



MAGOS
RADAR
APPLICATIONS



PROTECT YOUR PROPERTY WITH THE ULTIMATE PERIMETER PROTECTION SOLUTION



SR-250

OUR MOST AFFORDABLE RADAR SENSOR FOR SMALL PERIMETERS

ALL WEATHER, 24/7 WIDE AREA SURVEILLANCE

INTRODUCING THE SR-250

MAGOS OFFERS RADAR BASED, COST EFFECTIVE, STATE-OF-THE ART PERIMETER PROTECTION SOLUTIONS

- All-weather 24/7 Cost effective solution for smaller sites in need of high level security
- Lower initial investment and Reduced operating costs – No moving parts and Wide Area coverage
- 15 acre wide area coverage: 120° (horizontal) x 30° (vertical) detection up to 250m/820 ft
- Install three **SR-250** and one PTZ-Camera for all weather cost effective 360° solution covering 65 acres
- Integrated with most VMS platforms
- Auto PTZ slew-to-cue integrated with most PTZ brands
- Edge processing driven extreme power & data efficiency: easy solar + wireless integration
- Easy installation & commissioning with **MASS** Wizard site builder
- Integrated with **MASS + AI** - minimal nuisance alarms with AI based target classification



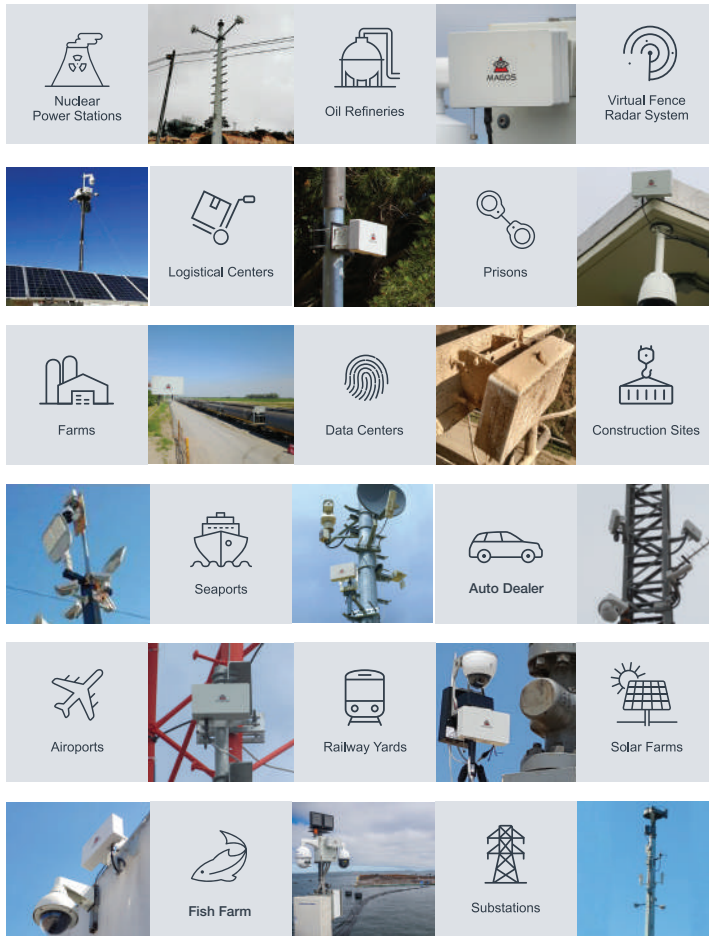
MAGOS SR-250

Magos' SR-250 is our most cost effective perimeter protection solution for smaller sites not requiring long range detection without compromising on detection performance at all conditions.

By utilizing state of the art MIMO & Digital beam forming technology It covers an area of more than 50,000m² (15 acres) with a detection range of up to 250m, yet consumes extremely low power (<3W) with a small form factor. It boasts an ultra-high range accuracy giving it excellent performance in cluttered environments. Its small size, low power consumption and low weight make it simple to install and renders it ideal also as part of a deployable system.



