



Safer Roads, Smart Systems

Edgmagic Defender

We Deliver a Comprehensive Ai Platform for the Physical World

Designed for Harsh, Unconstrained Environment

Our deployments address many difficult challenges;

- Poor and uneven lighting conditions,
- Glares, fog,
- Vibrations and accelerated motion.
- Unpredictable outages in signal, network, power

Tight Coupling of Sensors, Compute, Software and Ai

- All solution components from HW to SW to Ai are designed for easy and tight integration making deployment and operations easy
- Solution components can be easily changed - lenses, illuminators, compute, Ai models - to ensure most suitable deployment at each location

Inference Pipeline and Real Time Response

- We have built a robust architecture for fusing sensor inputs so we gain a richer understanding of the physical world.
- Our inference pipeline enables the right pre and post processing actions to deliver high quality analytics.
- Our solutions deliver results in real time with optimised Ai models

Natural Language Interface for Easy Usage

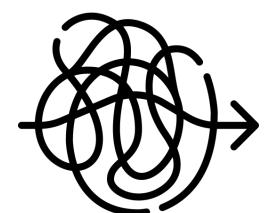
- We convert the physical world - people, faces, vehicles, objects - into digital data.
- This data can be integrated with other enterprise data sources and queried through a GenAi based natural language interface for more intuitive consumption of data

Flexible, Adaptable, Headroom to Grow

- Our software driven approach and modular architecture enables support for changing requirements in future.
- We can easily integrate our devices with local actuators, hardware to trigger actions and drive higher degree of assistance and automation

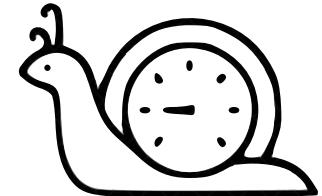
Comprehensive & Integrated Platform - designed for easy deployment & operations in physical world

FROM CURRENT CLOUD CENTRIC SOLUTIONS



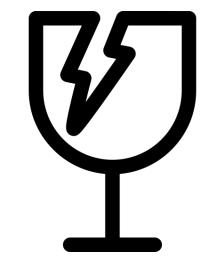
Complex

Diverse components (cameras, SW, Ai Models) from different suppliers. Difficult to integrate



High Latency

High latency due to need to carry high bandwidth signals to central servers for processing



Fragile

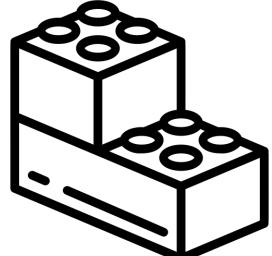
Prone to loss of signal, network, power leading to loss in inference



