



Sentinel™ Vision

AI Open-Carry Weapons Detection

Overview

First Responder Technologies' Sentinel™ Vision Smart AI Camera has been developed to provide fast and accurate situational awareness – when it matters most.

The all-in-one solution with the computing and detection at the edge allows for fast detection of weapons and sending of notifications. With end-to-end features and no additional hardware or software required, this truly is an out of the box solution.

The detection of weapons is becoming more and more important.

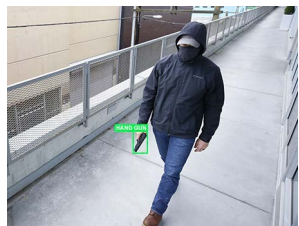
Sentinel™ Vision aims to prevent attacks and protect public or private spaces.

Key Operational Advantages

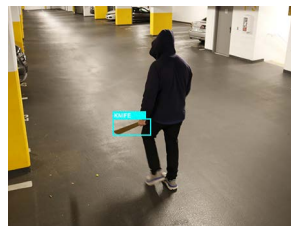
- Detects openly carried Handguns, Long Guns, and Knives.
- Gives autonomous alerts via Sentinel™ Threat Management System.
- Delivers alerts and video to any connected device.
- Minimal latency.
- Computing is done at the edge, eliminating the cost of large, ongoing cloud computing.
- Delivers precise position and status of threats.
- Reduces demands on manning.



Long Gun Detected



Handgun Detected



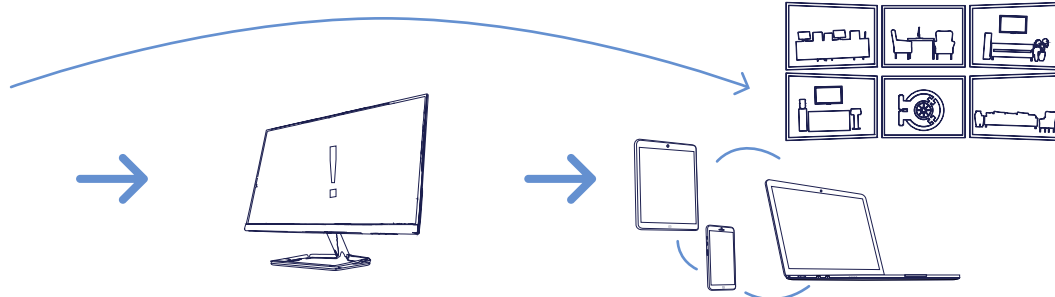
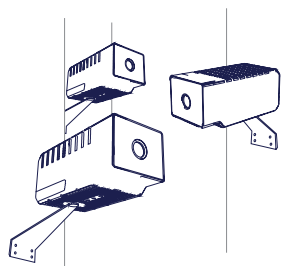
Knife Detected

Key features

- Edge based computing = minimal lag, fast identification
- High end 4K video
- Day and night operation
- ONVIF compliant
- On device storage
- Advance video analytics
- 5G ready, and cellular connectivity
- No cost over-the-air updates to AI and analytics
- Privacy by design – data stays with you

Market applications

- Residential
- Places of worship
- Retail
- Commercial
- Education campuses
- Entertainment venues
- Public spaces



- Single or multiple cameras per site setup
- Easy to scale
- No need for NVRs or DVRs

- Threat Management System
- Use on any device (desktop, Android, iOS)
- Configure, manage and operate

- Multiple alert options
- Minimal lag due to Edge computing

Features

Analytics	<ul style="list-style-type: none"> • Weapon Detection [Handgun, Long Gun, Knife] • Motion Detection • Periodic updates with new and improved analytics
Computing	<ul style="list-style-type: none"> • Edge-based AI computing • 384 GPU core/48 tensor core
Resolution	<ul style="list-style-type: none"> • 4K (3840 x 2160) @ 30FPS • Selectable
Image Sensor	<ul style="list-style-type: none"> • 8 Megapixel • 1/2.8" Progressive • CMOS Rolling Shutter • 120dB HDR
Lens	<ul style="list-style-type: none"> • Fixed (f=2.8mm) • IR Cut Filter • 120°(D)/102°(H)/56°(V) • F1.8
IR	<ul style="list-style-type: none"> • Multi, High-Intensity IR LED • Up to 15m range*
Durability	<ul style="list-style-type: none"> • IP66* for indoor/outdoor use
Connectivity	<ul style="list-style-type: none"> • 5G (ready) or 4G LTE • WiFi • RJ-45 Ethernet
Onboard Storage	<ul style="list-style-type: none"> • 512GB • Up to 10 days @ 4K/30FPS • Up to 36 days @ 1080p/30FPS
Audio	<ul style="list-style-type: none"> • One-way audio recording
Power	<ul style="list-style-type: none"> • 12V DC Barrel Jack • PoE via CAT5e
Dimensions	<ul style="list-style-type: none"> • 183mm x87mm x80mm

* Feature pending outside certification/validation

Simple to install

- Mount and power on – only PoE connection required
- Configure camera/settings in minutes via Sentinel TMS or locally-hosted browser
- No additional hardware/software needed
- No port forwarding or network changes required

Easy to use

- Configure Alerts and notifications
- Minimal training or expertise required
- Updates over-the-air
- Multiple access levels

Ready to scale

- From single camera to multiple
- One site or many locations
- Integration with Sentinel™ Threat Management System (out of box)

IoT Architecture

- No-cost updates (firmware, analytics & AI updates)
- Computing is done at the edge, eliminating the cost of large, ongoing cloud processing

Camera designed and manufactured by First Responder Technologies Inc.

How It Works

1. The AI will detect openly carried weapons.

2. Screens objects and not the person (privacy by design).

3. Weapon is tracked through range of vision (single or multiple cameras).

4. Alerts are issued into the Sentinel™ Threat Management system.

5. Real time messages and actions are then invoked (pre-set or customised routine).

6. Threat is intercepted and contained.

Sentinel™ Threat Management System (TMS)

TMS is First Responder Technologies' cloud-based management software. The simple, clean user interface provides access and management of all cameras, analytics and video storage.

- Sentinel™ Vision – download or use in browser
- Highly customizable central management hub and control centre
- Live monitoring of any connected Sentinel™ Vision camera
- Setup and maintain all cameras, locations and alert procedures
- Video analytics and remote monitoring interface
- Access on desktop or mobile, or any connected device
- Monthly subscription