WIDE SPECTRUM OF APPLICATIONS



SPECIFICATIONS

Sensor type	High res. solid state Ground Based Radar
Frequency	C-Band
Detection range	Up to 250m
No moving parts	MTBF of 50,000 hours
Built in tracker	Extremely low required bandwidth (<1kpbs)
Scan rate	2 scans per second
Azimuth coverage	120°
Elevation coverage	30°
High Range accuracy	<1.0m
Azimuth accuracy	1°
Target detection speed	0.3 – 30 m/sec
Power	48V, 3.5W
System interface	Ethernet, POE - IEEE 802.3at Type 1 (802.3af) & Type 2
Dimensions	250(w) x 150(h) x 59(d) mm / 9.8(w) x 5.8(h) x 2.3(d) inc
Weight	1.5 Kg / 3.3lb
Approvals	FCC, UL
Operating temperature	-40° - +85°C



PROTECT YOUR FACILITY
WITH THE ULTIMATE PERIMETER
PROTECTION SOLUTION



SR-500

OUR FLAGSHIP RADAR - HUNDREDS OF UNITS ALREADY DEPLOYED WORLDWIDE

ALL WEATHER, 24/7 WIDE AREA SURVEILLANCE

MAGOS OFFERS RADAR BASED, COST EFFECTIVE, STATE-OF-THE ART PERIMETER PROTECTION SOLUTIONS

- All-weather 24/7 Cost effective solution for smaller sites in need of high level security
- 60 acre wide area coverage: 120° (horizontal) x 30° (vertical) detection up to 600 m/2,000 ft
- Integrated with most VMS platforms
- Auto PTZ slew-to-cue integrated with most PTZ brands
- Lower initial investment and Reduced operating costs – No moving parts and Wide Area coverage
- Install 4 **SR-500** and 1 PTZ Camera for all weather cost effective 360° solution covering over 120 acres
- Edge processing driven extreme power & data efficiency – easy solar + wireless integration
- Easy installation & commissioning with **MASS** Wizard site builder
- Integrated with **MASS+AI** - minimal nuisance alarms with AI based target classification



