Human Security Radar™ Technical Information, Data Sheet

People screening technology for crowded places without disrupting the flow

Human Security Radar™ (HSR) is a fully automatic walk-through, non-stop scanner, inspecting several persons at a time. HSR provides standoff, real-time and automatic detection of suicide bombers carrying IED hidden on the body under clothing or in a backpack. HSR uses safe Active Centimeter Waves, which are common radio-frequency signals that reflect at extremely low signal power levels. The system uses multiple stereo video cameras and provides video-tracking capability of detected targets.

HSR requires no specially trained operator and therefore has very low operating costs. One or several security officers can monitor multiple devices simultaneously and automatically receive alarm signals, photos and coordinates of suspects. A remotely located security central can overview multiple devices and coordinate first responders.

Technology features

- high probability of detection and low false alarm rate
- operator independent
- high throughput without impeding the people flow
- multiple target detection
- real-time operation
- standoff detection
- automatic threat recognition ATR
- no privacy issues
- covert or open installation
- simple integration with existing security systems
- supports integrated video tracking

Applications

- mass transit hubs
- public venues
- airport arrival/departure halls
- critical infrastructure
- government buildings
- shopping malls, office buildings
- high speed trains
- cruise liners
- military/police checkpoints
- museums and exhibitions
- conferences, sports events

apstec systems
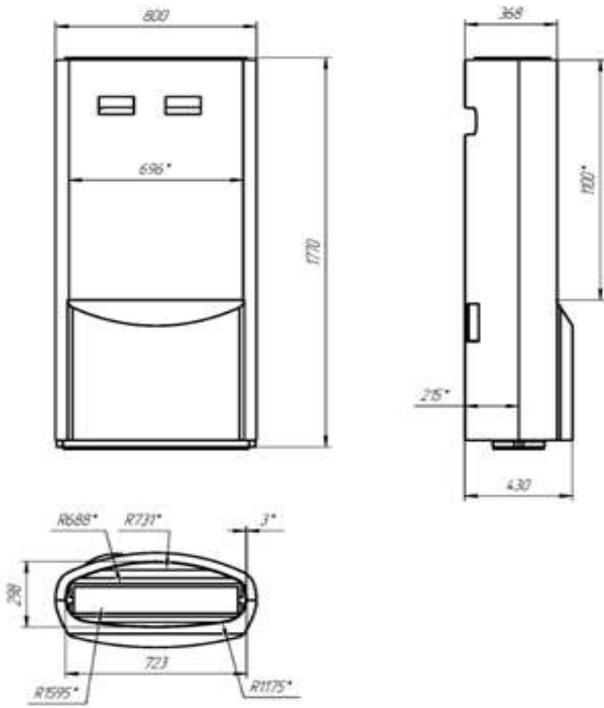
HSR dimensions (One pillar).

INSECTION REQUIREMENTS

Floor, vibration, weather

The floor should be relatively smooth and leveled.
Heavy sources of vibration should be avoided.
Not to be exposed to rain, snow or strong wind.
Ethernet/Wi-Fi connection with security control office – 100Mbit/s

Layout

The layout of a security checkpoint should be carefully planned to optimize queuing and security, please contact Apstec Systems for assistance

Health and Safety

Meets IEEE C95.1-2005 (EU standard for safety levels to Human Exposure of Radio Frequency Electromagnetic Field, 3kHz to300Ghz)

Installation Data

Width of free passage	160-240 cm
Weight	<100 kg
Power	3kWt/220V/50Hz
Temperature	10°C - 25°C
Humidity	5-95%, non-condensing

SPECIFICATIONS

General Specifications

Inspection mode:	continuous
Detection capabilities:	Common explosives
Inspection zone:	3x6 m^2
Inspection time:	in real time while passing
Speed of people:	Up to 6 km/h
Inspection capacity:	Up to 5 people simultaneously
Throughput:	>12000p/h

Data Processing System

Suspicious items identification:	Automatic detection and alarm.
Alarm information:	Alarm trigger, time, coordinates and picture of detected suspicious person.
Documentation:	Recording of alarms history.
Alarm format:	XML.
Upon request:	System status.
Access:	Different levels of access is possible.

Proposed space for installation is 6 x 4 mtr
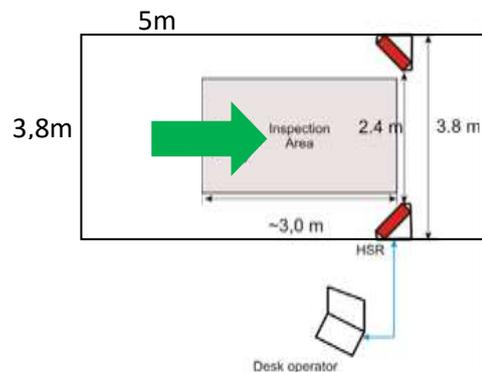
Schematic view of HSR installation (portal).
Green arrow shows main direction of people flow.
Desk operator can be local or central (remote).
Distance between HSR towers 1,6m - 2,8m.