

# THRUVISION



## 81 Series

BROCHURE | [THRUVISION.COM](http://THRUVISION.COM)

# PASSIVE TERAHERTZ PEOPLE- SCREENING CAMERA



We are proud to introduce the 81 Series. This is the latest generation of industry disruptive people security screening technology.

The 81 Series comes in four models and its passive Terahertz camera technology is at the forefront of innovation.

# BENEFITS

## TREAT SUBJECTS WITH RESPECT

No physical pat-down of the subject is required.

## RELIABLE

Built in redundancy and resilience supports mission critical operations.

## DETECTS ALL MATERIALS

Clothing, liquids, electronics, tobacco, foodstuffs and paper

Guns and bladed weapons

Explosives

Drugs

## FULLY INTEGRATED PLATFORM

All new modular design with integrated touchscreen control delivers a compact, mobile and unobtrusive solution with exceptional ergonomics for quick and easy deployment in a wide range of screening operations.

Battery powered option for up to 4 hours operation away from mains power.

## RESPECTFUL OF PRIVACY

Cannot distinguish age, ethnicity or gender, and complies with GDPR.

## HIGH THROUGHPUT

Screen up to 1,800 people/hour depending on ConOps and camera model.

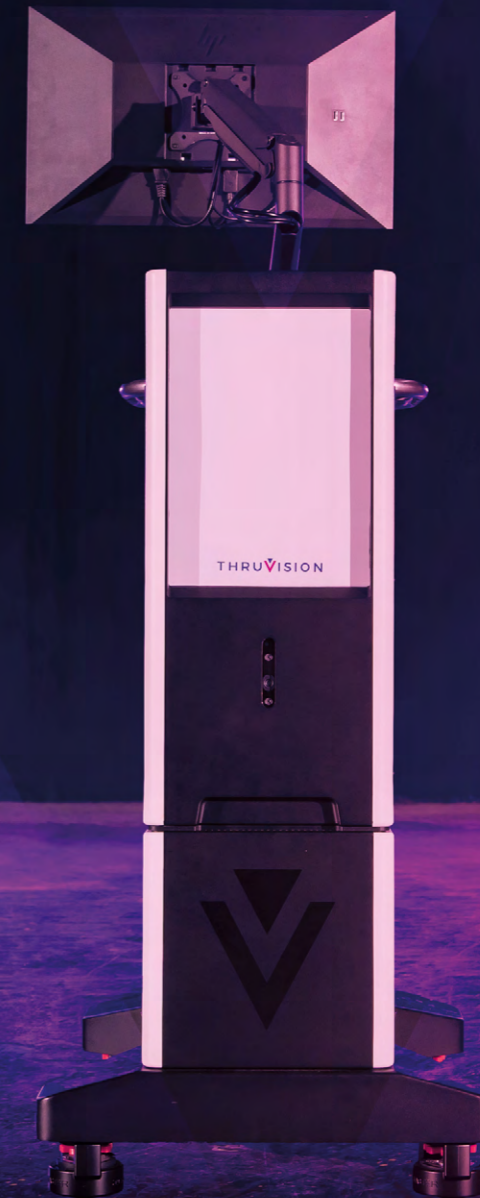
## SAFE FOR EVERYONE

Passive screening technology, safe for everyone including pregnant women and those with medical implants.

Detection-at-Range enables safe distance screening.

