⟨Ra⟩ RADiRguard™

INTELLIGENT PERIMETER SURVEILLANCE

Combining multiple complementary sensors in a single unit including

▶ **Radar Detection**

▶ **Intelligent Classification**

▶ **Optical and IR video recording**

▶ **Full CCTV capabilities**

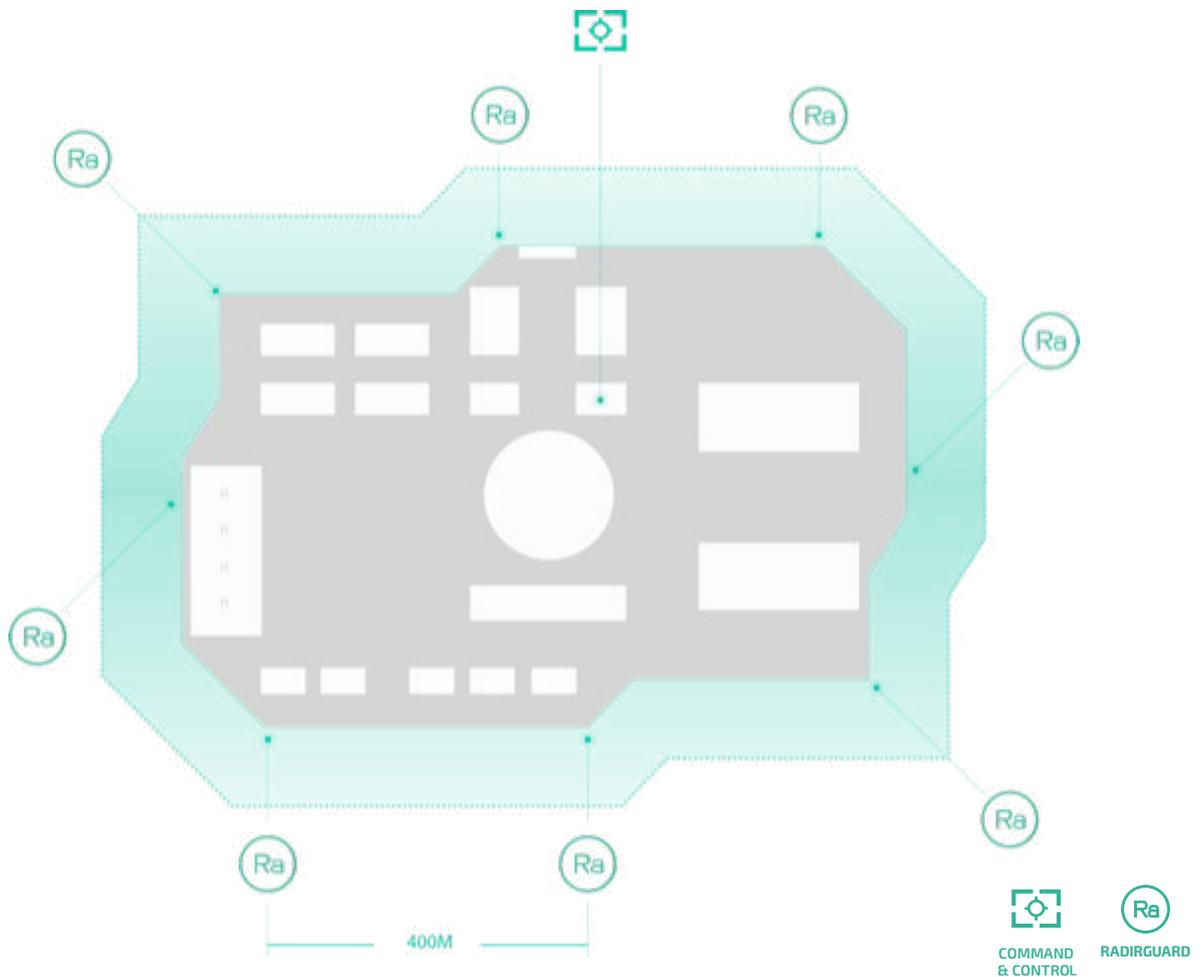▶ **Radio Frequency monitoring**

Ⓡₐ RADiRguard™

INTELLIGENT PERIMETER SURVEILLANCE SYSTEM

RADiRguard is a smart perimeter surveillance system combining multiple sensors and complementary technologies inside a single unit to maximise situational awareness.
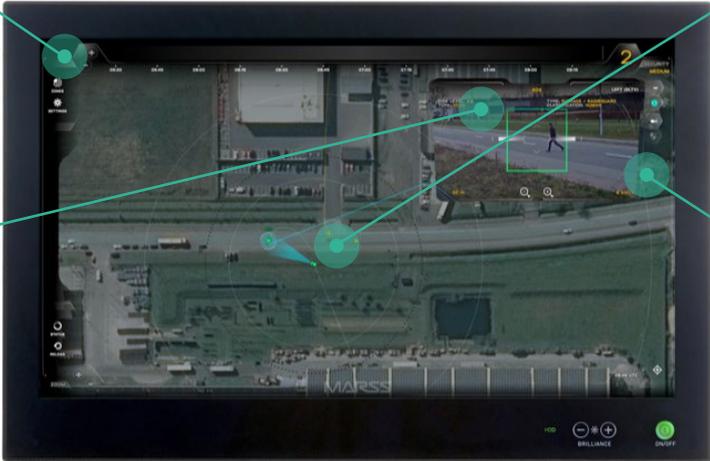
Each self-contained RADiRguard unit combines built-in radar, CCTV, IR & Radio Frequency monitoring, plus intelligent threat classification to reliably detect and classify objects in advance of reaching a perimeter.

