SPECIFICATION SHEET

# CrowdSense Desktop

People, queue, occupancy and vehicle counting from the cameras you already have. The video is analysed on your own Windows PC; only the numbers reach your CrowdSense dashboards, reports, alerts and API.

### One process per camera

Each video channel runs as its own Windows process. No Windows sign-in is required to keep it running.

### Metadata only on the wire

The pictures stay on the machine. Only events (line crossed, zone joined, and the like) leave the site, so a thin or unstable link still works.

### Tune it on the box

A live view and a recent-events list sit next to the stream, so lines and zones can be set and checked on site without waiting on the cloud.

## What it measures

| | |
|---|---|
| **People counting** | Entries, exits and footfall at gates, doors and walkways. |
| **Queue counting** | Queue length and wait time at gates, bars and counters. |
| **Live occupancy monitoring** | A running total inside, with alerts before capacity. |
| **Vehicle counting** | Cars, vans, trucks, buses and bikes, counted by type. |
| **Vehicle speed detection** | Average and peak speeds from two calibrated lines. |
| **OOH audience intelligence** | Passers-by, dwell and traffic at screens and billboards. |
| **Face, gender and age detection** | Anonymous age-band and gender estimates, never recognition. |
| **Parking analytics** | Car park occupancy, entries, exits and dwell, live. |
| **On-premise & private AI** | The AI runs on your own PC. Video never leaves the site. |
| **Retail analytics** | Footfall, conversion, queues and dwell for stores and pop-ups. |
| **Airport & transport hub analytics** | Passenger flow, queues and kerbside traffic at hubs. |
| **Anti-tailgating security** | Alerts when someone follows another through a controlled door. |
| **Library people counting** | Visitor counts, busy hours and occupancy for libraries. |
| **Perimeter security** | Zone, line and loitering alerts for closed areas. |
| **Video analytics API & webhooks** | Real-time camera events over a REST API and webhooks. |
| **Custom objects AI counting** | A model trained on your footage to count your own objects. |

## Detection profiles

| Profile | Detects | Accuracy | Classes | Per frame |
|---|---|---|---|---|
| **AI profiles**<br>Machine-learning models. Fewer false detections from shadows and sun. Needs more CPU, and AVX2. | People, vehicles or faces | Up to 98% | Person, bike, car, van, truck, bus. Face age and gender on the faces profile. | 20 ms per frame |
| **Non-AI profiles**<br>Background extraction. Lighter on the machine. More channels per box. | Any moving object | Overhead up to 92%. Tilted up to 80%. | None | 2 ms per frame |

## Hardware: feeds per PC

| Computer | AI profiles | Basic motion |
|---|---|---|
| Intel i9, 64 GB RAM, GeForce RTX | 30+ feeds | 40–80 feeds |
| Intel i7, 32 GB RAM | 7–15 feeds | 25–35 feeds |
| Intel i5, 16 GB RAM | 5–10 feeds | 17–25 feeds |
| Intel i3, 8 GB RAM | 3–6 feeds | 10–20 feeds |
| Intel Celeron / Atom, 4 GB RAM | Not supported | 3–7 feeds |

Tested box: Intel i9-14900K (3.20 GHz), 64 GB RAM, Nvidia GeForce RTX 4070. Tested at 30 feeds. One feed is one camera stream.

### Operating system

- Windows 10, 11 or Server, 64-bit (the installer is x64).
- A processor with AVX2 for the AI profiles (most Intel Core and AMD Ryzen chips since 2015). AMD follows the same bands.
- A discrete graphics card is optional; it helps at the top of the range.
- No Windows sign-in needed: each camera runs as its own background service.
- Internet: the numbers only, so 4G is plenty.

### Minimum object size

| | |
|---|---|
| AI, vehicle front or back | 4% of frame width |
| AI, vehicle side-on | 10% of frame width |
| AI, person | 3% of frame width |
| AI, face | 4% of frame width |
| Non-AI, any moving object | 3% of frame width, absolute minimum |

## Cameras

### What it will talk to

Any webcam. Any IP camera that can stream RTSP. ONVIF is not required. It is useful for discovery.

### Resolution

Any resolution works. Smaller frames (around 360p) are easier on the box, as long as neither side is under 256 pixels. For the faces profile, use 720p or 1080p.

### Tilt

Overhead profile: 0–20°. Tilted profile: 20–70°. AI people and vehicles: 20–90°. AI people: 0–90°. AI faces: 80–90°.

RTSP addresses for thousands of camera models: crowdsense.events/knowledge-base.

## Portal and plan features

- Counts, occupancy, queues, dwell, heatmaps and vehicle classes
- Unlimited users with roles, dashboards, reports and embeddable widgets
- Real-time occupancy alerts, REST API and webhooks
- A remote set-up check of each feed when it is activated
- Monthly or yearly; add or remove feeds as you go
- 14-day free trial on up to 4 feeds

## Privacy

CrowdSense Desktop analyses the video on the Windows PC it is installed on. What reaches the portal is text: a line was crossed, a zone filled, a queue grew. No video and no images are uploaded, and nothing sent can identify a person.

The software detects people and vehicles so it can count them; it does not identify anyone. No facial recognition, no biometric identification of people. Ever. Your cameras, your recordings and your footage stay on your site, under your control.

## Installer

| | |
|---|---|
| Product | CrowdSense Desktop 3.7.17 |
| Platform | Windows 10, 11 and Server, 64-bit |
| File | CrowdSense-x64-v3.7.17.msi, 168 MB |
| Download | crowdsense.events/download/crowdsense-desktop-windows.msi |
| SHA-256 | `fd3126525ea1e23d2974419fea53e9298aa18db0f399be454cd5cde641606b90` |
| Portal | cloud.crowdsense.events |

**Start a 14-day free trial, or book an event pass**

crowdsense.events/desktop/start · Plans: crowdsense.events/pricing