## VISUALISE THE THREAT

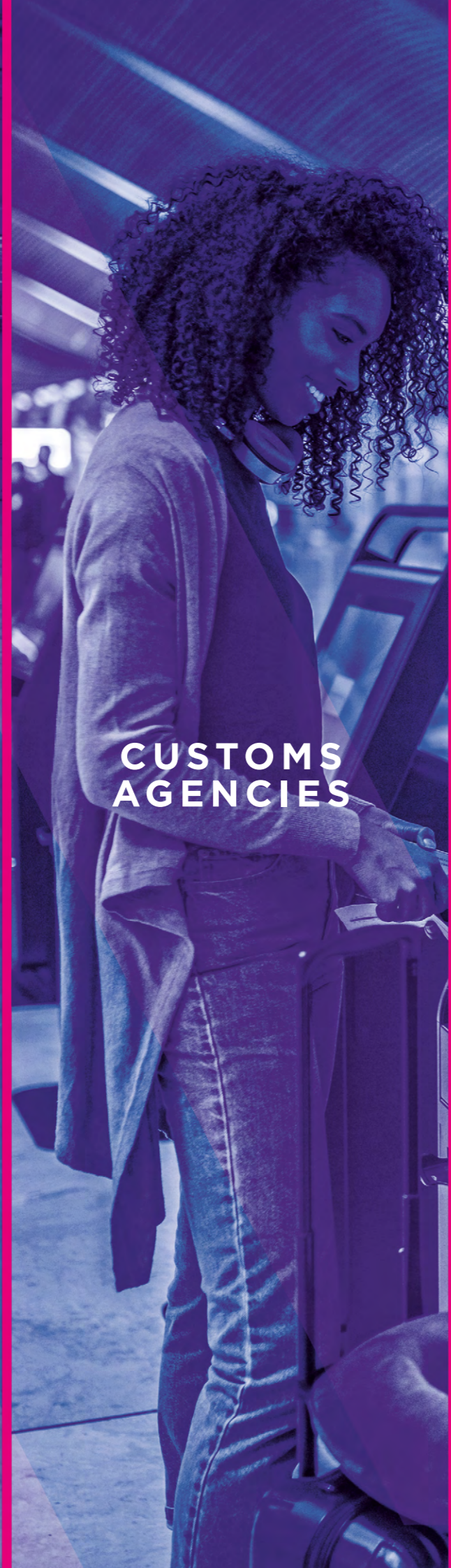
Shows concealment size, shape and location to allow rapid decision making without the need for pat-down.





