Sigma Defense

CheckPoints™

About CheckPoints

CheckPoints is a compact, dual-feed surveillance kit derived from our proven OverWatch System — purpose-built to give small units instant 360° situational awareness without adding manpower or complexity. Operators can rapidly deploy visible and thermal cameras from the CheckPoints kit, establishing a local security network that integrates directly with Tactical Assault Kit (TAK) devices to deliver live full-motion video, blind-side visibility, and silent vibration alerts. With CheckPoints, a single operator can monitor rear and flank sectors that would otherwise require an additional soldier—enhancing force protection and operational efficiency in dynamic environments.

How CheckPoints 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 Android Tactical Assault Kit (ATAK) for a shared, real-time view of the battlespace.

CheckPoints extends a team's vision beyond line of sight—delivering instant, autonomous rear and flank security without adding operators. It gives commanders persistent awareness of their perimeter so they can move, observe, and act with confidence in any environment.

The CheckPoints™ plug-and-play design automatically connects to any tactical radio, SATCOM, LTE, or Wi-Fi network, eliminating setup time and configuration burdens. Supporting multiple camera types—including FLIR Boson thermal, fisheye, and zoom optics—CheckPoints provides motion detection, geospatial tagging, and automated alerting, all at low power and weight. The result is a lightweight, network-enabled perimeter defense capability that extends the commander's eyes and ears at the edge—maintaining persistent watch, detecting threats early, and protecting the team without slowing the mission.

CheckPoints Features

Dual Camera Ports — Two cameras can be operated simultaneously with two input ports provided on the CheckPoints DogBone.

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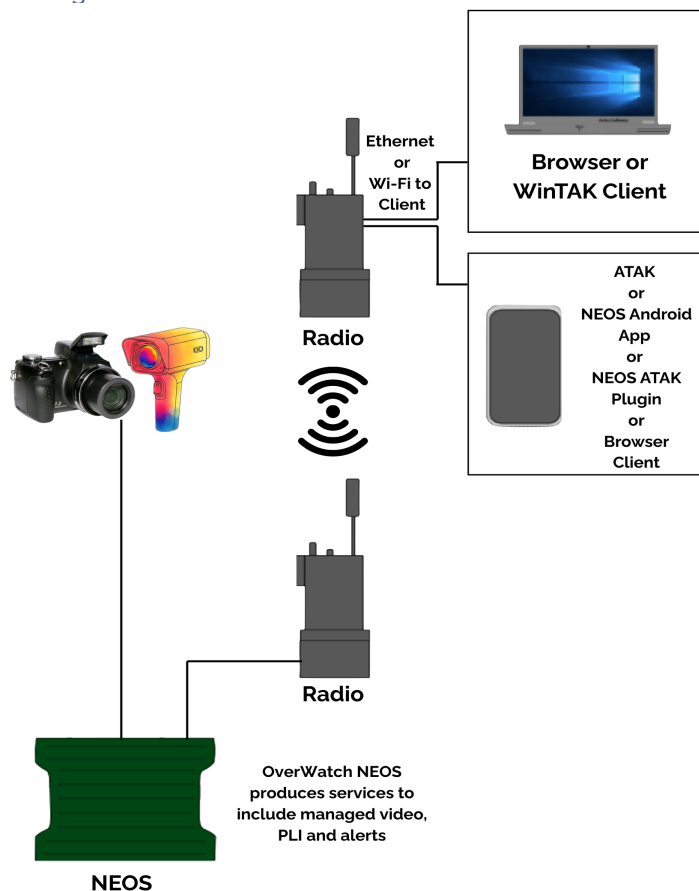
Data Network Compatible — SATCOM, LTE, Wi-Fi, laser data and radio compatible

Four Cameras — The CheckPoints Kit comes with a full set of cameras (3 visible, 1 thermal) and additional lenses (telephoto, 4mm, fisheye) for dynamic viewing.

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

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

Radio

Browser or WinTAK Client

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