ULTRA

Urban Security
Concept of Operations

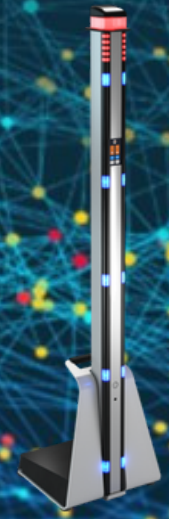metrasens

CONTENTS

This Concept of Operations Guide will provide you with a reference of the security advice of the UK Government, an overview of traditional screening methods, and Metrasens Ultra screening methods, to help you identify the solution that best serve your security and safety needs.

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ULTRA
INTELLIGENT DETECTION STARTS HERE

THE FUTURE OF FULL-BODY SCREENING. TODAY.

Metrasens Ultra is the most advanced, efficient, and flexible threat items detection system. Powered by Metrasens' Xact ID technology, Ultra is designed to become more intelligent as new risk profiles emerge through our state-of-the-art sensor technology, advanced proprietary algorithms, and artificial intelligence. Our technology is passive and safe, even for those that traditional security systems may not screen due to health reasons such as pacemakers or pregnancy.

Ultra can utilise remote management of the system via API, which can assist in developing operational statistics and event logging.

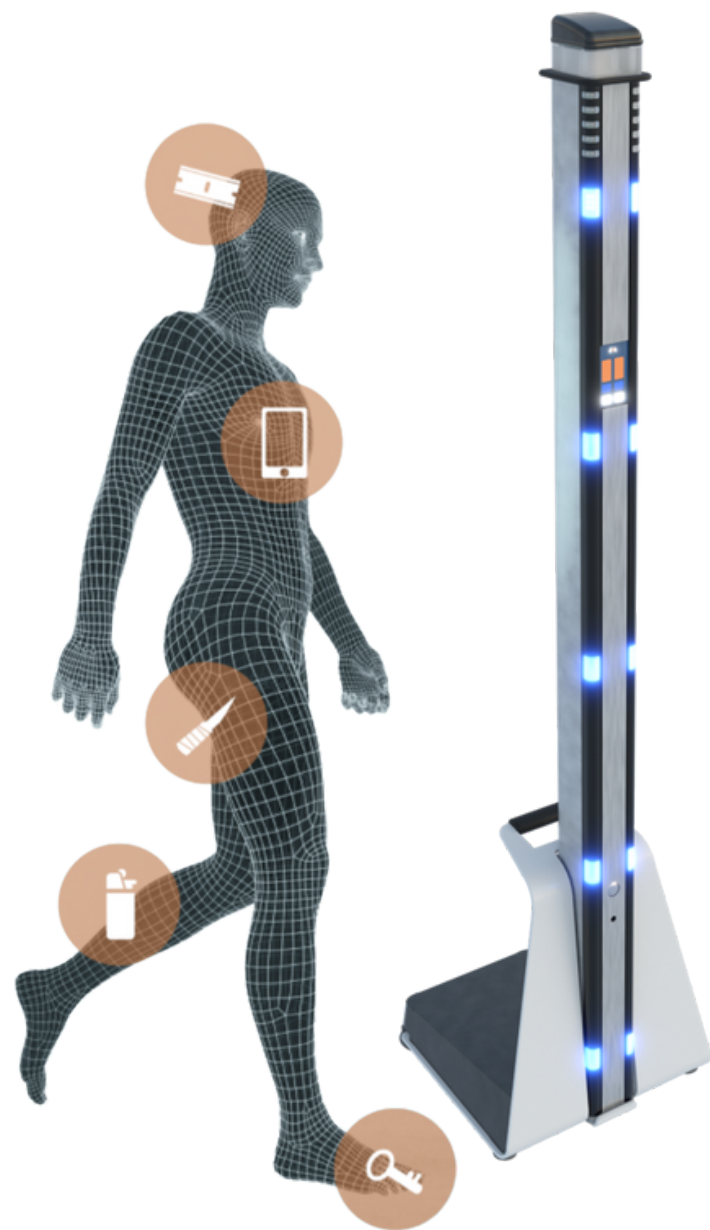| HIGHLY SENSITIVE AND PRECISE	SMART	FLEXIBLE	EFFICIENT
Ultra's 5-zone location identification and enhanced lower-body capabilities allow you to detect dangerous contraband with precision.	Powered by Metrasens Xact ID technology platform, Ultra becomes more intelligent over time as new contraband profiles emerge.	Ultra is PORTABLE and VERSATILE. It can be used wall-mounted or standing, indoors or outdoors, all around the facility or in one static location.	Ultra allows you to screen more people faster, in less time and with less interference, making it the most efficient detection system in the market.

LEARN MORE ABOUT ULTRA!

To schedule a product demo, contact Mariam Zare, Director of Sales, at mzare@metrasens.com.