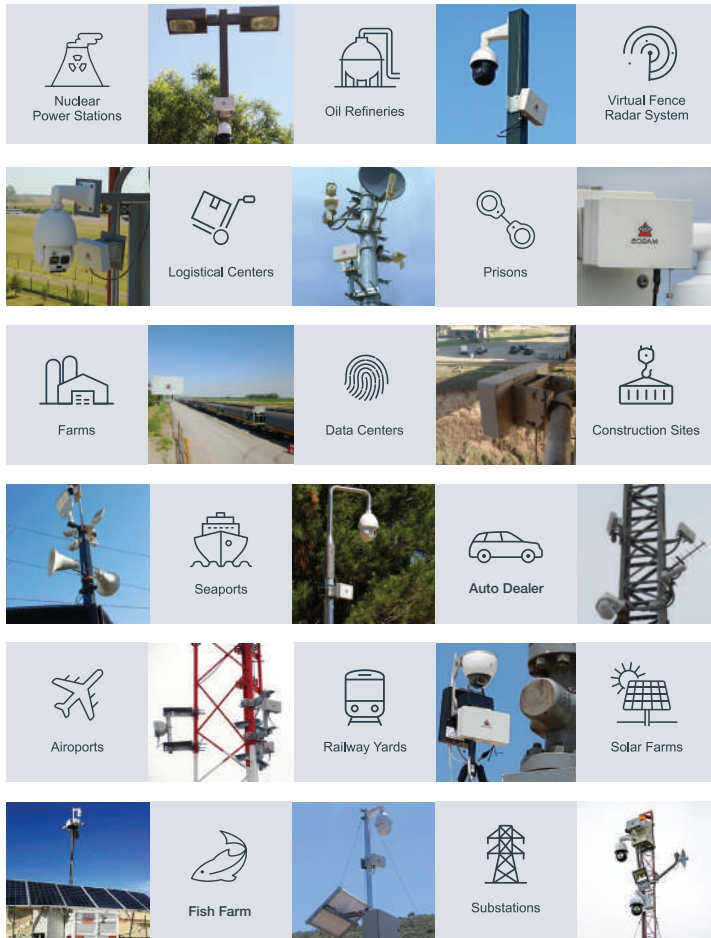
MAGOS SR-500

Magos' SR-500 is our most advanced radar and the most cost effective perimeter protection solution for both rural and more saturated environments, without compromising detection performance.

By utilizing state of the art MIMO & Digital beam forming technology It covers an area of more than 250,000m2(>61acres) with a detection range of up to 400m for walker and 600m for vehicle/boat, and yet consumes extremely low power (<3.5W) with a small form factor. It boasts an ultra-high range accuracy giving it excellent performance in cluttered environments. Its small size, low power consumption and low weight make it simple to install and renders it ideal as a deployable system.



WIDE SPECTRUM OF APPLICATIONS



SPECIFICATIONS

Sensor type	High resolution MIMO digital beam-forming radar
Frequency	C-Band
Detection range	Up to 100m Drone, 400m Human & 600m Vehicle/ Boat
No moving parts	MTBF of 50,000 hours
Built in tracker	Extremely low required bandwidth (<1kbps)
Scan rate	2 scans per second
Azimuth coverage	120°
Elevation coverage	30°
High Range accuracy	<1.0m
Azimuth accuracy	1°
Target detection speed	0.3 – 30 m/sec
Power	48V, 3.5W
System interface	Ethernet, POE - IEEE 802.3at Type 1 (802.3af) & Type 2
Dimensions	250(w) x 150(h) x 59(d) mm / 9.8(w) x 5.8(h) x 2.3(d) inc
Weight	1.5 Kg / 3.3lb
Environmental	Full outdoor functionality, IP67. FCC & CE compliant
Approvals	FCC, UL
Operating temperature	-40° - +85°C



PROTECT YOUR FACILITY
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PROTECTION SOLUTION



SR-1000

MAGOS 1KM RADAR - OPTIMAL SECURITY SOLUTION FOR LARGE PERIMETERS

ALL WEATHER, 24/7 WIDE AREA SURVEILLANCE

MAGOS OFFERS RADAR BASED, COST EFFECTIVE, STATE-OF-THE ART PERIMETER PROTECTION SOLUTIONS

- All-weather 24/7 Cost effective solution for smaller sites in need of high level security
- **One Radar covers over 200 acre** with wide area coverage: 120° (horizontal) x 30° (vertical) detection up to 1,200 m/3,900 ft
- Integrated with most VMS platforms
- Auto PTZ slew-to-cue integrated with most PTZ brands
- Lower initial investment and Reduced operating costs
- No moving parts and Wide Area coverage
- Install four **SR-1000** and one PTZ Camera for all weather cost effective 360° solution covering over 800 acres
- Edge processing driven extreme power & data efficiency – easy solar + wireless integration
- Easy installation & commissioning with **MASS** Wizard site builder
- Integrated with **MASS + AI** - minimal nuisance alarms with AI based target classification



