery Systems: How LLI Keeps You Running

Every power component in the LLI ecosystem. Battery compartments, external power, and how to configure for your mission profile.

The Power Architecture

LLI uses a modular power system on the MH-1. Instead of locking you into a single battery type with a fixed compartment, the MH-1 accepts swappable power modules that change your battery format, capacity, and operational profile without tools and without modification to the housing. The MH-1 ships standard with the CR123A battery compartment. Additional compartments are available as accessories.

MH-1 Battery Compartments

Compartment	Weight	Battery Format	Price
Standard	23g	CR123A	Included
UBC	31g (+4g w/ AA cap)	CR123A, AA, AAA, Fischer	\$199
Standalone Fischer	15g	External power only	\$49
AA/AAA Cap (accessory)	Accessory	Adds AA/AAA to UBC	\$49

Standard Battery Compartment

The default configuration that ships with every MH-1. Runs on CR123A lithium batteries at 23g. CR123A delivers 3 volts with excellent energy density, performs well in temperature extremes (rated to -40 degrees F), has a shelf life of approximately 10 years, and provides consistent voltage output throughout the discharge cycle.

Universal Battery Compartment (UBC)

The most versatile power option in the MH-1 system. Weighs 31g and accepts CR123A batteries, AA batteries, AAA batteries, and connects to external power through the Fischer port built into the back of the compartment. Start a mission on CR123A, switch to AA or AAA when those run out, and plug into external power for sustained operations. All without tools, all without removing the housing from your helmet. The Fischer port is a military-grade circular connector that provides a secure, waterproof connection between the housing and an external battery pack. At \$199, the UBC is the single most impactful accessory purchase for MH-1 owners who want maximum power flexibility.

Standalone Fischer Compartment

The Standalone Fischer replaces your onboard battery compartment and dedicates the MH-1 entirely to external power. At 15g, it is 8g lighter than the Standard compartment and 16g lighter than the UBC. Designed for users who run external power exclusively and want the lightest possible housing configuration. At \$49, it is the most affordable compartment option.

LLBP: Low Light Battery Pack

LLI's dedicated external battery pack. Runs on either 2x AA or 4x AA batteries. Connects via Fischer or LEMO connector. Designed to sit on the counterweight pouch at the rear of the helmet, balancing the weight of the night vision system at the front. This counterweight positioning reduces neck fatigue during extended wear and improves stability during dynamic movement.

UH-1 and MH-14 Power

UH-1: AA battery standard with external power port. AA was chosen for global availability and cost. Delivers 25 to 90 hours depending on configuration.

MH-14: Single AA battery with 50+ hours of continuous operation. The most efficient power system in the LLI lineup relative to tubes powered. Two or three spare AA batteries provides enough power for a week of nightly use.

How to Buy

All LLI power accessories are available through the authorized distributor network including Custom Night Vision, GPNVGs, Nightfall Optics, Aurora Tactical Group, and MK4 Design.