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DETECTION
- Head-to-toe, whole-body scan
- Detects all ferrous items, including cell phones, firearms of all sizes, bladed weapons and IEDs
- 5-Zone location identification
- ignores non-ferrous metals, such as jewellery and implants
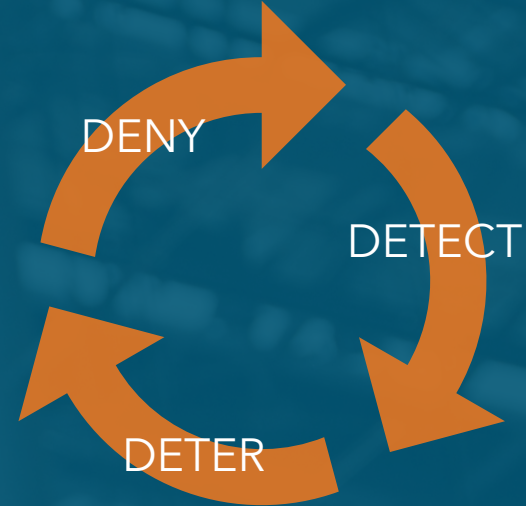
DEPLOYMENT VERSATILITY
- Portable and Battery-operated (16 hours of use on a 3-hour charge)
- Wall-mounted of free standing
- Reporting, data logging, and PSIM integration included
- IP65-rated, rugged design
- Use indoor or outdoor

EASY TO USE
- Deploy in less than 30 seconds
- Requires no calibration
- Screens 30-40 people per minute
- Touch screen display and user-friendly interface

FUTURE PROOF
- Secure audit trails enable retrospective analysis of all settings and time-stamped events
- Cyber-secure network interface allows remote management, threat-level defined settings and event analysis

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UK GOVERNMENT
SECURITY ADVICE

In the UK, the Centre for Protection of National Infrastructure (CPNI) provides practical security guidance to venues and promotes a three-part approach for hostile reconnaissance.

DENY

Deny focuses on making it as hard as possible to perform hostile reconnaissance on the venue. Reconnaissance may be performed away from the venue by looking for publicly available information which may be useful. For example, floor plans and 'Street view' style imagery of the venue on the internet. The venue should review what information is easily obtainable which may be useful for hostile reconnaissance and take measures to remove or restrict this information. Reconnaissance can also be performed in person at the venue and will usually include surveying the different entry and exit points, looking at CCTV, access controls and security presence to identify potential weaknesses. They may attempt to gain access to restricted areas, try and remain hidden/out of view and could try and conceal objects on themselves.

DETECT

Detect is about setting up security measures that focus on detecting suspicious people and activities. This can be through trained security staff and well-positioned CCTV with control room operators proactively looking for suspicious activities.

Customer-facing staff also have a very important role to play in detection. It is important that are trained, have effective equipment, are well supported, and have an effective reporting and review system for anything they may spot.

DETER

Deterrence is primarily achieved through coordinated promotion of protective security provision to the hostile that results in the perception and assessment that the reconnaissance or the attack itself will fail. Having effective detection systems can help deter aggressive incidents.

Simple messaging can deter hostiles, and inform, reassure, and help recruit public and staff to assist with detection efforts.

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TRADITIONAL SCREENING METHODS

PAT DOWN SEARCH

Effective and low-cost method for locating hidden items on a person, but physically invasive and less efficient, as it requires separate staff for males and females.

- Not a pleasant experience for visitors or screeners.
- Not Covid-19 compliant.

HAND-HELD METAL DETECTORS (HHMD)

Low-cost screening method for locating hidden metallic items on a person. It is slow and laborious as it requires at least 90 seconds per person to conduct an effective search. Handheld metal detectors have proven ineffective as a primary search tool.

- Not a pleasant experience for visitors or screeners.
- Not Covid-19 compliant.
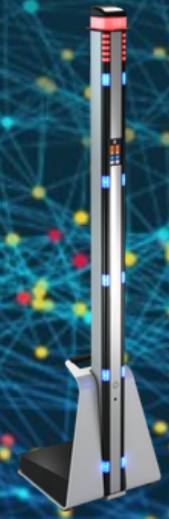- Requires complete divestment of metallic objects.

WALK THROUGH METAL DETECTORS (WTMD)

Conventional WTMDs require the public to divest all possessions as they don't differentiate between harmless metallic objects such as watches, coins, and mobile phones. Due to incomplete removal of non-harmless metal objects, 25% of people will require a secondary screening. This significantly slows down throughput and creates long queues.

- Bulky and visually intimidating to the public
- Requires complete divestment of metallic objects.

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ULTRA SCREENING METHODS

Metrasens Ultra is a truly versatile system that can screen individuals in various ways, depending on your individual venue preferences, needs, and the threat items you are trying to detect. Our team of security experts is here to provide you with a customised implementation plan designed for your specific needs.

