

# RETAIL SOLUTIONS

## 3D PEOPLE COUNTING SOLUTIONS

The next generation of automatic 3D people counting sensors. Far beyond counting.

TYPICAL  
**99%**  
ACCURACY



# APS-180E & APS-90E

## SMARTER PLANNING STARTS WITH INSIGHT: APS-180E & APS-90E

Our people sensors use 3D imaging technology and analytics to provide key insights for retail spaces. This knowledge allows businesses to plan operations efficiently, optimizing resources while increasing revenue.

Our best-in-class people sensors allow a seamless, accelerated integration with instore infrastructure. By combining revolutionary 3D image quality, superior low-light sensitivity and extremely low latency, the new generation of HELLA Aglaia Sensors sets the standard for data analytics and predictive solutions, going way beyond visitor counting.

### APS-180E



The APS-180E is an intelligent, highly dynamic stereoscopic camera equipped with precise image processing and feature-rich application software. As direct successor of the APC-180, it's designed to be compatible with existing set-ups in both form and size.

### APS-90E



The APS-90E combines a smart, highly dynamic stereoscopic camera with onboard computing power to pack precise image processing and feature-rich application software into an updated, sleek design. Also available as an outdoor-version.

## TECHNICAL SPECIFICATIONS

### Aluminum housing

#### Dimensions

237 x 99 x 37 mm  
(9.3 in x 3.9 in x 1.5 in)

**Weight** 600 g (21 oz)

**Internal storage** 8GB

**Protection class** IP 40  
(opt. cover & weatherproof housing)

**LED status indicator**

**Additional models**  
APS-180 E I/O

### Aluminum / plastic housing

#### Dimensions

160 x 160 x 42 mm  
(6.3 in x 6.3 in x 1.7 in)

**Weight** 400 g (14 oz)

**Internal storage** 8GB

**Protection class** IP 30

**LED status indicator**

**Additional models**  
APS-90 E I/O

**APS-180E**

**APS-90E**

**INSTALLATION REQUIREMENTS**

**Minimum mounting height**  
3 m (10 ft)

**Minimum mounting height**  
2 m (6.5 ft)

**Maximum mounting height**  
6 m (20 ft)

**Maximum mounting height**  
3,5 m (12 ft)

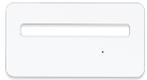
**ACCESSORIES**



Surface mount hood



Faceplate



Installation kit recessed



Surface mount box



Installation kit outdoor



Installation kit outdoor



1/4" camera mount adapter



1/4" camera mount adapter

**APS-180E**

**APS-90E**

**POWER**

<8 W power consumption

<8 W power consumption

**Power supply**  
PoE (PD-class 0)  
24 V DC (only I/O version)

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**EMC**  
CE, FCC, EAC

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Buffered clock battery

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**CONNECTIVITY**

3 inputs/outputs (optional)

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External scanner connectable  
via contact I/Os (outside  
traffic-capture rate)

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via contact I/Os (outside  
traffic-capture rate)

Ethernet 1000 Base T, PoE,  
RJ45 socket

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RJ45 socket

WiFi or Bluetooth device  
scanning (optional)

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scanning (optional)

Wireless HMI access  
for set-up

Wireless HMI access  
for set-up

Wireless data transmission

Wireless data transmission

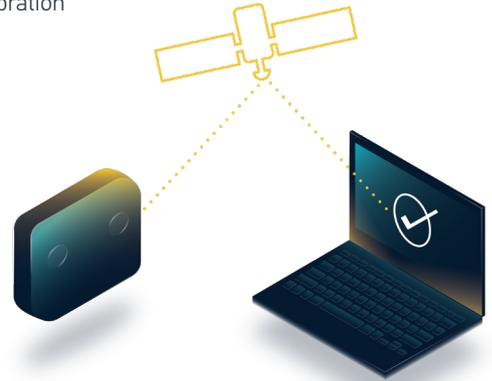
## DATA CREATED & TRANSMITTED BY PEOPLE SENSOR

- Real-time data (object ID/height, position, time, direction)
- Bi-directional counting
- Detection & alarms (Fill-level, Dwell time, Waiting time, Queue length)
- Heightmap information
- Object classification (adults, children, all other objects)
- Turnaround detection
- Real-time video streaming
- Onboard video recording
- Automatic upload of video sequences to server
- Secure data transmission via HTTPS
- Seamless integration with other in-store technologies via digital inputs and outputs
- Report format / communication protocols: SOAP/XML, REST, HTTP(S), (S)FTP, digital outputs, other IP-based services and custom protocols possible



## WEB GUI & CAMERA MANAGEMENT

- Secure user-level management access
- User customizable Web GUI (logo, colors)
- Auto-stitching multi-sensor images
- Update ability (remote and manual)
- Self-monitoring (online health check)
- Auto-calibration



## FUNCTIONALITY

### APS-180E

- >99% counting accuracy
- 10 counting lines
- 8 free definable zones

#### Maximum detection area

8 m x 8 m = 64 m<sup>2</sup>  
 at 6 m height  
 (26 ft x 26 ft = 690 ft<sup>2</sup>  
 at 20 ft height)

Automatic detection of installation height

### APS-90E

- >99% counting accuracy
- 10 counting lines
- 8 free definable zones

#### Maximum detection area

4,95 m x 4,2 m = 21 m<sup>2</sup>  
 at 3,5 m height  
 (13 ft x 17 ft = 220 ft<sup>2</sup>  
 at 12 ft height)

Automatic detection of installation height

# NEW SEAMLESS TRACKING OF PEOPLE

## LARGE-AREA-MONITORING

Seamless tracking of people over multiple sensors, covering wide entrances, checkout areas and large retail spaces.

- Continuous tracking of shopper behavior in large areas
- Array of up to 10 units in master-slave configuration
- Self-configuration: fully automatic without applying floor mats, marks, etc.
- Flexible definition of mounting heights and installation angles

## INTERNET OF THINGS

- Link People Sensing data with all IoT devices (PoS, inventory, weather, temperature, ...)
- Build real customer insights and 360 degree shopper profiles
- Feed sensor data directly into the Watson IoT platform

## INTEGRATE INTO EXISTING STORE INFRASTRUCTURE

- Simple integration of anti-theft technology, light barriers, RFID-readers, etc. via GPIOs
- Devices will act as gateway to 3rd-Party sensors
- Configurable real-time alerts via digital outputs



## QUEUE MANAGEMENT

- Measure fill level and waiting times
- Receive instant notifications when reaching threshold

## SHOPPER BEHAVIOR

- Monitor in-store hotspots (checkouts, promotional displays, ...)
- Gather insights for customer engagement



## OBJECT CLASSIFICATION

- Separate counting results for adults and children
- Classification of non-human objects, such as shopping carts
- Suppress potential false counts resulting from non-human objects

## COUNTING ACCURACY

- Monitors areas as large as 64 m<sup>2</sup> (676 sq ft) with up to 10 counting lines
- Conditional counting: account for every crossing, suppress U-turns, or select time windows
- Accuracy of at least 99%, even in crowded areas

## CONTACT US

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