WG Human Presence Detection System

The WG Human Presence Detection System detects unauthorised individuals hiding in vehicles or containers by sensing the vibrations caused by the human heartbeat.

WG Human Presence Detection System includes a computer, digital control box, small vehicle and ground sensors and cables.

The magnetic vehicle sensors, when placed on a vehicle or a container, determine whether a human is inside without the time-consuming and expensive task of unloading and inspecting the entire vehicle or container and all of the contents.

Based on the vibrations the WG Human Presence Detection System indicates if an individual is present by a traffic light system displayed on the PC, within a few seconds the traffic light will show Red for Human Presence or Green for No Human Presence.

The ground sensors mitigate any nearby environmental vibrations for increased accuracy, the sensors, similar to those used to measure earthquakes, measure the tiny movements or vibrations transmitted to a suspension system.
STANDARD FEATURES

- **Accuracy**: Lower false alarm rates than any other available product
- **Economy**: Far less capital-intensive than dedicated vehicle & cargo X-ray machines
- **Excellent data transfer**: High-speed USB interface between the control box module and host computer
- **Flexibility**: Rapid deployable Portable and industrial versions to meet environmental or operational requirements
- **Flexible cabling**: Heavy duty connectors for maximum cable life
- **Reliability**: Accurate results in a variety of environmental conditions, including dry, dusty, wet and hot/cold environments
- **Safety**: No risks to operator or detected persons during operation
- **Sensors**: Light, compact and rapid deployable
- **Speed**: Fast processing for maximum efficiency
- **The system delivers reliable and efficient performance**

**Cable Management System**

- The Cable Management System offers a durable, protective and economic solution for cabling. It is an effective, easy-to-use storage and management system
- **5 Reel enhanced system**

**Cables Features**

- Ideal for indoor/outdoor use
- Powder-coat finish
- pre-assembled to reel
- Retractable, Slip ring assembly

**Enclosure Features**

- Heavy steel construction
- Ideal for indoor/outdoor use
- NEMA 4 and 12 rated
- Powder-coat finish
- Storage area for electronics box and sensors

SPECIFICATION

**Fully Ruggedised Laptop**

- 1 GB system memory or better
- 100 - 240 VAC, 1.5A, 50/60 Hz
- 13.3" LCD display, 160 GB hard drive or better
- CD/DVD drive
- Full magnesium alloy case with handle
- High performance computer
- MIL-STD-819F and IP54 compliant
- Sealed all-weather design
- Shock-mounted, quick-release hard drive
- Spill-resistant keyboard and touchpad
- Touchscreen display – optional

**Desktop Workstation**

- 1 GB system memory or better
- 100 - 240 VAC, 1.5A, 50/60 Hz
- 17" LCD display, 160 GB hard drive or better
- CD/DVD drive
- High performance computer
- Keyboard / mouse
- Touchscreen display – optional

**Industrial Workstation**

- 1 GB system memory or better
- 100 - 240 VAC, 1.5A, 50/60 Hz
- 15" active matrix TFT LCD display, 160 GB hard drive or better
- CD/DVD drive
- Extreme temperature proof
- High performance computer
- Industrial silicone rubber keyboard with integrated pointing device
- NEMA 4X and IP66 compliant
- Overall dimensions: H51cm x W61cm x D41cm
- Shock and vibration proof
- Stainless steel enclosure
- Touchscreen display - optional
- Wall mountable
- Water proof/dust proof, Corrosion Resistant
- Weight: 100lbs / 45 kg

**Standard Mode**

- Number of cable reels – 3
- Dimensions - 111cm x 45cm x 53cm
- Weight - Approximately 90.9kg

**Enhanced Mode**

- Number of cable reels – 5
- Dimensions - 111cm x 45cm x 53cm
- Weight - Approximately 136kg
SPECIFICATION

Components Standard System
- 2 x Ground Sensors, includes one spare
- 3 metre USB Cable
- 3 x Vehicle Sensors, includes one spare
- 4 x 15 metre Sensor Cables, includes one spare
- AC Adapter: AC 100V-240V 50/60Hz
- Control Box Module
- Host computer
- Null Modem RS-232 Cable

Components Enhanced System
- 3 metre USB Cable
- 3 x Vehicle Sensors, includes one spare
- 4 x Ground Sensors, includes one spare
- 6 x 15 metre Sensor Cables, includes one spare
- AC Adapter: AC 100V-240V 50/60Hz
- Control Box Module
- Host computer
- Null Modem RS-232 Cable

Software
- Current to Windows OS
- Desktop security software
- Detection Software - Standard or Enhanced version
- Microsoft Windows® Operating System
- Output Signal Capability to be Integrated in Third Party Security System
- Vehicle Logging and Reporting Database

Host Computer Specifications
- The system is available in a variety of configurations, providing you with the flexibility to choose the product and platform that best meets your needs.

Semi Ruggedised Laptop
- 1 GB system memory or better
- 100-240 VAC, 1.5A, 50/60 Hz
- 13.3” Touchscreen display - optional
- 15.4” Widescreen LCD display, 160 GB hard drive or better
- CD/DVD drive
- Hardware
- High performance computer
- Partial magnesium alloy case with handle
- Shock-mounted, quick-release hard drive
- Spill-resistant keyboard and touchpad

APPLICATION

- Airports
- Border crossings
- Correctional institutions
- Courthouses
- Embassies
- Government facilities
- Maritime ports
- Military facilities
- Portal entries to high value facilities
- Prisons
- Seaports
SECURITY APPLICATIONS

Immigration
Human Presence Detection is an ideal security tool for border crossings throughout the world where illegal aliens and/or potential terrorists may attempt unauthorized entry into a country or territory as stowaways.

Cargo/Seaport Security
Human Presence Detection system provides screening of both vehicles and cargo containers prior to being loaded onto airplanes, ships and rail cars. Large trucks exiting seaports can be inspected quickly for illegal immigrants or other individuals attempting to gain unauthorized access.

Prisons
Human Presence Detection system is currently deployed in more than 100 correctional facilities throughout the world. The vehicles of prison services, prison industries, and transport can all be inspected quickly and safely.

Critical Infrastructure Protection
Critical buildings and assets including embassies, military installations and federal and diplomatic buildings can benefit from the increased security that Human Presence Detection provides. The system detects unauthorised entry of hidden persons in vehicles entering buildings and facilities. Human Presence Detection system can quickly and accurately add a level of security while simultaneously freeing security personnel to attend to other critical duties and responsibilities.

Airport Security
Human Presence Detection System enhances airside security by inspecting vehicles that routinely require access to restricted areas such as those required for maintenance or food service.

OPERATION

Operates in two modes: standard and enhanced, delivering superior performance in a variety of environments.

The enhanced mode boasts all the features of the standard mode but it uses two additional ground sensors and upgraded software active ground vibration cancellation technology.

The enhanced mode is particularly well-suited for harsh environments where persistent ground vibration in environments such as busy border checkpoints, seaports and high traffic inspection areas which can interfere with performance and result in false positive indications.

The system can be upgraded from standard to enhanced operating mode quickly and easily in the field with a retrofit kit and new software load.