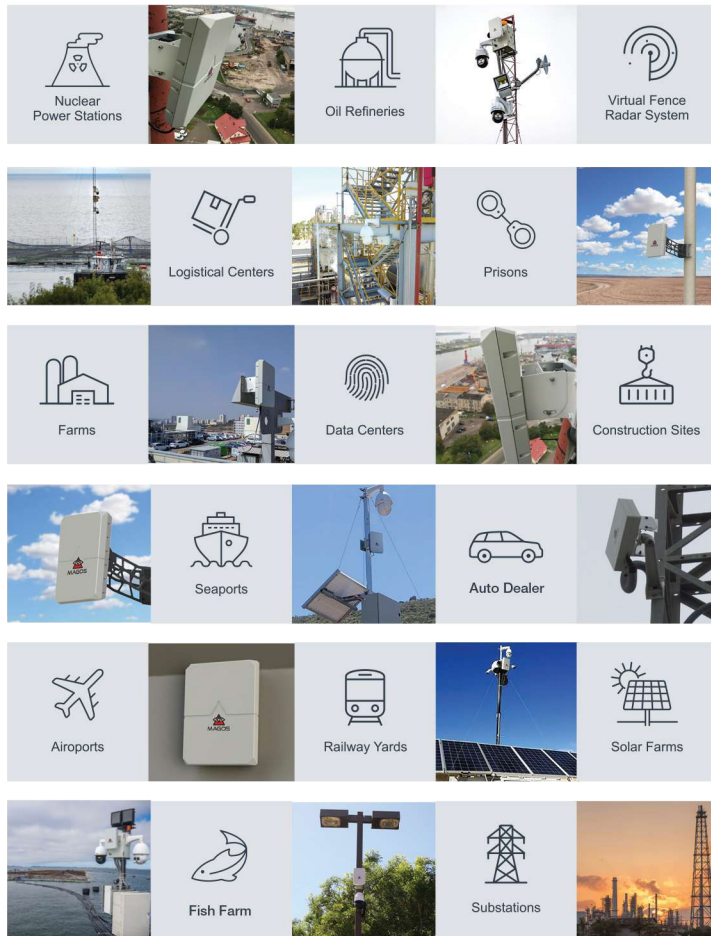
MAGOS SR-1000

The SR-1000 is Magos' long range addition to our advanced and cost effective perimeter protection detection solutions. The SR-1000 is most suited for large perimeters and areas that either have a wide area to cover continuously (Parking lots, Farms etc. or a very long perimeter(Airport, ports etc.).

By utilizing state of the art MIMO & Digital beam forming technology It covers an area of more than 800,000m2(>200 acres) with a detection range of up to 1000m for walker/ vehicle/boat, and yet consumes extremely low power (<5W). It boasts an ultra-high range accuracy giving it excellent performance in cluttered environments. Its small size, low power consumption and low weight make it simple to install and renders it ideal as a deployable system.



WIDE SPECTRUM OF APPLICATIONS



SPECIFICATIONS

Sensor type	High resolution MIMO digital beam-forming radar
Frequency	C-Band
Detection range	Up to 1200m
No moving parts	MTBF of 50,000 hours
Built in tracker	Extremely low required bandwidth
Scan rate	2 scans per second
Azimuth coverage	100°
Elevation coverage	30°
High Range accuracy	<1.0m
Azimuth accuracy	1°
Target detection speed	0.3 – 30 m/sec
Power	48V, <5W
System interface	Ethernet, POE - IEEE 802.3at Type 1 (802.3af) & Type 2
Dimensions	250(w) x 300(h) x 80(d) mm / 9.8(w) x 11.8(h) x 3.15(d) inc
Weight	3 Kg/6.6lb
Approvals	FCC, UL
Operating temperature	-40° - +85°C



