SWAD is a passive, stationary, electro-optical system protecting high-value infrastructure and strategic areas by providing warning upon detection and direction of fire shot from small rifles, carbines, sub-machine guns and other small arms.

- Passive, IR-based (infrared) detection
- Multiple & simultaneous threat detection
- Wide angular coverage
- Day and night operation
Overview

Upon detection, SWAD analyzes the small arms fire patterns, duration and intensity, and classifies the type of weapon. Utilizing sophisticated imaging and processing techniques, SWAD locates the precise flash source, assisting in identifying the shooter location for fast and efficient threat-source elimination.

SWAD simultaneously detects multiple small arms/sniper fire sources, day and night, at long range, and with high precision.

SWAD consists of a set of wide Field Of View (FOV) and high frame rate IR staring sensors, a processor, a command & control unit with a real-time IR imaging display - and interfaces with a 3rd party sniper end-station comprised of an electrical pan & tilt for slewing a day/night camera and/or a gun.

Main Features

- Weapons detected: rifles, carbines, sub-machine guns, shotguns and other small arms
- High probability of detection including for a single shot
- Low false alarm rate
- High directional accuracy
- Wide angular coverage
- Low sensitivity to adverse weather conditions
- Real-time imaging display
- Integration with additional modules allowing automatic countermeasure activation
- Automatic pan & tilt slewing towards shooter location
- Comprehensive Built-In-Test (BIT)

Performance

- Detection range of hundreds of meters
- Angular coverage (for a single sensor) - 130° in azimuth and 25° in elevation (x number of sensors)
- Directional accuracy - better than 1° in azimuth
- Fast reaction time - better than 1 sec