

T5000



Benefits

- Safe people screening
- Operational outdoors
- No intimate body details shown
- Stand-off range consistent with operational requirements

Outdoor Stand-off People Screening

Overview

The T5000 is a stand-off people screening system used to detect objects concealed under clothing. ThruVision Systems' terahertz technology operates by collecting energy that is naturally emitted by all people. The T5000 does not display intimate body details of the person being screened and can be used discreetly to screen both moving and stationary people between 6m and 25m. Materials that can be detected by the T5000 include metals, plastics, liquids, gels, ceramics and narcotics.

The T5000 system consists of a camera unit and a remote PC linked through an Ethernet connection. The remote PC and operator may be any distance from the camera thereby further increasing the safety of the operator.

Applications

The T5000 addresses outdoor applications and provides a mobile solution for checkpoint security, counter terrorism, urban surveillance and the protection of critical infrastructure. The T5000 is fitted with an internal temperature control unit, is ruggedised to facilitate real world deployments and has vibrational mountings to enable transport in challenging terrain.

Using the T5000

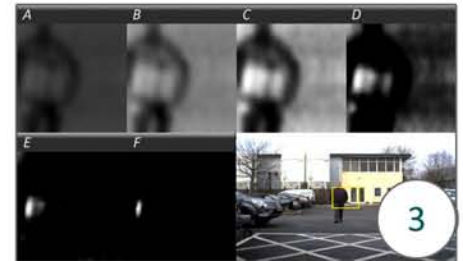
Due to the variety of environmental conditions that can be experienced each day, the T5000 has been designed to reduce complexity for the operator. When using the T5000 the operator sees 6 different contrast levels (labelled A-F). The contrast levels are designed to accommodate the changes in the natural environmental conditions. On a particular day, at least one of the contrast levels should display the appropriate imagery to show the operator the concealed item. The contrast level best able to display the concealed object will depend on the particular environmental conditions, however operators have found benefit from using all 6 ranges concurrently.



In the above image the person was at a distance of 25m from the T5000. The change in contrast around their torso indicates the presence of a concealed object.



The person was at a distance of 20m from the T5000 in image number 2. The object on their torso now appears brighter.



The person was at a distance of 10m. The separate packages within the concealed object and a mobile phone (front right trouser pocket) can now be seen by the operator.

When using the T5000 to screen people the images will appear similar to the 3 images displayed above. When the person is 25m from the T5000 the operator, using contrast level 'C', can see the presence of large concealments. At this point the operator could choose to stop the person and ask them to display the object that is concealed. At 20m the operator is very aware that there is a concealment and at 10m the operator can detect medium sized objects such as the mobile phone located in the person's pocket in image number 3. The T5000's ability to resolve medium sized concealments increases as the person approaches the system. The object being concealed in the above images was a simulated PB-IED comprising 3 separate packages.

Technical information

General

Weight: 75 kg (165 lbs)

Power consumption: 300 W

Operating voltage: 22 V DC – 28 V DC

Operating current: 10 A typical; 12 A maximum

Mounting options: Adapter plate for industry standard pan/tilt

External connections: 24 V DC and Ethernet

Dimensions: 955 mm (w) x 787 mm (d) x 409 mm (h) (37.6 "x 31.0 "x 16.1 ")

Specification

Maximum stand-off imaging distance: 25 m (82 ft)

Minimum stand-off imaging distance: 6 m (20 ft)

System operating temperature: -10°C to 55°C (14°F to 131°F), < 85% relative humidity, non condensing *

Storage temperature: 0°C to 50°C (32°F to 122°F), < 85% relative humidity, non condensing

*Note: Whilst the T5000 has been designed to operate within this temperature range, the image quality may vary as it is dependant on a variety of factors.

Please contact your local authorised ThruVision Systems' representative for further information.

Accessories

Pan/tilt unit

Rugged tripod

Tough laptop

Certifications



EN55022

EN55011