

OWL

INTELLIGENT RADAR & IMAGING IN A SINGLE NODE.

RADAR DETECTS.
CAMERA VERIFIES.
ALL IN ONE PACKAGE.

The McQ OWL® combines micro-radar tracking and high-definition video capture into a single, fully integrated unit. Engineered to replace multi-component systems, OWL instantly turns detection into visual proof without complex setups or excessive power demands.

RESULTS

- Single-Unit Footprint
- Low Delay Target Verification
- Reduced SWaP-C Overhead
- All-Weather Day/Night Capture



AUTONOMOUS TARGET TRACKING & VISUAL PROOF

The OWL® is an all-in-one, sensor-driven surveillance solution designed for rapid deployment in remote, contested, or high-risk environments. By embedding an advanced micro radar directly into the camera housing, the system operates completely autonomously—detecting targets, rejecting foliage clutter, and sending real-time imagery or video only when a true threat is identified.



INTEGRATED MICRO RADAR

Onboard 24 GHz FMCW radar automatically tracks targets and rejects environmental noise, ensuring zero false triggers from blowing foliage.



EVENT-DRIVEN IMAGERY

Captures highly compressed, high fidelity images or 1080p video only upon radar confirmation, preserving bandwidth and drastically lowering overall power draw.



AUSTERE COMMUNICATIONS

Utilizes dynamic video compression and encryption to stream clear visual evidence seamlessly over low-bandwidth cellular, local, or satellite links.



SCALABLE ISR INTEGRATION

Operates as a standalone node or integrates directly into McQ's broader ISR ecosystem—cross-cueing with ground sensors and serving as a wireless communications bridge.

OPTIONS & OPERATIONAL FIT

McQ OWL® Tactical CAMERA KIT

SKU: OW-K9020

Communication: Terrestrial 900MHz wireless link

Battery Life: 3 Days

Form Factor: Under 1kg unit fits standard operator packs

MCQ OWL® GLOBAL CAMERA KIT

SKU: OW-9101

Communication: Iridium SBD

Battery Life: 1 day

Form Factor: Under 1kg unit fits standard operator packs



PURPOSE-BUILT FOR UNATTENDED PERIMETER & TARGET TRACKING

The McQ OWL® eliminates the logistical headache of running separate radar and camera nodes. By matching the radar's field of view directly to the high-definition optics, operators receive instant visual confirmation the moment a target enters the zone.

DAY & NIGHT DETECTION PERFORMANCE

Personnel Tracking: Micro radar detects and tracks human signatures beyond 50 meters, triggering instant optical capture.

Vehicle Tracking: Tracks moving vehicle signatures beyond 100 meters across a 48° horizontal field of view.

Night & Low-Light Imaging: Integrated 940nm non-visible IR flash provides clear night images out to 45 meters without giving away the unit's position.

MAXIMIZING THE McQ ISR ECOSYSTEM

A standalone camera captures imagery, but an integrated McQ tactical node delivers complete situational awareness. The McQ OWL® seamlessly bridges into our wider tactical ecosystem to combine micro-radar tracking, ground sensor cueing, and automated visual proof across a unified network footprint.

Cross-Sensor Cueing via RANGER®: Pair the McQ OWL® natively with McQ RANGER® ground sensors over the secure 900 MHz TNet local network to extend detection perimeters and trigger instant optical verification.

Scalable C2 & Cloud Control: Seamlessly export radar tracks, target data, and compressed video to cloud-based user interfaces, standalone server relays, or third-party tactical C2 systems.

Adaptive Bandwidth Management: Real-time variable video compression allows operators to dynamically adjust stream resolution to match available network throughput without interrupting mission flow