iOmniscient

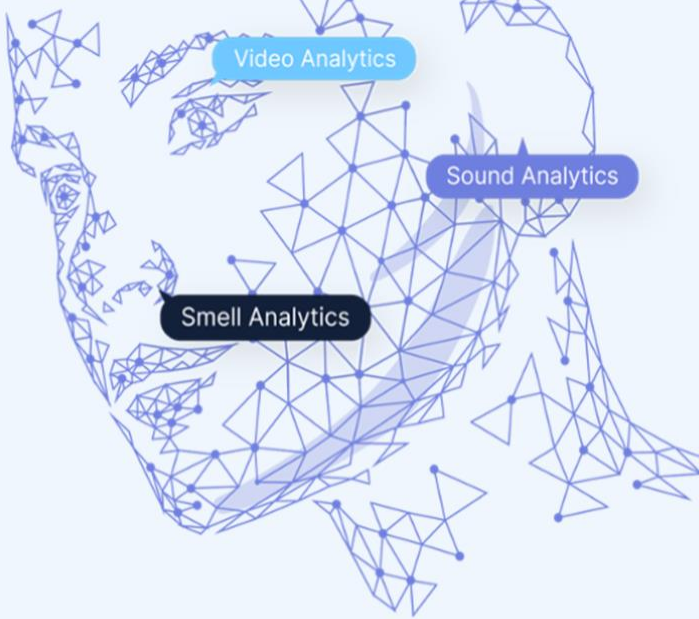
iQ-Healthcheck

A comprehensive system for camera maintenance



iOmniscient

Table Of Contents



1 The Challenge

2 Traditional Monitoring vs iQ-Healthcheck

3 Types of Malfunction

4 Key Features

5 How It Works

6 Why iOmniscient

7 About iOmniscient

Click a number and go to the page

iOmniscient

The Challenge

Any sensory-based analytics system is only effective when the sensors are working.

Current Challenges

- Up to 20% of cameras in a large CCTV network may be malfunctioning at any time
- Faults often go unnoticed until an incident such as a theft occurs
- Malfunctions can be accidental (fog, dust, a spider’s web) or deliberate sabotage
- A system is only fulfilling its purpose when it is functioning effectively

Why iQ-Healthcheck?

iQ-Healthcheck runs alongside any existing system, receiving its feed directly from the cameras. It sends the maintenance team a ticket highlighting the fault and tells users in real time when a camera is not functioning correctly.



iOmniscient

Traditional Monitoring vs iQ-Healthcheck

One moving fault-detection layer replaces manual, ad-hoc inspection.

Traditional Approach

- ✕ Faults discovered only after an incident occurs
- ✕ Manual, ad-hoc inspection rounds
- ✕ No visibility into camera health
- ✕ Reactive maintenance, higher downtime

iQ-Healthcheck

- ✓ Continuous, automated fault detection
- ✓ Real-time alerts and maintenance tickets
- ✓ Dynamic map view of every camera’s status
- ✓ Proactive maintenance, maximum uptime

iOmniscient

Types of Malfunction

The system continuously detects three categories of camera malfunction.



Accidental Malfunction

- Camera out of focus
- Camera disconnection
- Camera moved accidentally
- Spider’s web over lens



Purposeful Malfunction

- Tamper detection
- Covering of lens
- Painting over of lens



Environmental Issues

- Insufficient scene contrast
- Rain, fog, dust or snow
- Camera shake from strong winds

iOmniscient

Key Features

Proactive maintenance keeps every camera at maximum uptime.



Dynamic Map View

All cameras and their status shown on a live map; click any camera to see its view.



Pro-Active Maintenance

Early knowledge of each camera's status keeps the whole system at maximum uptime.



Real-Time Ticketing

Fault details sent directly to the maintenance team, prioritized by location and severity.



Multi-Sensory Analytics

Video-sound-smell based AI analytics for autonomous camera-health monitoring.

iOmniscient

How It Works

From fault to fix, without manual inspection rounds.

1

1. Detect

The system continuously analyzes every camera feed for signs of malfunction.

2

2. Diagnose

It identifies the precise fault type — accidental, purposeful, or environmental.

3

3. Notify

A maintenance ticket is sent with the camera's location and fault priority.

4

4. Resolve

The maintenance team fixes the issue and the system status updates automatically.



iOmniscient

Why iOmniscient

The technology advantage behind every iOmniscient deployment

Cost Effective

Uses existing CCTV infrastructure with lower-resolution, fewer cameras. No GPUs required, 90% less storage & bandwidth, and no large control room — a smartphone becomes the control room.

Autonomous Response

When an event occurs, the system automatically finds the appropriate responder and tells them exactly where to go and what to do.

Privacy Protection

All iOmniscient systems are privacy protected by design. Privacy is never compromised, even while the system stays aware and raises alerts for safety issues.

©2026 iOmniscient Corporation

About iOmniscient

Partnership

All iOmniscient Products run exclusively on Intel based computing hardware using OpenVINO™

- The use of Advanced AI technology that goes beyond Deep Learning enables iOmniscient to run its systems without the need for 3rd party GPUs.
- This reduces the power required by a factor of 16 – resulting in a 16-fold reduction in the carbon footprint.
- This is just one part of a multi-faceted program to help customers to implement Sustainable Systems.

www.iomni.ai

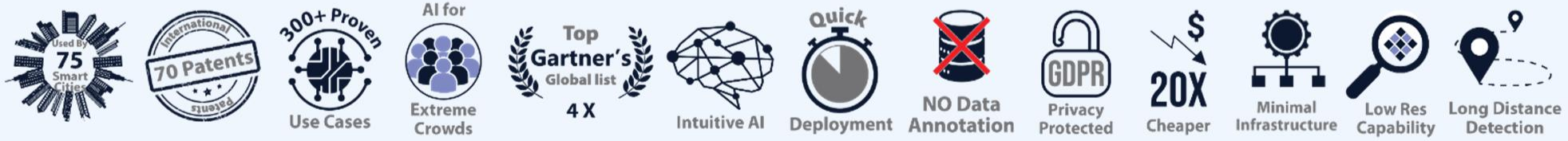
enquiries@iomni.ai

©2026 iOmniscient Corporation

About iOmniscient

- iOmniscient is an **Ethical AI** company.
- It offers **multi-sensory (video-sound-smell) Artificial Intelligence based analytics for Autonomous Systems.**
- It focuses on ensuring **Outcomes** for its customers.
- With **over 2 decades of experience,** iOmniscient systems have been demonstrated to be **robust,** operating with high accuracy and few false alarms specially in **complex and crowded** environments.
- By design, its systems **reduce the cost of infrastructure** required:
  - they can use existing cameras
  - they require fewer cameras with lower resolution
  - they require 90% less storage and network bandwidth
  - they are computing light and require no GPUs
  - they allow autonomous operations requiring fewer personnel to operate
- iOmniscient has implemented projects in **70 countries.**
- With over **70 international patents** many of its capabilities are unique and unavailable from any other source.





iOmniscient