HOUSING COMPARISON

MH-1 vs. UH-1: Which Housing Fits Your Mission?

Two articulating binocular housings. Same tubes. Same optics. Same core features. Different materials, different trade-offs, different price points.

Where They Are Identical

Both accept MX-10160 and MX-11769 format tubes. Both accept PVS-14 style optics (standard mil-spec, RPO, Boomslang 50-degree, Act in Black 50-degree). Both deliver 40-degree FOV standard and 50 degrees with wide-angle optics. Both provide manual gain control through a plug-in system with no soldering, compatible with 3-pin and EGAC tube configurations. Both include dual-power IR illumination. Both feature rotational pod shutoff, IPD stops, adjustable pod tension, and external power capability. Both carry a lifetime warranty.

If you are choosing between these two housings, the decision comes down to four factors: material, modularity, battery format, and price.

Factor 1: Material

MH-1: Aerospace-grade magnesium and titanium alloys, CNC machined. Housing: 152g (5.4 oz) in its lightest configuration.

UH-1: Engineered polymer with rigid metal bridge backer. Housing: 166g (5.86 oz).

The MH-1 is harder and more impact-resistant at the housing level. The UH-1 is heavier at the housing level and costs less. Note: the complete MH-1 system (552g) is lighter than the complete UH-1 system (577g) due to differences in internal architecture.

Factor 2: Modularity

MH-1: Full modular ecosystem. Split-to-mono capability via MH-14 adapters. Panning arm compatible (LLPA). Modular power system with interchangeable battery compartments.

UH-1: Binocular only. No split-to-mono. No panning arm support. Modular internal architecture for field repair, but power system is a single fixed compartment.

Factor 3: Battery Format

MH-1: CR123A standard compartment. AA or AAA via UBC accessory (AAA requires a separate cap). Fischer external power port available as a separate accessory.

UH-1: AA standard with external power port. Single compartment design. AA is cheaper, universally available, and better for international use.

Factor 4: Price and Color

MH-1: $1,999. Black, FDE, Ranger Green, Grey.

UH-1: $1,499. Black only. The $500 savings can redirect toward better image tubes.

Side-by-Side Comparison

Feature	MH-1	UH-1
Housing Price	$1,999	$1,499
Material	Magnesium + Titanium	Polymer + Metal Bridge
Housing Weight	152g / 5.4 oz	166g / 5.86 oz
System Weight (Std.)	552g / 19.5 oz	577g / 20.35 oz
Battery (Standard)	CR123A	AA
Battery (Optional)	AA / AAA via UBC	External power port
External Power	Fischer port (accessory)	Built-in port
Gain System	3-pin and EGAC	3-pin and EGAC
Split to Mono	Yes (MH-14 adapter)	No
Panning Arms	Compatible (LLPA)	Not compatible
Colors	Black, FDE, RG, Grey	Black only
FOV	40 deg / 50 deg	40 deg / 50 deg
Dual IR	Yes	Yes
Warranty	Lifetime	Lifetime

Decision Framework

Choose the MH-1 if:

You need split-to-mono capability. You want panning arm compatibility. You want color options beyond black. You prioritize metal construction for extreme-environment durability. You want the full LLI modular ecosystem. You plan to integrate with the MH-14 monocular system. You want a modular power system with interchangeable battery compartments.

Choose the UH-1 if:

You will always run a binocular configuration. You want to allocate more budget toward tubes and optics. You prefer AA battery commonality. You are purchasing in volume. You do not need color options.