



## APPLICATIONS

Fusion is an automated real-time sniper detection system. Custom Manufacturing & Engineering™ (CME™) has developed this product by fusing sensory data from multi-spectral sensor suite. Fusion provides threat awareness and targeting information for Military Operations, Law Enforcement, Border Defense, and Homeland Security.

## Description

A sniper's greatest asset is their ability to attack while remaining hidden. When fired upon, the target force is immediately faced with the problem of determining the location of the attacker. Locating Snipers is difficult because snipers fire their weapon from behind cover, and may move to a new prepared position within seconds of firing a shot. The Fusion system overcomes the sniper's advantages by using multi-spectral analysis of his muzzle flash to rapidly determine range, bearing, and elevation to the sniper's location.

When a sniper fires his weapon, Fusion instantly provides visible and audible alerts to the target force, and presents a targeting solution in less than two seconds. The solution may be broadcast to dismounted forces operating near the Fusion system, or relayed to a command post via a wireless interface. Additionally, the sniper location is lased to facilitate immediate return fire.

The Fusion system may be vehicle mounted for convoy security, or pole mounted for perimeter defense. When vehicle mounted, the targeting laser remains fixed on the sniper's location as the vehicle moves.

## Key Features & Benefits

- Rapid detection of sniper firing events and targeting of sniper
- Tracking event location while vehicle moves to facilitate targeting return fire
- Determines sniper location (azimuth, elevation, distance) by fusing the outputs of all sensors.
- Hostile location is reported in absolute coordinates (lat/lon or MGRS) as determined by GPS and electronic compass
- Determines line of bearing (LOB) from vehicle to sniper location
- Correlates LOB, distance and elevation data provided by the acoustic sensor suite with LOB data and elevation angle from electro-optical sensors to reduce false alarms
- Visible camera overlay of event location
- Pan tilt/laser designator with motion compensation
- Wireless from fusion server to GUI via 802.11 WiFi
- Visual and audible alerts trigger upon sniper detection