Not Adaptable

Hardwired solutions. Not easy to adapt to changing requirements

TO EDGE NATIVE Ai SOLUTIONS



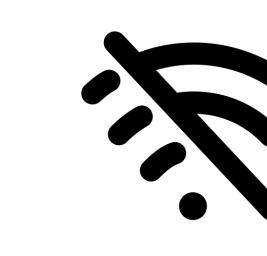
Integrated

All components - sensors, Ai models, software designed to work together



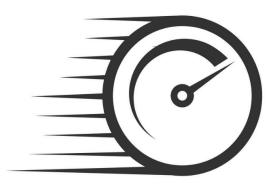
Resilient

Built in processing, redundancy, Not reliant on external systems, Battery backup



No Network

In device processing. Not reliant on high bandwidth network



Low Latency

Optimised Ai models. In device processing. Real time results



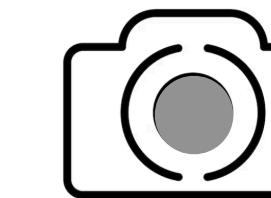
Adaptive

Software driven - easy to onboard new Ai models. Replace lenses, sensors



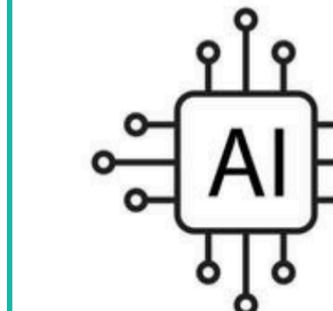
Secure

Data remains in device. Only post inference alerts travel out



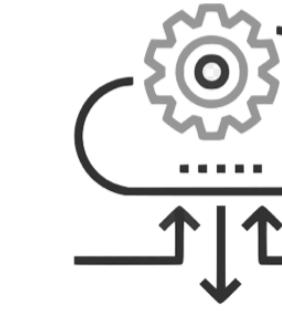
Sensors

- Illumination
- Wifi, GPS, IMU
- Battery Backup



Ai Device

- Local Processing
- Orchestration Software
- Interfaces



Ai Models

- Optimized for edge
- Inference Pipeline
- Device Management Software

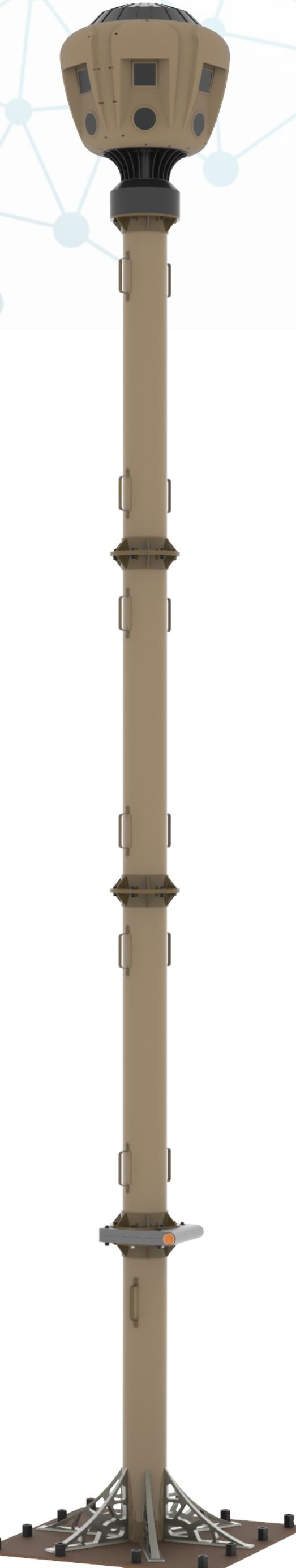


Insights Platform

- Cloud based
- Integration APIs
- Device Management

Features

- **Detects, recognises, and identifies threats from 10 m to 500 m**
 - Day or night, rain or shine, clear or foggy
- **Intelligence at the edge** delivers insightful performance with broken, weak, or intermittent network connections.
- **Highly redundant architecture** allows for system to work even with multi-component failures.
- **Inbuilt battery backup** allows for continuous operations despite power outages.
- **Innovations in tower design** allow for easy installation and ongoing maintenance and operations.
- **Innovation in camera design** ensures robust performance with minimal maintenance and cleaning.
- **Fusion of sensors**, visible, thermal, RADAR, GPS, IMU and other sensors improves situational awareness.



Representative Solutions

Pole Cam - Extra Long Range Panoramic Visibility



Perimeter
Fencing

People / Object/
Vehicle
Detection

Activity
Detection,
Classification

Parking Assist

Ai Specifications

- **People, vehicle, objects, and scene related Ai modules;** detect, count, pick attributes, identify activity, proximity recognition, container number recognition, vehicle number plate recognition, presence or absence of objects and anomaly detection, parking space detection.
- **Ai modules are optimized** to run in robust, performance efficient and precise manner to reduce false alarms.



Benefits

- **Self-standing, self-aware, self-healing** system designed to run in regular and harsh environments.
- **One installation, large coverage.**
 - Reduces effort, costs, and operational complexity.
- **Aesthetically designed** system can be made to merge with the surroundings.
- **Sensor fusion** ensures comprehensive situational awareness and action.





Thank You