**RETAIL  
DISTRIBUTION**

**5**



**CUSTOMS  
AGENCIES**



**PRISONS**



**ENTRANCES**



**AVIATION**

**6**

# OPERATIONAL USAGE CONCEPTS

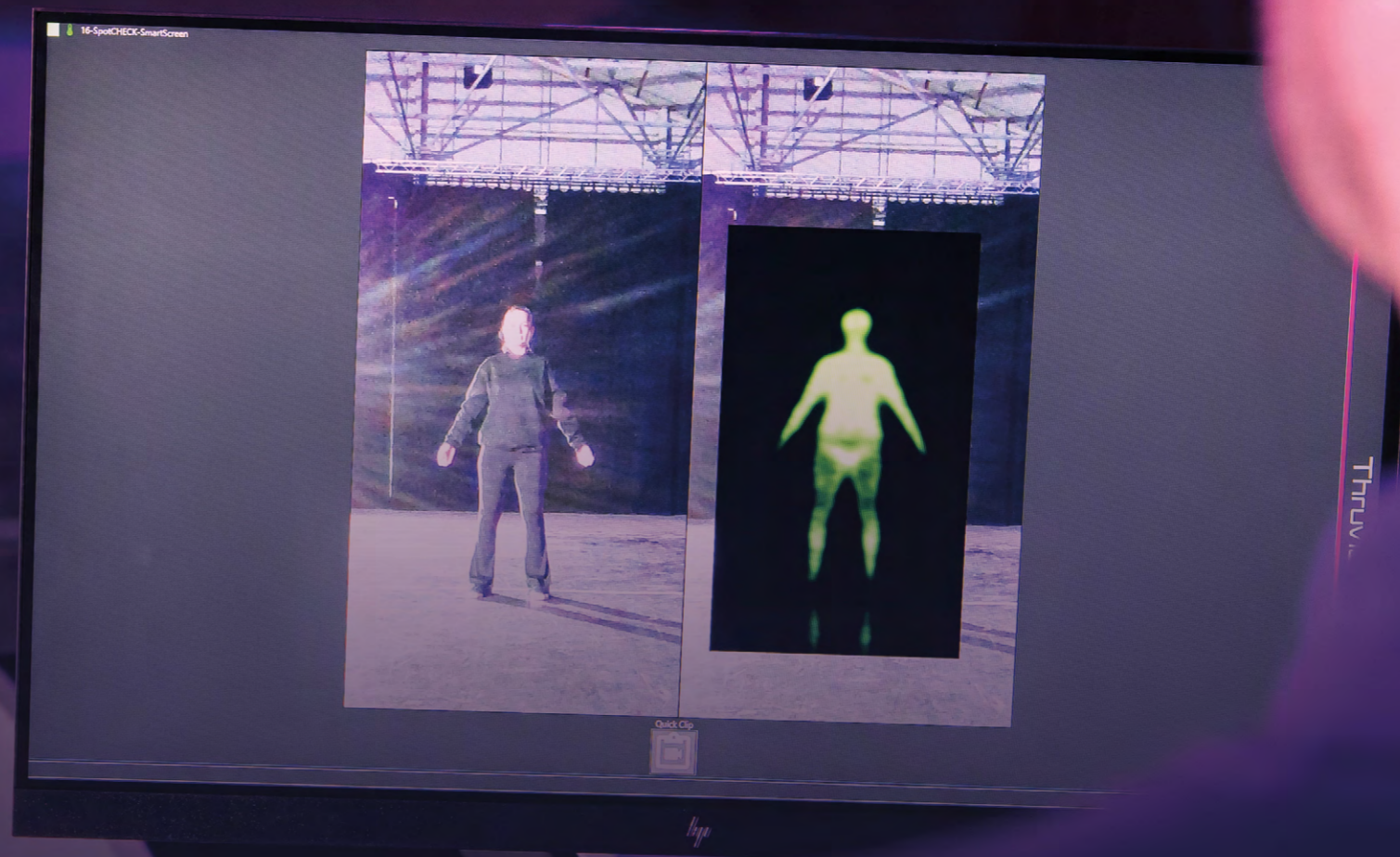
**SpotCHECK**

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**WalkTHRU**

