Retail :

| **Product code** | CZK-Retail |
| --- | --- |
| **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** |  |

**Specific Video Analytics Applications:**

* **Customer Footfall Analytics** – Analyzes customer traffic.
* **Shelf Stock Monitoring** – Detects low inventory in real time.
* **Queue Management** – Reduces checkout wait times.
* **Loss Prevention (Theft Detection)** – Alerts security to potential shoplifting.
* **Heatmap Analysis for Store Optimization** – Identifies popular store sections.
* **People Counting and Demographic Analysis** – Tracks age, gender, and customer emotions.

**Key Benefits:**

* **Theft Prevention** – Identifies shoplifting attempts.
* **Customer Behavior Insights** – Analyzes shopping patterns for marketing strategies.
* **Queue Management** – Reduces checkout waiting times.
* **Inventory Monitoring** – Detects empty shelves and restocking needs.