PROTECT YOUR FACILITY WITH THE ULTIMATE PERIMETER PROTECTION SOLUTION



SCEPTER-C

**RADAR BASED PERIMETER PROTECTION
COVERING > 300,000m² WITH 1 RADAR CE CERTIFIED**

ALL WEATHER, 24/7 WIDE AREA SURVEILLANCE

MAGOS OFFERS RADAR BASED, COST EFFECTIVE, STATE-OF-THE ART PERIMETER PROTECTION SOLUTIONS

- All-weather 24/7 Cost effective solution for smaller sites in need of high level security
- **One Radar covers over 60 acre** with wide area coverage: 100° (horizontal) x 30° (vertical) detection up to 600m/1,968 ft
- Integrated with most VMS platforms
- Auto PTZ slew-to-cue integrated with most PTZ brands
- Lower initial investment and Reduced operating costs
- No moving parts and Wide Area coverage
- Install four **SCEPTER-C** and one PTZ Camera for all weather cost effective 360° solution covering over 1,000,000m²- 280 acres
- Edge processing driven extreme power & data efficiency – easy solar + wireless integration
- Easy installation & commissioning with **MASS** Wizard site builder
- Integrated with **MASS+AI** - minimal nuisance alarms with **AI** based target classification



MAGOS SCEPTER-C

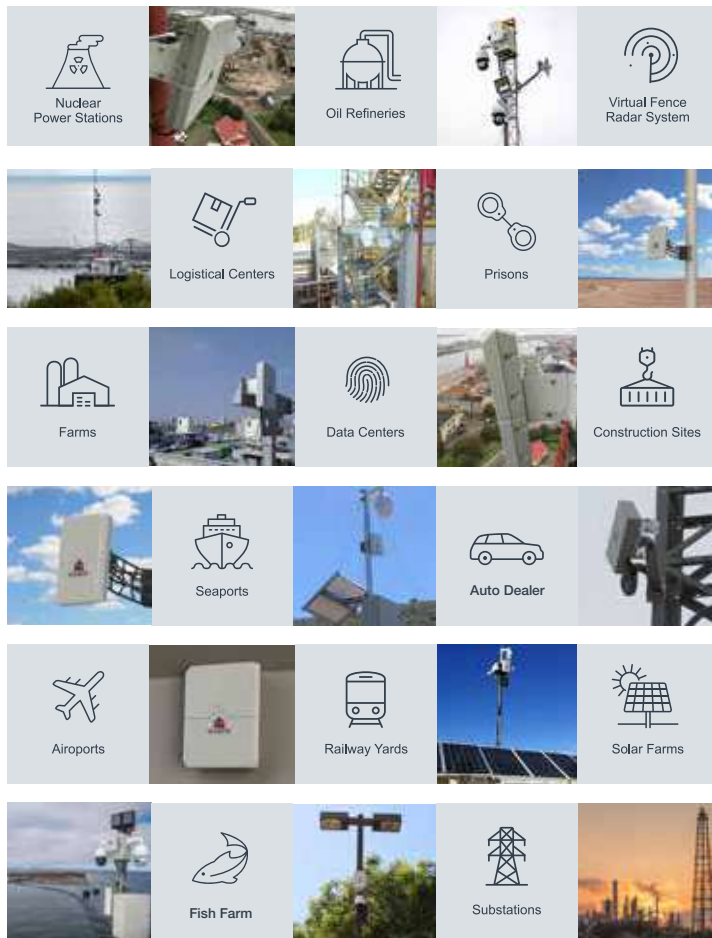
The Scepter-C is MAGOS' long range addition to our advanced and cost effective perimeter protection detection solutions. The Scepter-C is most suited for large perimeters and areas that either have a wide area to cover continuously (Parking lots, Farms etc. or a very long perimeter(Airport, ports etc.).

MAGOS' CE Certified addition to our advanced and cost effective perimeter protection detection solutions. The Scepter-C is most suited for medium-large perimeters and areas that either have a wide area to cover continuously (Parking lots, Farms etc. or a very long perimeter(Airport, ports etc.).

By utilizing state of the art MIMO & Digital beam forming technology It covers an area of more than 300,000m2(>60 acres) with a detection range of up to 400m for walker 600m vehicle and yet consumes extremely low power (<5W). It boasts an ultra-high range accuracy giving it excellent performance in cluttered environments. Its small size, low power consumption and low weight make it simple to install and renders it ideal as a deployable system.