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**WalkTHRU PLUS**



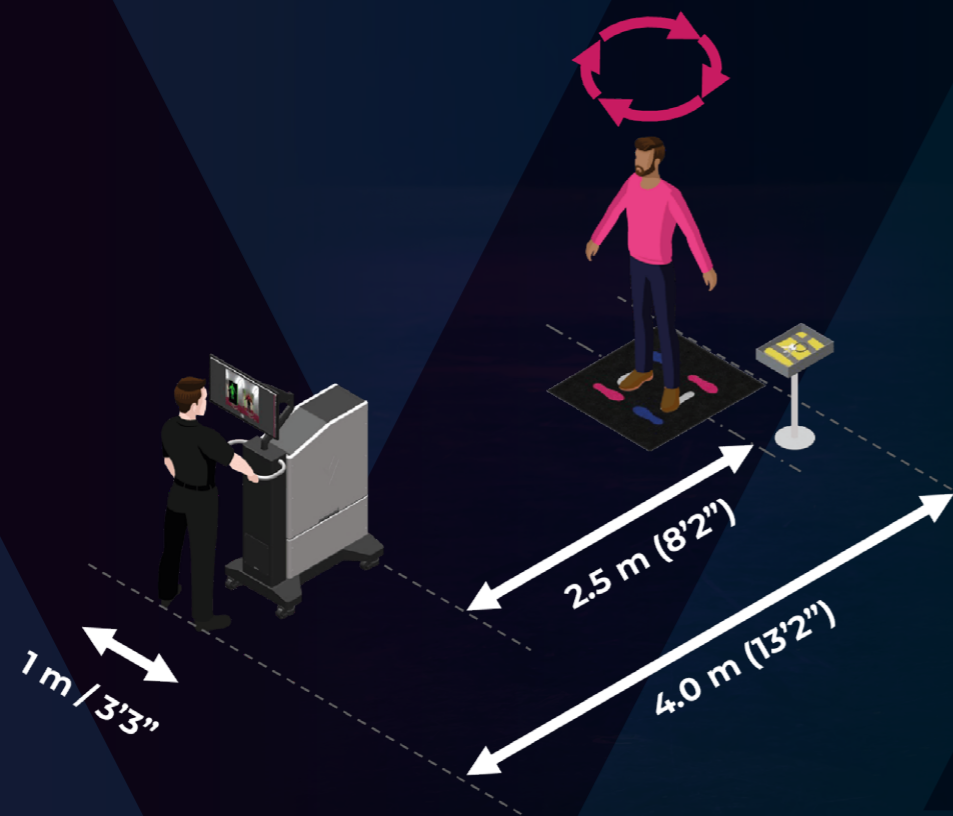
# SpotCHECK

UP TO 300  
PEOPLE/HR

1 CAMERA

Prioritise detection performance to screen for the smallest items.

Subject makes four 90° turns to screen full body, pausing for 2-3 seconds at each point.



