

MAGOS

From Ground to Sky  
AI-Powered  
**Radar**  
Innovation



# About Magos

Magos introduces disruptive technology to the security industry with high-performance radars and AI-based software capabilities. By combining enhanced intruder detection with accurate threat classification, Magos offers the most effective and reliable perimeter protection solution.



Outstanding radar performance and resolution in all weather and lighting conditions



Cutting-Edge AI technology reduces nuisance alarms to near zero



Seamless system integration while utilizing existing infrastructure



Extensive know-how with expert training and support



Less infrastructure, maintenance, and manpower costs

# MASS+AI Real-time Control With Minimum False Alarms

Magos Area Surveillance Software (MASS) is a real-time command and control system for monitoring the Magos radars input, controlling the PTZ cameras, and managing the Magos AI solution. MASS seamlessly integrates with all major site-security solutions, including VMS, Access Control, PSIM and etc., and is compatible with ONVIF compliant PTZ cameras. MASS+AI combines the best of two technologies: Magos radars for superior object detection and tracking, and AI algorithms for accurate video-based object classification, reducing nuisance alarms to near zero without compromising threat detection capabilities.



## Additional Features Include:

- Multi-target classification of people, vehicles, and animals, while filtering out nuisance alarms
- Automatic control of any number of sensors and PTZ cameras
- Real-time handling of multiple threats
- Advanced class-based and geo-filtering delivers only relevant information
- Easily deployable web-based software with minimal system requirements
- AI-based automatic & accurate target classification, with no need for manual intervention
- BlueForce GPS based friendly target tracking

# Magos Ground-Based Radars

High performance for outstanding detection

The Magos radars utilize world-class MIMO and digital beamforming technology to deliver superior resolution, coverage, and performance even in the most challenging cluttered environments and in all- weather and lighting conditions. With outstanding specifications, both in azimuth and in elevation, the radars enable complete site coverage without dead zones. Low maintenance, no moving parts, and high reliability make Magos the most cost-effective perimeter protection system available.

## Specifications



### SR-150

#### DETECTION RANGE

Human: 150m  
Vehicle/Boat: 150m

#### AZIMUTH COVERAGE

120°

#### ELEVATION COVERAGE

30°

#### RANGE ACCURACY

0.1m

#### AZIMUTH ACCURACY

1°

#### SCAN RATE

8 scans per sec

#### TARGET DETECTION SPEED

0.3 - 30m/sec

#### DIMENSIONS (W/H/D)

24.3cm X 14.9cm X 5.9cm /  
9.6" X 5.9" X 2.3"

#### POWER CONSUMPTION

11W max, 8W typ

#### WEIGHT

1.2Kg / 2.6lb

#### APPROVALS / CERTIFICATIONS

CE, FCC, UL, IC, Anatel  
(Brazil), ETA (WPC - India),  
KC (Korea), EAC (RFA -  
Russia), RCM (Australia)



**SR-250**

Human: 250m  
Vehicle/Boat: 250m

120°

30°

0.1m

1°

8 scans per sec

0.3 - 30m/sec

24.3cm X 14.9cm X 5.9cm /  
9.6" X 5.9" X 2.3"

11W max, 8W typ

1.2Kg / 2.6lb

FCC, UL, IC, Anatel  
(Brazil), ETA (WPC - India),  
KC (Korea), EAC (RFA -  
Russia), RCM (Australia)



**SR-500**

Human: 400m  
Vehicle/Boat: 600m

120°

30°

0.1m

1°

8 scans per sec

0.3 - 30m/sec

24.3cm X 14.9cm X 5.9cm /  
9.6" X 5.9" X 2.3"

11W max, 8W typ

1.2Kg / 2.6lb

FCC, UL, IC, Anatel  
(Brazil), ETA (WPC - India),  
KC (Korea), EAC (RFA -  
Russia), RCM (Australia)



**SR-1000**

Human: 800m  
Vehicle/Boat: 1000m

100°

30°

0.1m

0.7°

8 scans per sec

0.3 - 30m/sec

24cm X 32cm X 5.8 cm /  
9.4" X 12.6" X 2.3"