RADiRguard is a cost effective, easy to deploy and scalable solution which can be configured to a wide variety of surveillance areas.

High resolution radars automatically detect and track multiple human and vehicle targets simultaneously.

400M

COMMAND & CONTROL

RADIRGUARD

RADiRguard™

RADiRguard uses a multi-sensor approach and multi-stage decision hierarchy to reliably detect, track and classify an intruder entering a perimeter.
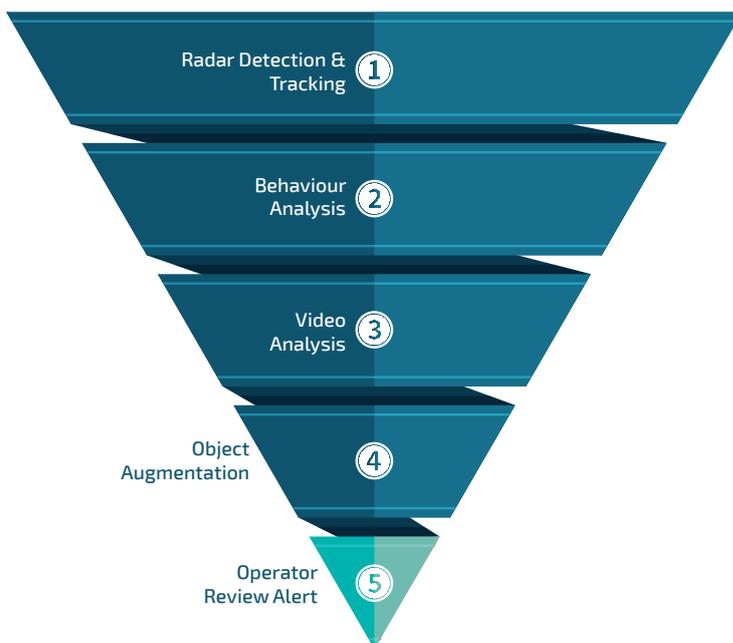
USER INTERFACE

Intuitive multi-touch user interface requiring little or no training provides increased situational awareness

LIVE VIDEO FEEDS

Panoramic video cameras provide uninterrupted video feeds of multiple radar tracks for immediate identification.
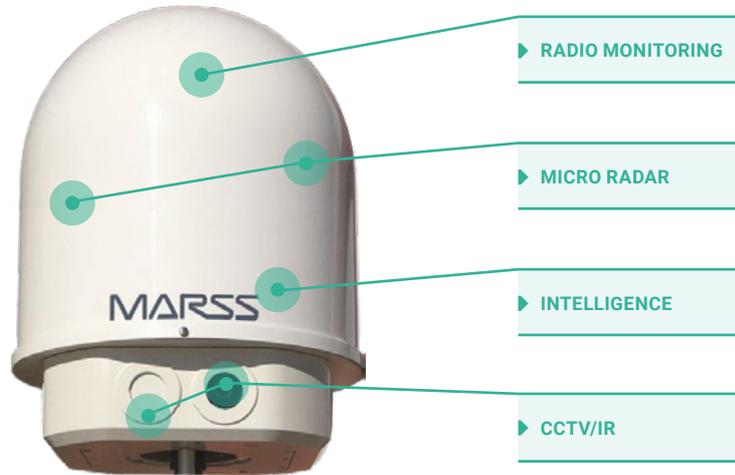
AUTOMATIC DETECTION

High resolution radars automatically detect and track simultaneous multiple human and vehicle targets simultaneously

TARGET DATA

Targets are classified (e.g. human vs vehicle) with range, speed, TCPA and risk level automatically computed and presented to the operator.

MULTI STAGE DECISION HIERARCHY

Radar Detection & Tracking — 1

Behaviour Analysis — 2

Video Analysis — 3

Object Augmentation — 4

Operator Review Alert — 5

1 Reliable object detection and tracking achieved by compact microwave radars

2 Track behaviour algorithms confirm first level of classification

3 Camera footage is analyzed for object recognition and precise classification

4 Additional analyse of GSM/Wifi/VHF signals provides risk level for each tracked object

5 Alarm sounded with system providing visual confirmation to operator and aiding interception

RADiRguard™

- ▶ **RADIO MONITORING**
- ▶ **MICRO RADAR**
- ▶ **INTELLIGENCE**
- ▶ **CCTV/IR**

TECHNICAL SPECIFICATIONS

Capability

Squared area of	Squared area of 18,000 sqm (400m x 45m human and vehicle detection, tracking and classification)
Modular configurations	400m x 50m, 400m x 100m 20°- 360° radial sectors with 100m or 200m radius
Environmental	IP67 and extended temperature (-20C to +60C); wide temperature version (-40C to +70C) also available
Classification	Humans, passenger cars, trucks, animals

Components

Optical camera	HD or 4K with 90deg field of view (up to 4 units)
IR camera	640x480px uncooled (optional)
Radar	High resolution, solid state radars, 15 scans per second
Video capture standard	Full HD 1080p daylight
Video capture optional	Full HD 1080p low light, 640x480 uncooled infrared, 320 x 240 uncooled infrared

Specification

Network connection	Wired and wireless options available
Mounting and installation	Only power and Ethernet (wired or wireless) required; Power Over Ethernet (POE) available on selected configurations
User interface	NiDAR multitouch command and control
OS	Linux
Connectivity	Ethernet, Wifi, 3/4G optional
Ingress protection rating	IP67
Power supply	110-230VAC or 12-24VDC
Power consumption	109W (peak)
Weight	12kg max
Dimension	450mm x 300mm x 400mm
Export	No export control restrictions (eg ITAR)

Specifications, technical data and product availability are subject to change without notice.

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