# WalkTHRU

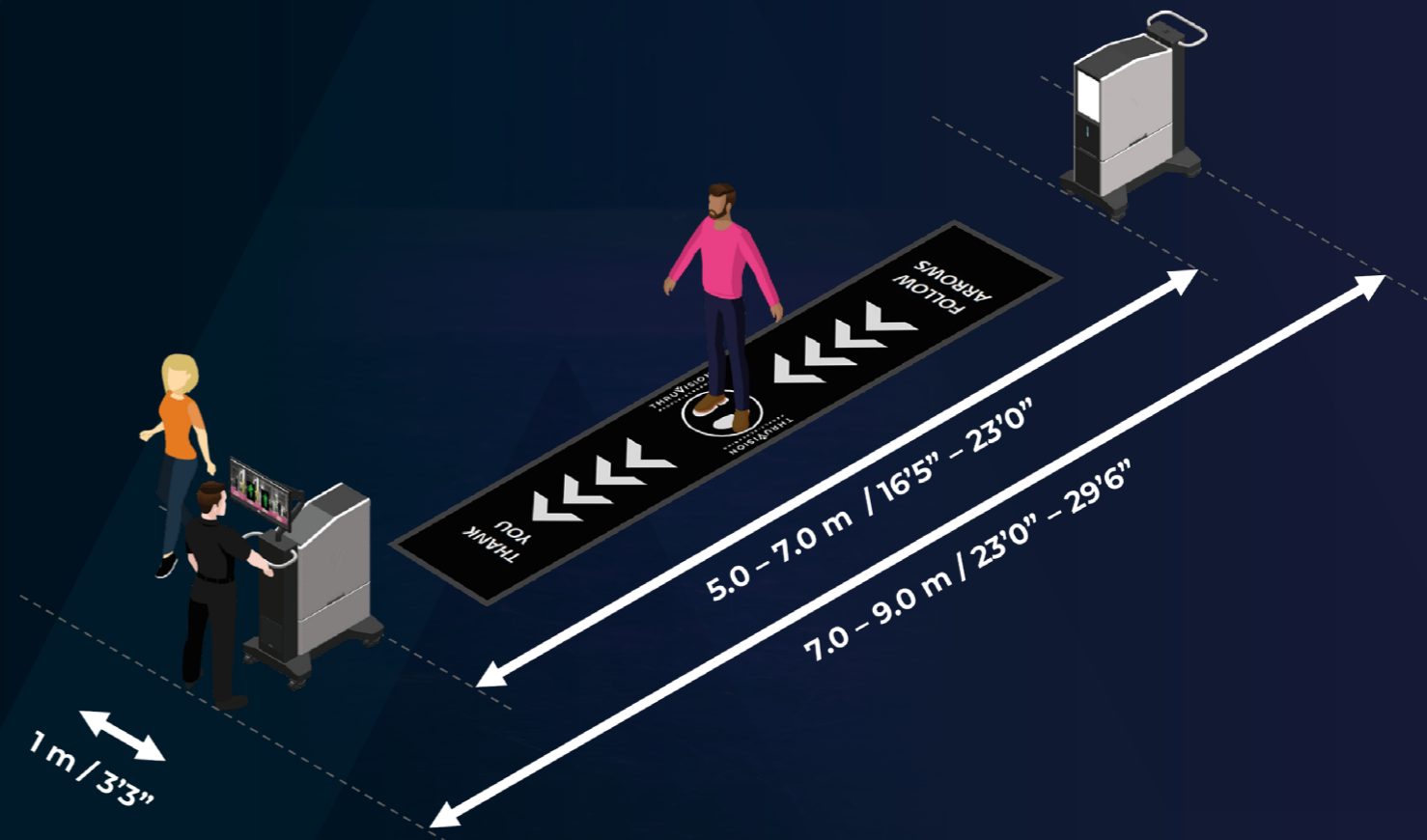
UP TO 600  
PEOPLE/HR

2 CAMERAS

Balance throughput and detection performance when screening for a range of item sizes.

Subject walks along centreline of lane, and pauses for 2-3 sec in middle of lane.

Resolve detections in lane, or send subject to secondary screening area.