1. 360-DEGREE TURN

This method will find the smallest items down to items such as pins, needles, small pieces of razors, recording & transmitting electronic devices, and internalised electronic items. The subject performs a full 360-degree turn in front of the device which takes 5 seconds to complete; this gives a complete full-body search without any physical contact, respecting the individual's physical space.

2. WALK PAST

The walk past method can be implemented with one or two Ultra poles, depending on your specific security needs. It provides a fast and simple way to screen individuals for restricted items. This method can be used to easily find phones, knives & guns, as well as other smaller items.

3. FREEWAY

The Freeway method is designed for high-footfall events and venues and venues that implement a clear bag entry policy. The poles are set up to look for more significant threat items, such as guns, large knives, zombie knives, and machetes. Users must hold out phones/metallic items so the guard can visually see what is being brought into the venue and walk past the detector without stopping or having any physical form of search.

FREEWAY MODE ROI VS. WALK THROUGH METAL DETECTION SYSTEMS

MSU Stadium
Guest Count: 61,337

✗ Option 1: Walk-through Metal Detector
- 30 lanes open
- 10 guests per minute/per lane
- minimum time for screening: 203 minutes
- Staff required: 2 per lane = 60 staff positions
- Staff cost at $20/hr. = $4,200

✓ Option 2: Ultra Freeway Mode
- 10 lanes open
- 50 guests per minute/per lane
- minimum time for screening: 122 minutes
- Staff required: 2 per lane = 20 staff positions
- Staff cost at $20/hr. = $800

4. SELF-SERVICE METHODS

These self-screening methods are designed to be used in environments that want to implement a no-touch, efficient, and effective screening method that is customer-friendly and non-invasive, removing the need for cross-gender searching, reducing staffing needs and improving customer satisfaction.

4.1 TRADITIONAL SELF-SCREENING

Operation
- Visitor places ALL electronics, keys, etc in the tray on divestment table.
- Guard checks items and moves tray to far side of table
- Visitor then walks to end of table, passing right through the 80cm screening channel
- Picks up belongings once clear
- Guard moves tray back to start

80cm wide active Screening Channel

Ultra, set to level 3

Space required
- Width: 1m for guard location, then 70cm for table width, then 80cm for screening channel and 60cm for Ultra base = 3.1m
- Length: 1m before Ultra and 1m after, so a 2m table
- TOTAL = 3.1m x 2m = 6.2 sq m
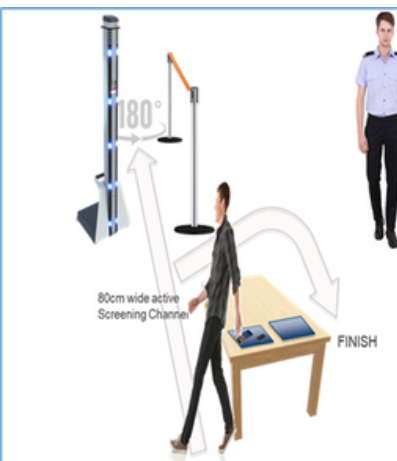
4.2 WALK AROUND SELF-SCREENING

Operation
- Visitor places all electronics, keys, etc on the divestment table.
- Then walks around the front of the table to be screened.
- Picks up belongings from other side once clear

Note: When threat level is High, can introduce a 360° turn in front of Ultra to increase detection level to almost 100% of threat items

Tensa-barrier line

80cm wide active Screening Channel

Ultra, set to level 3

Space required
- Width: 1m walkway each side of table, then 70cm for table width = 2.7m
- Length: 1m table and 1m at end of table for Ultra, screening channel and tensa
- TOTAL = 2.7m x 2m = 5.4 sq m

4.3 OUT & BACK SELF-SCREENING

Operation
- Visitor 1 places ALL electronics, keys, etc in the tray on divestment table.
- Visitor 1 then walks to end of table, passing right through the 80cm screening channel
- Turns 180° and returns around the other side of table
- Picks up belongings once clear
- Visitor 2 has already divested at Start position and is ready to screen

180°

80cm wide active Screening Channel

FINISH

Ultra, set to level 3

START

Space required
- Width: 40cm for table width, then 80cm for screening channel and 60cm for Ultra base = 1.80m
- Length: 1m before Ultra and 1m after, so a 2m table
- TOTAL = 1.80m x 2m = 3.6 sq m

METRASENS

We are the world's leading provider of advanced detection technologies that, combined with tailored solutions, address the deficiencies in conventional screening methods

OUR APPROACH

Our approach is holistic and consultative, helping organizations focus on the safekeeping of people in their environments, from identifying security and safety gaps to customised implementation and training plans that are fit for purpose.

OUR TEAM

Look to our proven team of professionals with decades of collective experience in magnetic detection technologies to provide innovation purpose-built to improve safety and security worldwide.

OUR TECHNOLOGY

We are experts at distilling complexity into simplicity to create revolutionary products that are effective, flexible, and easy to use.

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