WIDE SPECTRUM OF APPLICATIONS



SPECIFICATIONS

Sensor type	High resolution MIMO digital beam-forming radar
Frequency	C-Band
Detection range	Up to 400m Human/600m for Vehicle/Boat Drone detection - 100m
No moving parts	MTBF of 50,000 hours
Built in tracker	Extremely low required bandwidth
Scan rate	2 scans per second
Azimuth coverage	100°
Elevation coverage	30°
High Range accuracy	<1.0m
Azimuth accuracy	1°
Target detection speed	0.3 – 25 m/sec
Power	48V, <5W
System interface	Ethernet, POE - IEEE 802.3at Type 1 (802.3af) & Type 2
Dimensions	250(w) x 300(h) x 80(d) mm / 9.8(w) x 11.8(h) x 3.15(d) inc
Weight	3 Kg/6.6lb
Approvals	CE, UE, cTUVus
Operating temperature	-40° - +85°C



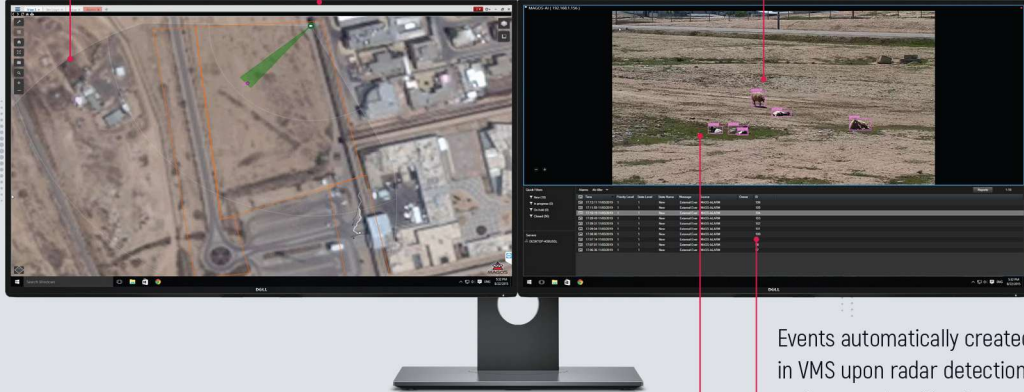
MASS

MAGOS AREA SURVEILLANCE SOFTWARE

Advanced Masking/ Geo fencing capabilities

Integrated and operational with a variety of VMS – Milestone, Avigilon, Genetec, FLIR Latitude, Victor, VideoEdge, Digifort, ISS, D-Guard EXACQ, Symphony and more...

Integrated Video Analytics target classification for Minimal FAR & NAR



Events automatically created in VMS upon radar detection and target classification

Automatic PTZ Slew-to-cue – plug and play with ONVIF cameras

MASS DRIVES THE MAGOS SOLUTION POWERED BY OUR FAMILY OF COST EFFECTIVE HI-RES GROUND BASED RADARS

SR-250

Covering >15 Acres / Detecting targets up to 250M



SR-500

Covering > 60 Acres / Detecting targets up to 500M



SR-1000

Covering > 200 Acres / Detecting targets up to 1000M



- Seamless integration with leading VMS platforms
- Auto PTZ Slew-to-cue
- Integrated Video Analytics target classification
- Advanced Masking/Geo fencing capabilities
- Mobile device operation and Pairing
- Easy setup and installation
- Automatic Drone launch to Radar detection
- Unlimited number of sensors
- Web based radar control interface with built-in Mapping engine
- Fully unattended operation with Multi Site capabilities



MASS+AI

PRESENTING MAGOS INTEGRATED AI TARGET CLASSIFIER

AUTONOMOUS PERIMETER PROTECTION FROM DETECTION TO REACTION

DETECT

RADAR DETECTS IN ALL WEATHER & LIGHTING CONDITIONS



VIEW

PTZ CAMERA AUTO & CONTINUOUSLY CUED TO TARGET



CLASSIFY

TARGET CLASSIFIED



ALERT

ALARM RAISED AND VMS EVENT CREATED
ONLY ON VALID TARGETS



REACT

AUTO-STREAM LIVE DIRECTIONS AND VIDEOS TO PATROL,
DRONE AUTO-LAUNCHED TO TARGET, LASER FLICKER,
ACOUSTIC CANON, FLOOD LIGHT, VOIP LOUDSPEAKER



