From Ground to Sky

AI-Powered Radar Innovation

MAGOS™

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

DETECTION RANGE

AZIMUTH COVERAGE

ELEVATION COVERAGE

RANGE ACCURACY

AZIMUTH ACCURACY

SCAN RATE

TARGET DETECTION SPEED

DIMENSIONS (W/H/D)

POWER CONSUMPTION

WEIGHT

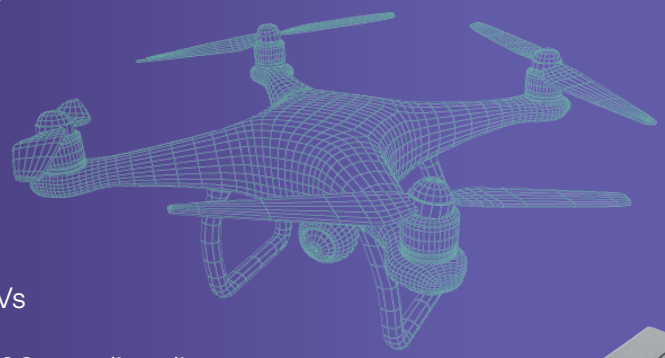
APPROVALS / CERTIFICATIONS

SR150-C	SR500-C
Human: 150m Vehicle/Boat: 150m	Human: 400m Vehicle/Boat: 600m
120°	100°
30°	30°
0.1m	0.1m
1°	0.7°
8 scans per sec	8 scans per sec
0.3 – 30m/sec	0.3 – 30m/sec
24.3cm X 14.9cm X 5.9cm / 9.6″ X 5.9″ X 2.3″	24cm X 32cm X 5.8cm / 9.4″ X 12.6″ X 2.3″
11W max, 8W typ	11W max, 8W typ
1.2Kg / 2.6lb	3Kg / 6.6lb
CE, FCC, UL, IC, Anatel (Brazil), ETA (WPC – India), KC (Korea), EAC (RFA – Russia), RCM (Australia)	CE/RED EN 62368-1:2014, EN 60950-22:2006 / AC:2008, EN 301 489-1, EN 301 489-3, EN 300 440

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

Magos Drone Detection Radar

The AR-300-F 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-F 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:

360 Vision Technology, Avigilon, Axis Communications, Bosch, FLIR, Hanwha Vision, Hikvision, Illustra, Pelco, i-PRO

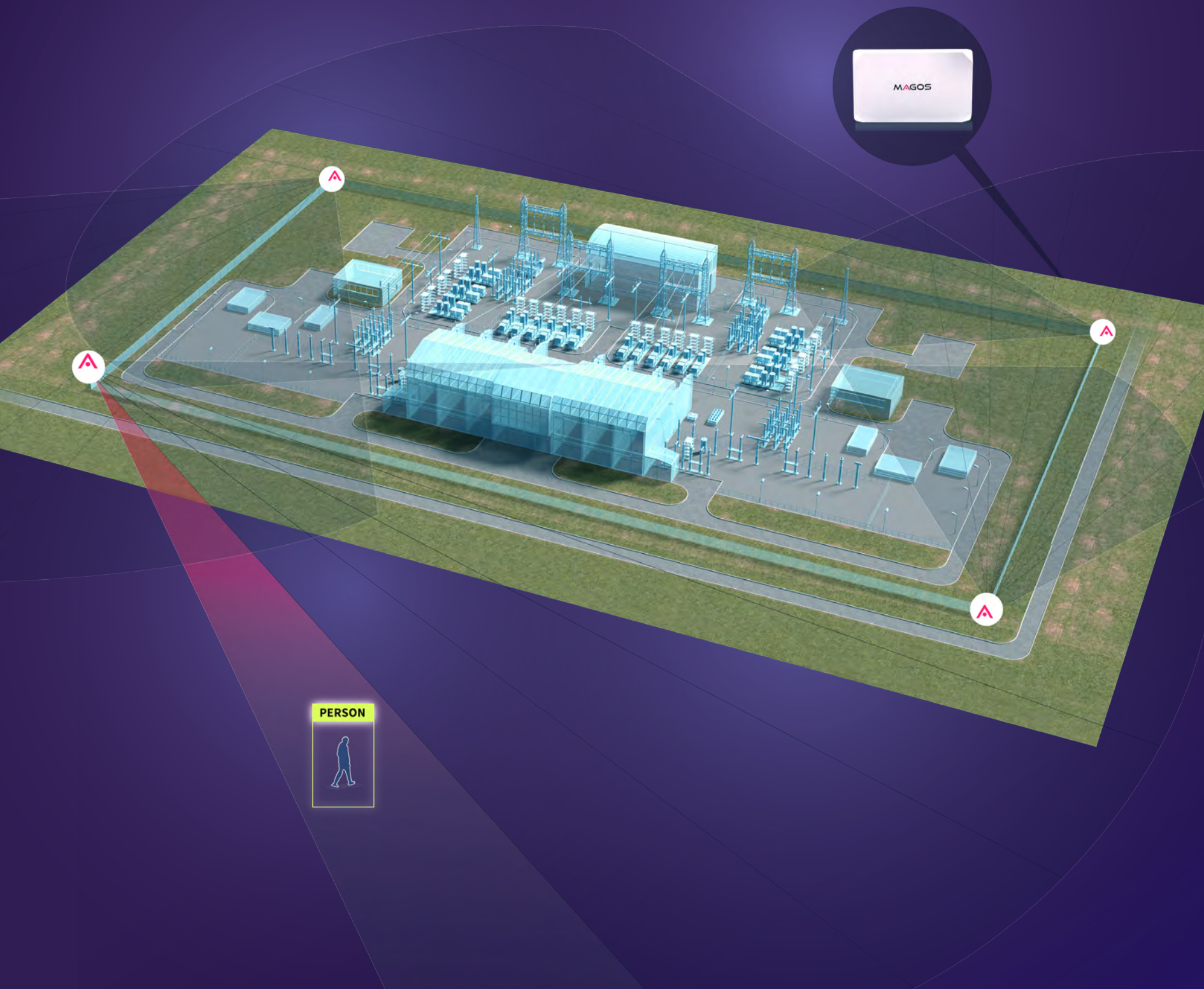
VMS/ Access Control:

American Dynamics, Avigilon, Axis Communications, Bosch, C·CURE IQ, digifort, Eagle Eye Networks, exacq (From Tyco Security Products), FLIR, Gallagher Security, Geutebrück, Genetec, Hikvision, IndigoVision (a Motorola Solutions Company), March Networks, milestone, Mirasys, Salient, Siemens, Verint

Drone Deployment:

Herotech8 Open Air, Nightingale Security

End-to-End Perimeter Protection



MAGOS™

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