13.5W max, 9W typ

3Kg / 6.6lb

FCC, UL, IC, Anatel  
(Brazil), ETA (WPC - India),  
KC (Korea), EAC (RFA -  
Russia), RCM (Australia)

**Frequency** C-Band 5.8 GHz / **Sensor Type** High resolution MIMO digital beam-forming radar / **Reliability** MTBF of 50,000 hours, no moving parts / **Power Interface** PoE 802.3af (802.3at Type 1) / **Environmental Ratings** NEMA-6, IP67 / **Communication Interface** Ethernet (less than 100kbps) / **Operating Temperature** -40 - +70° C

# AR300 - Drone Detection Radar

The AR-300 Drone Detection Radar offers optimal performance at close range with Magos' drone detection and tracking technology, superior resolution, and coverage capabilities.



## Key Features

- Detection range of >300m for UAVs
- 360° airspace area coverage of 300m radius distance using four AR-300 radars and one PTZ camera
- Merged with Magos' market leading AI classification technology to reduce false-alarms from birds
- Supreme performance under all weather and lighting conditions
- Easy integration with any major security system with the MASS software
- Quick and simple installation, with no need for specific site customizations
- Low power, low bandwidth communications, and low size allow for minimal infrastructure requirements and cost-effective pricing



## Technical Specifications

DESCRIPTION	3D Digital Beamforming radar, 300m range, 0.5m resolution
DETECTION RANGE	300m (DJI Mavic)
FREQUENCY	10.0 – 10.5GHz
TRANSMITTED POWER	3.2W
AZIMUTH AND ELEVATION COVERAGE	120° x 120°
RANGE ACCURACY	0.1m
AZIMUTH & ELEVATION ACCURACY	0.8°
SCAN RATE	7Hz
DIMENSIONS (W/H/D)	19cm X 35.2cm X 4.15cm / 7.5" x 13.8" x 1.6"
POWER CONSUMPTION	48V, 35W
OPERATING TEMPERATURE (C °)	-40° - +55°
POWER INTERFACE	PoE++/802.3bt Type 3, 4PPoE
ENVIRONMENTAL RATINGS	NEMA-6, IP67
WEIGHT	4.16kg/9.17lbs
APPROVALS/ CERTIFICATIONS	FCC, UL
ORDERING P/N	MSA1443A

# Magos AI Appliances

The Magos AI Appliances add deep-learning video analytics to any IP camera. Combined with Magos Area Surveillance Software (MASS), the automated target classification capability significantly enhances radar detection performance. This greatly reduces nuisance alarms from wildlife and moving vegetation while increasing target detection and tracking.



## AI APPLIANCE

19" rack-mounted 1U server  
RAID HDD, ECC memory, redundant power supply  
Supports up to 10 cameras



## MINI AI APPLIANCE

Compact housing ideal for POCS/Demos  
Low cost solution  
Supports up to 10 cameras

## A Wide Spectrum of Verticals



Electric  
Utilities



Data  
Centres



Renewable  
Energy



Oil & Gas



Car Lots



Seaports



## INDUSTRIAL AI APPLIANCE

Rugged housing  
Extended temperature range  
Suitable for field box installation  
Supports up to 10 cameras



## EDGE-AI APPLIANCE

Rugged housing  
Extended temperature range  
Suitable for field box installation  
Low cost solution  
Low power (~35W) - ideal for trailers/remote sites  
Supports up to 2 cameras



