OverWatch™ Integration Kit (OWIK™)

About OWIK

The OverWatch Integration Kit (OWIK) allows teams to instantly network-enable nearly any sensor and push real-time video and data across any tactical network. Built on the proven DogBone processor that powers the OverWatch family, OWIK ingests digital or analog feeds from DSLR cameras, thermal optics, ground stations, standalone sensors, HDMI/DisplayPort devices, GoPros, and more. It then compresses, optimizes, and distributes that data over MANET radios, SATCOM, LTE, Wi-Fi, or laser transport. Its sensor-agnostic design allows operators to bring their own optics, integrate non-Tactical Assault Kit (TAK) legacy systems; and immediately share live ISR feeds across Android Tactical Assault Kit (ATAK), Windows Tactical Assault Kit (WinTAK), and Mission Command Host (MCH)—without servers, special infrastructure, or reconfiguration in the field.

How OWIK Supports the Mission

Surveillance and Reconnaissance — Delivers live, recorded, and snapshot video with instant alerts on movement or change with compact, concealable cameras.

FOB Perimeter Security — Creates a 360° security bubble with automated motion alerts and continuous day/night overwatch.

Asset Monitoring — Keeps eyes on critical targets 24/7.

Force Protection — Eliminates blind spots and warns of threats before they appear.

Change Detection and Alerting — Detects and flags movement automatically, alerting operators before the situation shifts.

Situational Awareness — Feeds live video and alerts into ATAK for a shared, real-time view of the battlespace.

OWIK turns virtually any sensor into a networked, real-time ISR asset, providing immediate visibility across the fight without adding complexity or gear. It ensures every element shares the same picture faster, tighter, and with better precision.

OWIK™ provides a rapid, flexible ISR multiplier that turns any camera or sensor into a networked node, enabling shared situational awareness across dispersed teams in minutes. The system's low-SWaP, rugged design ensures it can be carried and deployed by a single operator, while the OverWatch™ software-defined architecture automatically manages routing, bandwidth, and multicast distribution—even in contested or degraded networks. With universal connectivity, plug-and-play adapters—including the Aries PeaNut™ universal cable—and proven TAK-native integration. OWIK ensures teams can fuse, share, and act on real-time information from any sensor on the battlefield. This gives them a decisive advantage in reconnaissance, perimeter security, force protection, and dynamic targeting missions.

OWIK Features

Universal Camera Ports — Plug and play 99% of video into an OverWatch DogBone.

Tactical MANET Radio Compatible — Seamless integration with all major MANET radios.
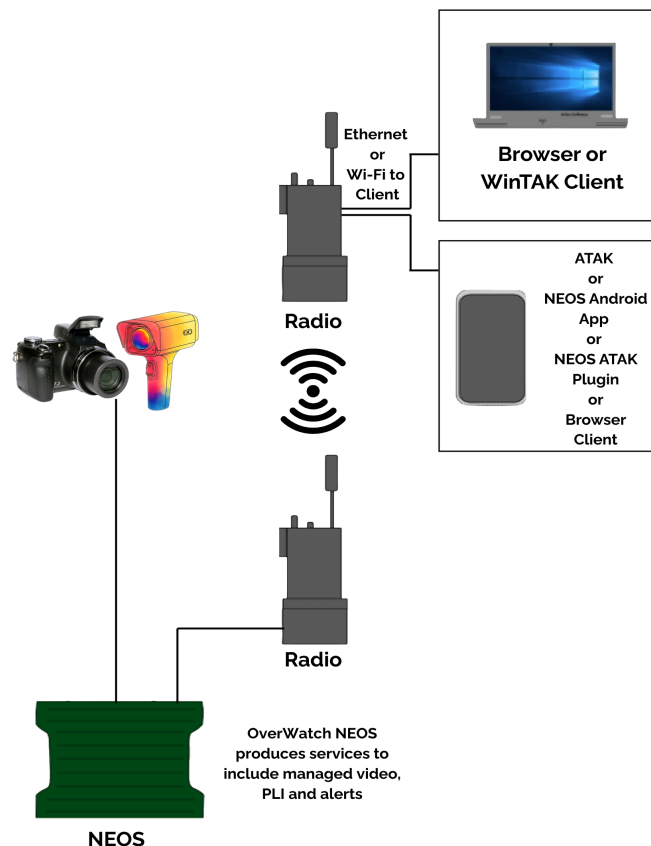
Data Network Compatible — SATCOM, LTE, Wi-Fi, laser data and radio compatible

Bring Your Own Optics — Provides cabling to connect to a broad array of video hardware sources: HDMI adapter cable, USB-C adapter cable and Aries PeaNut Cable.

TAK Enabled — Instant access to camera feeds and rapid video distribution via a user-friendly, field-proven alerting system that is viewable on tablets and mobile devices.

Low SWaP-C — Man-wearable ruggedized anodized aluminum enclosure; very small size and weight with low 5-volt power requirement.

EMCON — Avoids detection with zero Wi-Fi or Bluetooth emissions.

Ethernet or Wi-Fi to Client

Browser or WinTAK Client

Radio

ATAK or NEOS Android App or NEOS ATAK Plugin or Browser Client

Radio

OverWatch NEOS produces services to include managed video, PLI and alerts

NEOS

CIVILIAN	MIL-SPEC
Enclosure Dimensions: 3.24" x 3.5" x 1.0"	Enclosure Dimensions: 3.52" x 4.2" x 1.3"
Power Requirement: 5 volts at 3 amps	Power Requirement: 5 volts at 3 amps
Enclosure Weight: 184 grams	Enclosure Weight: 302 grams
Network: Ethernet Standard	Network: Ethernet NATO STANAG (Glenair)
Power: Barrel Adapter	Power: NATO STANAG (Glenair)
Video Input: USB A Standard H.264, MJPEG, AVC, Analog (w/ Aries Peanut Cable)	Video Input: USB NATO STANAG (Glenair) H.264, MJPEG, AVC, Analog (w/ Aries Peanut Cable)
OS: Linux Based Aries OS	OS: Linux Based Aries OS
Board: Aries Board	Board: Aries Board
EMCON: No Wi-Fi or Bluetooth hardware or software	EMCON: No Wi-Fi or Bluetooth hardware or software
Output Video Stream: MJPEG over HTTP via TCP	Output Video Stream: MJPEG over HTTP via TCP
Video Quality: Adjustable 1 - 99% compression	Video Quality: Adjustable 1 - 99% compression
Video Framerate: Adjustable 1 - 20 FPS	Video Framerate: Adjustable 1 - 20 FPS
Video Resolution: Adjustable up to 360 x 480	Video Resolution: Adjustable up to 360 x 480
Full Remote Settings Customization	Full Remote Settings Customization
Alert Trigger Threshold: Adjustable 1 - 5000 pixels	Aert Trigger Threshold: Adjustable 1 - 5000 pixel:
IP Rating: Not Qualified	IP Rating: 68
TRL: 9	TRL: 9
Operating Temp: -40C to 105C	Operating Temp: -40C to 105C