# WaikTHRU PLUS

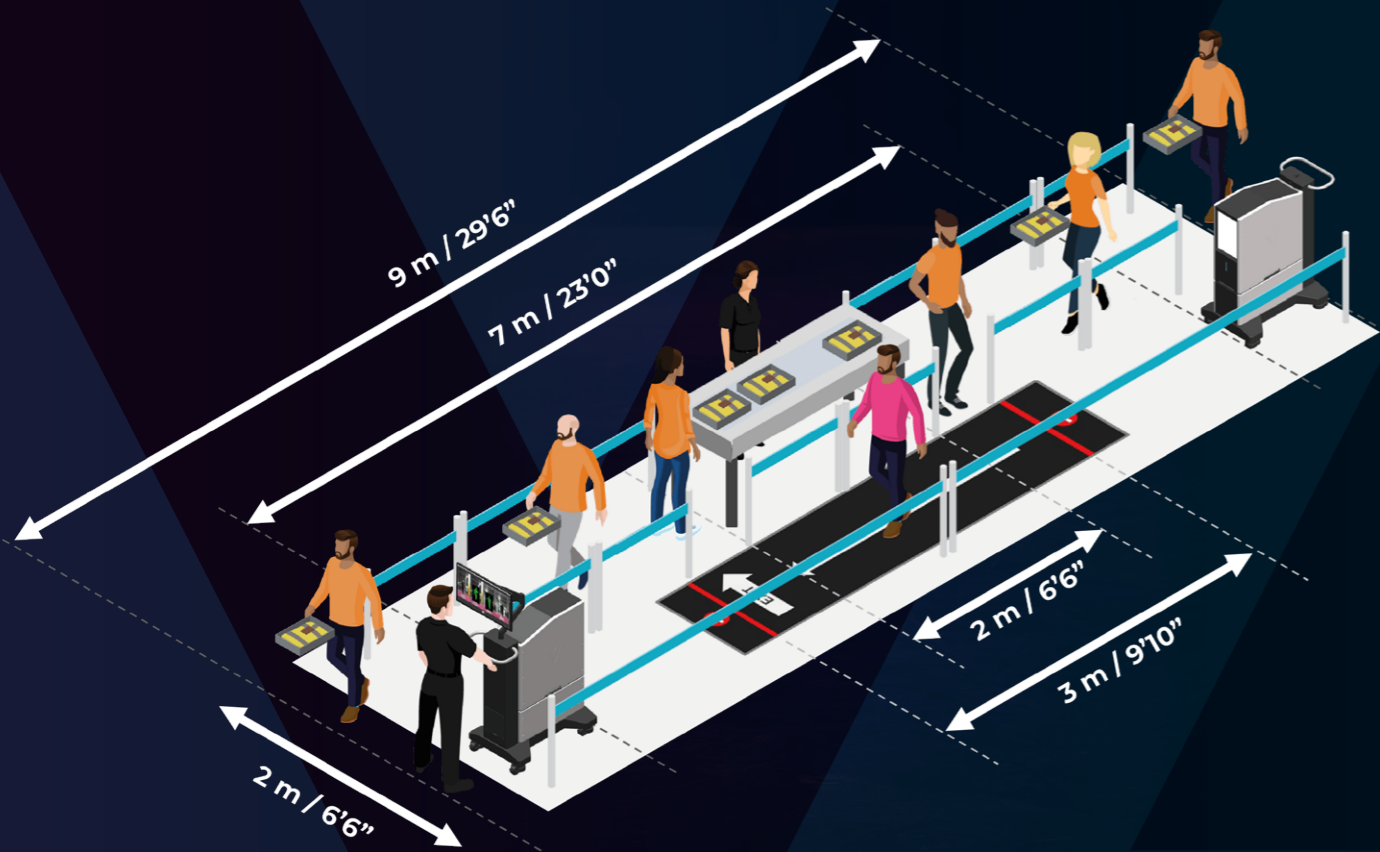
UP TO 1800  
PEOPLE/HR

2 CAMERAS

**Prioritise absolute throughput when screening for larger items.**

Subject follows optimised path through lane without pausing, designed to maximise system performance at very high flow rates.

Resolve detections in lane, or send subject to secondary screening area.



# NEXT GENERATION SOFTWARE

## SmartSCREEN

Available exclusively for the 81 Series. **SmartSCREEN** is a powerful new package of smart software enhancements to expand functionality and enhance detection performance.

## DynamicDETECT

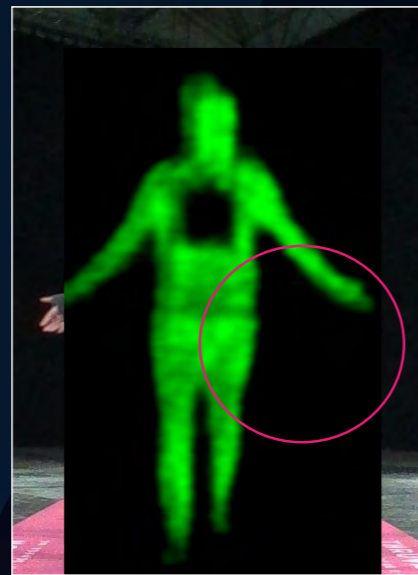
Available exclusively for the 81 Series, **DynamicDETECT** is an innovative AI-based automatic concealed item detection algorithm.



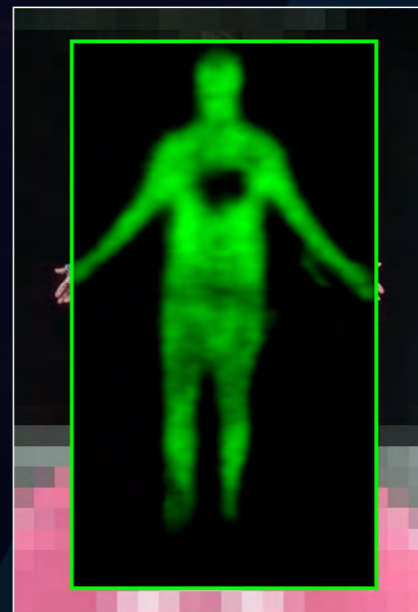


# Smart SCREEN

Powerful software features in one simple package, to expand functionality and optimise detection capability in a range of screening environments.



Example of SmartFocus with and without Terahertz background removal



Example of SmartPrivacy

## SmartFocus

Automatically focuses attention on the person being screened by removing the background from the Terahertz image.

Removes operator distractions from the Terahertz image.

Optimises contrast for the best possible image quality on the person being screened, in all screening environments.

## SmartRecord

Detects when a person enters the screening area to automatically start recording.

Automatically stops recording when screening area is quiet.

Maximises system recording capacity.