Water  
Facilities



Airports



Aqua  
Agriculture



Correctional  
Facilities



Logistics  
& Warehouses



Stadium  
& Arenas

# Top Partners

## PTZ Cameras:



AVIGILON™



BOSCH



HIKVISION®

Illustra

PELCO®

PRO

## VMS/ Access Control:

American Dynamics

AVIGILON™



BOSCH

C·CURE IQ



digifort



EAGLE EYE NETWORKS

exacq  
From Tyco Security Products



GEUTEBRÜCK

Genetec™

HIKVISION®



IndigoVision®  
a Motorola Solutions Company



milestone

MIRASYS



SALIENT

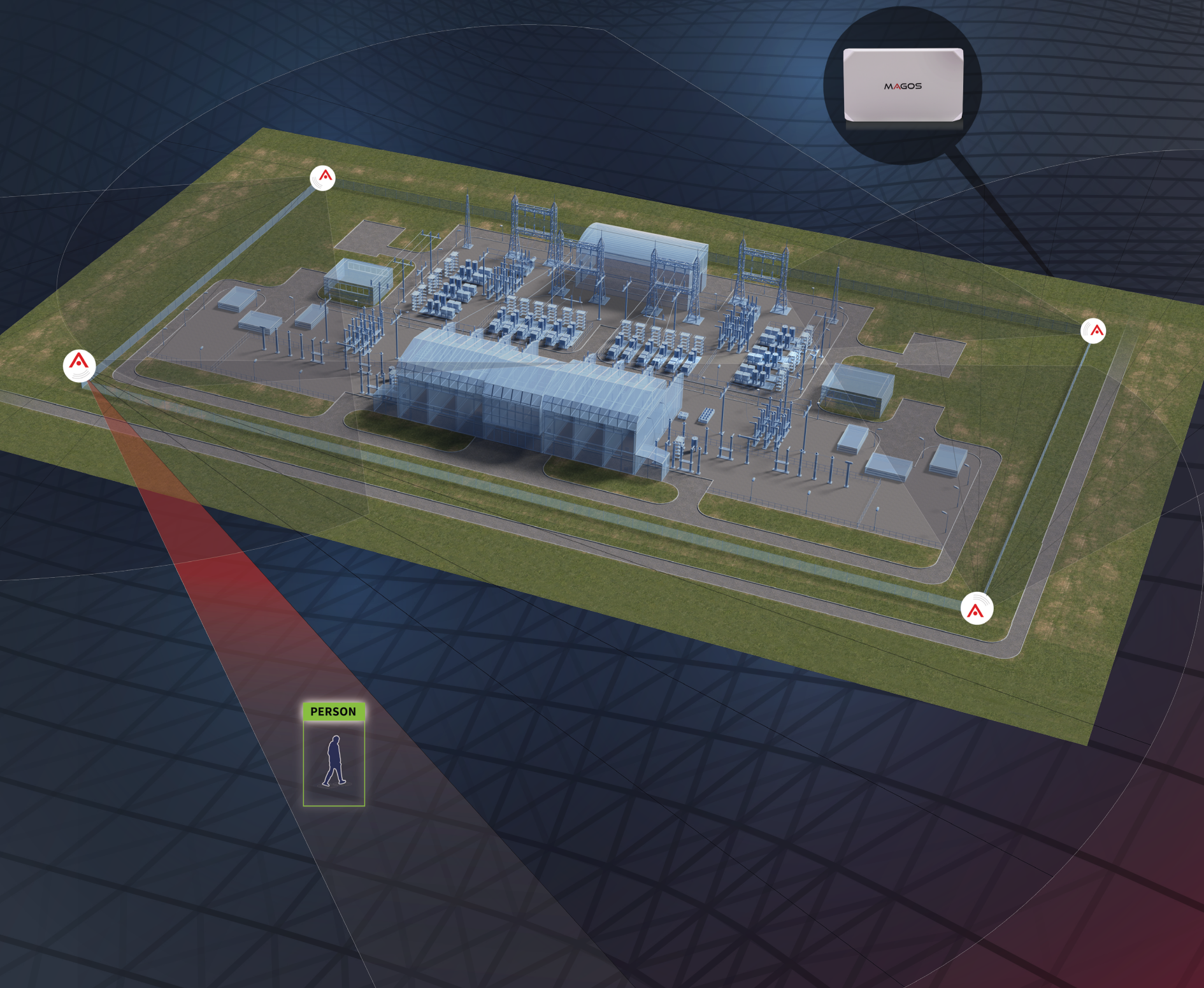
SIEMENS

VERINT.

## Drone Deployment:



# End-to-End Perimeter Protection



# MAGOS

For more information about  
Magos Systems, visit [magosystems.com](http://magosystems.com)  
or contact the Magos team at [info@magosys.com](mailto:info@magosys.com)

