Hotel and Restaurant :

| **Product code** | CZK-HotelRestaurant |
| --- | --- |
| **Hardware Platform** | Edge: Nvidia Jetson Series, Sophgo Micro Servers  Central: Nvidia H100, L40, RTX 4000 Series, RTX 5000 Series Ada, A16, A30, Sophon AI server |
| **Operating System** | Ubuntu, MS Windows |
| **Management Interface** | Web-Based Management Software |
| **Database** | PostgreSQL |
| **Development Approach** | Microservice, containerized |
| **Frontend** | React |
| **Backend** | Python |
| **3rd party Integration** | 3rd Party API Integration  Camera Support: RTSP, ONVIF |
| **Keywords** |  |

**Guest Facial Recognition for Check-in & VIP Services**

* **Enables seamless, contactless check-in using facial recognition.**
* **Recognizes VIP guests and offers personalized services.**
* **Enhances security by identifying blacklisted individuals.**

**Intrusion Detection & Perimeter Security**

* **Detects unauthorized individuals in restricted hotel areas.**
* **Enhances security at entry points, parking lots, and staff-only zones.**
* **Prevents unauthorized access to guest rooms and sensitive locations.**

**Queue & Crowd Management**

* **Monitors queues at reception, restaurants, and event areas.**
* **Reduces wait times by optimizing staff allocation.**
* **Provides real-time analytics for improved customer service.**

**Kitchen & Food Safety Monitoring**

* **Ensures kitchen staff follow hygiene protocols (PPE compliance, handwashing).**
* **Detects food safety violations, such as improper handling or storage.**
* **Enhances compliance with health regulations.**

**Fire & Smoke Detection**

* **Identifies fire hazards in guest rooms, kitchens, and common areas.**
* **Sends real-time alerts to security and emergency teams.**
* **Prevents large-scale hotel disasters.**

**Theft & Loss Prevention**

* **Detects suspicious activity in lobbies, hallways, and storage rooms.**
* **Prevents unauthorized access to hotel safes and valuables.**
* **Enhances security for guests and staff.**

**Parking & Valet Security (License Plate Recognition - LPR)**

* **Automates vehicle entry and exit with LPR technology.**
* **Tracks VIP and staff parking spaces for efficient management.**
* **Prevents unauthorized parking and vehicle theft.**

**Energy Efficiency & Smart Building Analytics**

* **Monitors room occupancy for automatic energy savings.**
* **Detects unoccupied rooms with lights or HVAC running.**
* **Helps reduce operational costs through AI-based automation.**

**Emergency Evacuation & Guest Safety Analytics**