

## **Introducing Concealed Weapons Detection**

- Improved security with high accuracy
- Fast single-file throughput
- Use cutting-edge multi-sensor technology to mitigate catastrophic risk

Built to detect a wide range of mass casualty weapons, this system passes the Federal Standard for accuracy and is 10X faster than legacy metal detectors. The system uses multiple sensors to both detect a threat, as well as identify and then ignore harmless personal items, so that people can walk-through without removing phones, watches, belts, batteries, and other personal items. The sensors include magnetometer, induction, lidar, thermal, visual camera, and machine learning technologies.

The system is designed to scan one person at a time, walking at normal speed, through the pillars and towards the thermal camera. The maximum number of people is about 1 per second, or 3,600 people per hour as the maximum flow rate. The system can be configured to show "Clear", if nothing is detected and show and say "Not Clear", if the algorithm detects a possible weapons. This alarm can be Auditory, Visual, and the alarm notification can be sent immediately to those who need it wherever they are: Security Operation Center, mobile phone App, computer-based browser, Video Management System, Access Control, or integrated with other business software.



34 inches is optimum width. 30" to 38" range.

- High accuracy of mass casualty targets
- No divestment for high throughput
- Low nuisance alarm rate using multi-sensor and machine learning
- Stand alone or networked through wifi or network cable
- Silent Mode for non-cooperative use-case
- Not harmful to humans

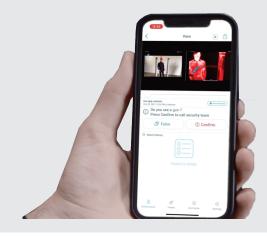
Use cutting edge technology to improve safety, operational efficiency, and the security experience.



## Athena Concealed Weapons Detection: New Product Solution Brief







## **Mitigating The Risk Of Mass Casualty Weapons**

The Athena Concealed Weapons Detection System is designed for a wide wariety of use-cases:

» Venues

» Events

» Places of Worship

- » Political Functions
- » Board Meetings
- » VIP Entrances

The default security level sensitivity setting on the system is expected to find mass casualty weapons such as handguns, rifles, shotguns, and many bombs. This default setting passes the Federal Standards test 100% of the time. This rigorous testing found the Federally defined target piece, which represents a handgun and is called the "AM7" definition, 100% of the time, in many orientations, from high to low. The testing is rigorous to ensure a highly capable design.

The customer has the option to increase or decrease the sensitivity according to the use-case and customer goals. The system uses security levels corresponding to an international standard. Customers get to consider what the optimum trade-off is. The default setting is to maximize the likelihood of finding the "AM7" type of handgun (or larger style), while also discriminating and not alerting on mobile phones, keys, or common personal items. In order to be able to catch the AM7 Target handgun barrel of hardened steel 100% of the time, and also allow the free flow of common person items is the goal. In terms of the nuisance rate of false alarms, we have observed that in the average crowd, a rate of about 5%. So in a group of about 100 people going through, we have averaged about 5 that set off the alarm (for a range of reasons) that do not have a weapon.

## **Best In Class Approach**

**Reduce the burden on security team:** Personnel and the human factors of checkpoint security need augmentation with the proper tools.

**Improve the security experience:** High flow rates of 10x faster than legacy metal detection are less intrusive, and reduce time spent waiting in line.

**Combine Other Athena Products:** Combine Concealed Weapons Detection with both Temperature Detection, Symptom Screening, and visual gun detection at distance for layers of security.