MINIMIZE FALSE & NUISANCE ALARMS BY COMBINING RADAR DETECTION + AI CLASSIFICATION

- Optimal for unattended sites and remote surveillance sites- utility sub-stations, data centers
- Merges the best target detection technology(Radar) with the best target classification technology(AI)
- Combined classification engine yields lowest possible rate of false & nuisance alarms with the best probability of detection in all weather conditions



MAGOS-AI APPLIANCE

MAGOS ARTIFICIAL INTELLIGENCE APPLIANCE

The Magos AI Appliance adds deep-learning video analytics to any IP camera. When connected to Magos Area Surveillance System (MASS) software, customers can improve radar detection performance and get automated target classification capability - greatly reducing nuisance alarms from wildlife and moving vegetation and improving target detection and tracking performance.



KEY FEATURES

Appliance features leading CPU and GPU hardware that simultaneously support Magos area surveillance software with AI capabilities.

It supports up to 5 PTZ cameras concurrently and can be stacked with more appliances to fit any number of cameras and radars.

Preloaded and configured with Magos' MASS and AI analytics technology

High capacity video analytics processing

Supports any ONVIF compliant cameras

Pre-configured for quick and easy setup with MASS software

Dual hot-swappable power supplies for high availability in the event of component failure

An easy to access and maintain 1U rack mount chassis - includes a sliding rail kit

A three-year warranty with on-site parts delivery service



Specifications



SYSTEM	Control software	Magos Area Surveillance System – compatible with version 3.1 or above
	Operating System	Hardened Linux, supports secure remote upgrades
	Network Video Streaming Performance	1 GbE Up to 600 Mbps over a single connection 5 x 2MP (10fps)
	Recording Storage Capacity	None
	Drive Configuration	Mirrored OS – 2 x M2 drives, RAID 1
	Network Interface	1 x 1GbE RJ-45 ports (1000Base-T)
	Graphics Processing Unit	NVIDIA Quadro®
	Video Outputs	4 x HDMI – for administration only
	Local Viewing	Yes or web-based administration
	MECHANICAL	Form Factor
Dimensions (LxWxH)		589 mm x 482 mm x 43 mm; 23.2" x 18.9" x 1.68"
Weight		8.8 kg (19 lbs)
ELECTRICAL	Power input	100 to 240 V AC, 50/60 Hz, auto-switching
	Power Supply	550 W redundant, hot-swappable (1+1)
	Power Consumption	Average: 350W (1200 BTU/h), Maximum: 550W (1880 BTU/h)
ENVIRONMENTAL	Operating Temperature	10°C to 35°C (50°F to 95°F)
	Storage Temperature	-40°C to 65°C (-40°F to 149°F)
	Humidity	10% to 85% relative humidity with 40°C max. dew point
	Operating Vibration	0.26 Grms at 5 Hz to 350 Hz
	Storage Vibration	2.0 Grms at 10 Hz to 500 Hz for 15 min
	Operating Shock	10G
	Storage Shock	70G
SUPPLIED ACCESSORIES	Rack Rail System	Sliding rail system. Supports: <ul style="list-style-type: none"> • Tool-less mounting in 19"-wide EIA-310-E compliant square hole and unthreaded round-hole 4-post racks • Tooling mounting in threaded hole 4-post racks
	Bezel	1, front
	Power Cords	2
ANALYTICS PERFORMANCE	Decoding channels	5
	Immediate Analytics channels	2
DEVICE TYPES SUPPORTED		ONVIF compliant PTZ cameras with absolute move capability