VISUALCOUNTER

VISION-5D

CUSTOMER TRAFFIC MONITORING SENSOR FOR COMMERCIAL AREAS

Solution for customer flow analysis in commercial areas. The most accurate (99%) and reliable people counting solution on the market

LATEST GENERATION ToF (TIME-OF-FLIGHT) TECHNOLOGY
Innovative `Time of Flight´ technology that creates a high-resolution and accurate 3D image (with no GDPR impact) based on infrared rays reflected from the surroundings

MAXIMUM ACCURACY WITH ARTIFICIAL VISION ALGORITHMS
Processing algorithms based on neural networks and fuzzy logic that make it the most accurate people counting system on the market (>99%)

CUSTOMER SEGMENTATION AND GROUPING BEHAVIOUR
Customer path tracking, object identification and customer segmentation by height and grouping behaviour (individuals, couples and groups/families)

SMARTPHONE DETECTION AND TRACKING
Integrated module for detection and tracking of smartphones

WAITING IN QUEUE MANAGEMENT
Monitoring of people in queues and their waiting time

IP / IoT / M2M CLOUD-NATIVE COMMUNICATIONS
IP communications (Ethernet PoE, WiFi) and IoT/M2M native modules (LTE-M 4G / NB-IoT 4G / 5G)

STAFF IDENTIFICATION
Variety of integrated technologies for the 'identification and exclusion of employees': RFID, Bluetooth, IR, Mobile app, NFC

EASY DATA INTEGRATION
Flexible data integration (API, text csv, xml, JSON, web services)

INTERNAL STORAGE OF HISTORIC DATA
Historic data storage up to a maximum of 400 days

REMOTE AND CENTRALISED CLOUD MANAGEMENT
Remote cloud management of an unlimited network of devices

COMMERCIAL AREA BEHAVIOURAL ANALYTICS

PEOPLE COUNTING AND CUSTOMER PATHS
- Daily/weekly/monthly traffic paths
- Customer grouping behaviour
- Occupation of the commercial area
- Counting of people crossing and interested in the window display

DETECTION AND TRACKING OF SMARTPHONES
- Rate of attraction into the shop's commercial environment
- Visits and usual paths in department areas
- Dwell time in the shop and its different departments
- Returning customer rate / loyalty
- Maps of activity and movement in the commercial area

WAITING IN QUEUE MANAGEMENT
- Identification of the number of people waiting in queues
- Estimation of the average waiting time and drop-out rate

IDENTIFICATION OF EMPLOYEES
- Identification or exclusion of employees
- Different integrated technologies:RFID, Bluetooth, IR, Mobile app, NFC

IOT - CLOUD SERVICES
- Cloud IoT architecture and platform with possibility of predictive and big data analytics services
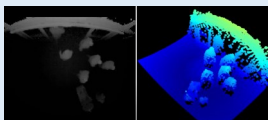
FUNCTIONAL ARCHITECTURE

TIME-OF-FLIGHT (ToF) TECHNOLOGY

The ToF technology allows to estimate the distances of bodies and objects obtaining a 3D image in real time with high precision and resolution
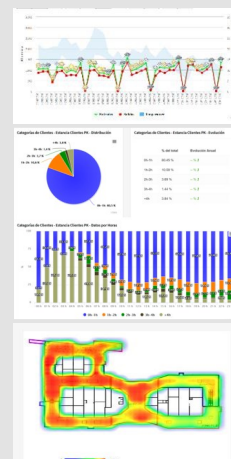
Latest generation algorithms

Processing algorithms based on neural networks and fuzzy logic that allow accurate counting, identification and monitoring of people

5D

5 Dimensions-Data

- SMART PEOPLE COUNTING
- SMARTPHONE DETECTION
- QUEUE MANAGEMENT
- EMPLOYEE IDENTIFICATION
- IOT - CLOUD SERVICES

TECHNICAL SPECIFICATIONS

Model	VC.VISION.5D (PoE / WiFI / Track / 4G / IoT-NB / 5G)
Sensor technology	ToF - Time of Flight
Processor / Operating System	ARM Cortex-A8 / Linux
Communications	IP (Compatible protocols: IPv4, TCP, UDP, DHCP, SNMP, SFTP, SSH, HTTPS) • Ethernet • WiFi (802.11 b/g/n) • LTE-M 4G / NB-IoT 4G / 5G
Voltage / Power consumption	• 12 VCC/700 mA (9 Wmax.) • PoE (Power Over Ethernet) - IEEE 802.3af Compatible
Connections	• RJ-45 (Network/PoE) • Jack (Power) • 2 x USB 2.0 • 10 pin connector: UART / Ext. Power 5V / Digital I-O • SMA connector for external antenna LTE-M 4G / NB-IoT 4G / 5G
Internal memory	Internal RAM/Flash
WIFI Scanner Module	• IEEE 802.11 b/g Standard: • WEP, WPA-PSK security • Integrated Antenna / Gain: 5 dBi Omnidirectional
Dimensions / Weight	40 x 151 x 94 mm / 750 g
Environmental parameters	• ROHS • Range of ambient operating temperature -25°C / +70°C • Relative humidity 5% / 95% (without condensation)

VISUALCOUNTER AROUND THE WORLD

- More than 40.000 counting devices installed

- Present in 80 countries on all five continents

- Reference customers in each market niche

- Solutions tailored to each country and sector

- Developing, manufacturing and marketing own people counting solutions