Removes the need to search through hours of empty footage to find what you are looking for.

## SmartCount

Counts the number of people passing through your screening area.

Logs statistics to a simple text file for easy importation into spreadsheets and reports.

## SmartPrivacy

Obscures the identity of people and things in the background of the CCTV image to further enhance focus on the person being screened.

Optionally obscures the face of the person being screened to respect their privacy.

# Dynamic DETECT

## ADVANCED AI TECHNOLOGY

Advanced, AI-based concealed item detection designed to quickly and effectively identify the shape, size and location of concealed items on walking or stationary people.

## DETECT CONCEALED ITEMS

Easy to understand red overlays show the shape, size and location of concealed items.

## SUPPORTS RAPID DECISION MAKING

Quickly alerts operators to potential concealments.

## DETECTION PERFORMANCE

Highly effective detection performance with no need for physical 'pat-downs'.



# CAPABILITY & PERFORMANCE

The 81 Series comprises four versatile models to suit a range of operational and performance requirements. The 81 Series is capable of detecting all types of non-metallic and metallic items, including clothing, liquids, electronics, tobacco, foodstuffs and paper.



- 8104** Cost-effective sensor for detecting large objects on stationary people.
- 8108** High-performance sensor for detecting a range of objects on stationary people.
- 8112** High-performance sensor, optimised for detection of large items on moving people.
- 8116** Very high-performance sensor for detecting small items on both stationary and moving people.

## SOLUTION SELECTOR

| CONCEPT OF OPERATIONS                      | PEAK FLOW RATE (PEOPLE/HR) | 35CL SPIRITS | PACKET CIGARETTES | METAL WATCH    | USB PENDRIVE   |  |  |  |  |
|--|----------------------------|--------------|-------------------|----------------|----------------|--|--|--|--|
|  |                            | 9MM HANDGUN  | KITCHEN KNIFE     | 50x50 MM DRUGS | SMALL PENKNIFE |  |  |  |  |
| REPRESENTATIVE MINIMUM CONCEALED ITEM SIZE |                            |              |                   |                |                |  |  |  |  |
| SpotCHECK                                  | UP TO 300                  | 8104         | 8104              | 8108           | 8116           |  |  |  |  |
| WalkTHRU                                   | UP TO 600 (WITH PAUSE)     | 8104         | 8108              | 8116           |                |  |  |  |  |
| WalkTHRU PLUS                              | 600 - 1,200 (NO PAUSE)     | 8112         | 8116              |                |                |  |  |  |  |
|  | 1,200 - 1,800 (NO PAUSE)   | 8116         |                   |                |                |  |  |  |  |

■ Compatible with DynamicDETECT 
 ■ Requires SloScan (NOT compatible with DynamicDETECT) 
 ■ Compatible with SmartSCREEN

# SYSTEM BASES

## MAINS POWERED BASES

Sturdy integrated base for use where mains power is available

### RUGGED

Rugged wheels for quick and easy deployment

### STURDY

Sturdy construction matches 81 Series cameras to give a fully integrated system

### VERSATILE

Supports all ConOps

### SIMPLE

Simply plug in and switch on to get up and running



### OPERATOR STATION

Option includes high performance PC and touchscreen monitor for integrated screening system support

### CAMERA STAND

For supporting second camera in WalkTHRU and WalkTHRU Plus ConOps

**Mains Operator Station:**  
TV-MNT-OSM

**Mains Camera Stand:**  
TV-MNT-CSM

## BATTERY POWERED BASES

Battery powered option for up to 4 hours standalone operation away from mains power

### BATTERY PACK

Designed for use with standard third-party battery pack

### OPTION

Both Operator Station and Camera Stand variants available

### RUN-TIME

Battery run-time up to 4 hours on a full-charge

**Battery Operator Station:**  
TV-MNT-OSB-UK/EU/US

**Battery Camera Stand:**  
TV-MNT-CSB-UK/EU/US



**SEE THE  
UNSEEN**

**THRUVISION**