People Counter

Detector for Counting People Indoors

ADEC people counter is a simple solution to accurately count people indoors in areas not affected by direct sunlight. The system easily overcomes the limitations inherent in today's people counter solutions operating with single or stereo-cameras.

The advantage of using sensors that use 3D point-could data is the absence of any and all privacy concerns: No data is acquired that would allow the identification of individuals. Additionally, the active nature of the system makes it independent from ambient light to work properly: it works equally well in complete darkness

Typical Applications

The people-counter system has been developed with typical counting applications in mind:

- Visitor counting
- Emergency & evacuation services
- Entrance / exit count

In addition to common applications, the system's design supports more advanced people tracking applications when using multiple counters linked together

- Entry / exit count at arbitrarily large pathways
- Data to provide geo-location / GPS services indoors
- Tracking of people movement over arbitrarily large area
- Counting of people in polygon-shaped stitch-together areas

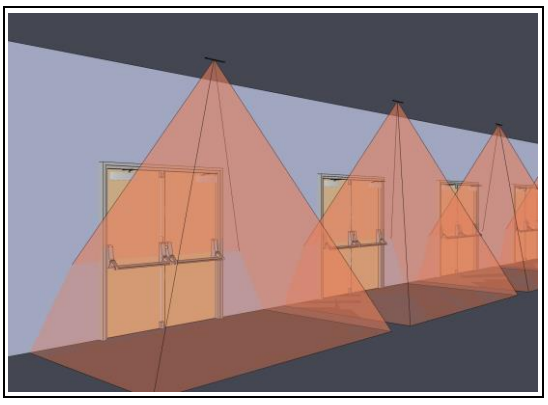
Principle of Operation

Each counter acquires 3D point-cloud information from the built-in sensor. Any number of counting lines or polygons can be defined. Counting information is stored locally or in a central database. Detectors report automatically to the commissioning tool for calibration and configuration of count lines. Data can be read from the counter using ODBC into any customer application, including Excel, Word etc., it can be auto-forwarded to a UDP server or to the ADECloud to be viewed in any Internet browser.

Features

- **Accurate counting of people indoors**
  Supports any number of count lines and polygon-shaped count-areas
- **Works in complete darkness**
  Does not require ambient light, works in emergency situations and complete darkness
- **PoE-powered**
  Operation on regular PoE-capable network switch (802.11af compliant)
- **Cloud / IoT integration**
  Integration into ADECloud to view count values and history in any web-browser
- **Dwell-time**
  For polygon-shaped count lines, retrieve time for each person to pass the area
- **Privacy preserved**
  3D point-cloud sensors eliminate need for video-based surveillance and camera-based image acquisition & analysis
- **Auto-configuration**
  Configuration software automatically discovers counters and facilitates guided configuration
- **Measurement of Aerial Count**
  Measures number of people in polygon-shaped area

Sample Installation



Technical Specification

Electrical	
Supply	via injector or PoE switch (802.3af)
Power consumption	5W max
Communication	Ethernet, 802.3af (PoE)
Power-up	Typically < 60 s from power on
Mechanical	
Dimensions [mm]	230 x 80 x 85 (w/o brackets)
Housing	PVC black
Mounting points	Standard CCTV Camera ¾" flunsh
Weight	app. 650 g (23 oz)
Counting & Tracking	
Accuracy	>99% in regular setting >96% in bi-directional traffic ~50% in shoulder-to-shoulder traffic
Counting Objects	Unlimited counting lines & polygons
Environment	
Operating Temperature	0°C to +50°C (32°C to +122°F)
Humidity	95 % RH max. (non-condensing)
IP protection	(not for outdoor use)

Accessories

PoE Power Injector

802.3af-compliant injector adds power to the detector if no PoE Router is used
Part # **21010**

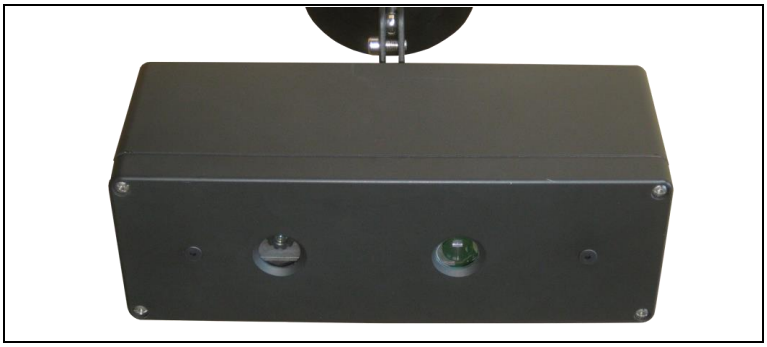
Communication & Infrastructure

802.3af-compliant professional POE-capable 8-port switch Part # **21055**

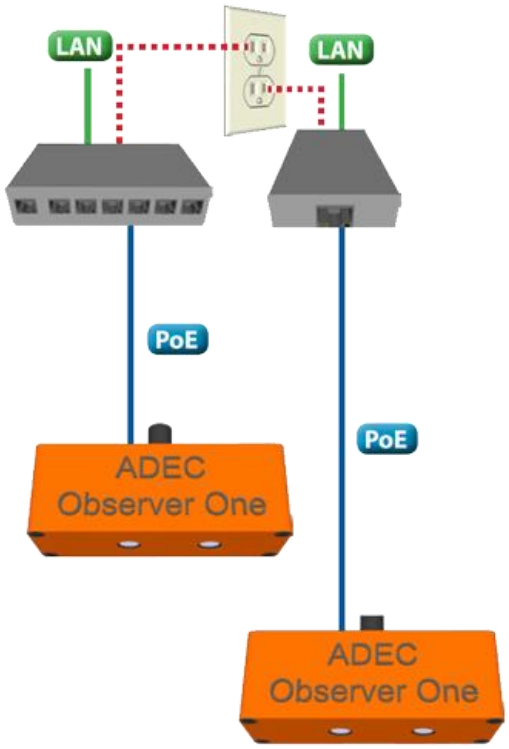
Ethernet Cables

1 m (3.3 ft.)	Part # **65022**
2 m (6.6 ft.)	Part # **65023**
5 m (16 ft.)	Part # **65025**
10 m (33 ft.)	Part # **65028**
20 m (66 ft.)	Part # **65030**
50 m (164 ft.)	Part # **65035**
90 m (295 ft.)	Part # **65039**

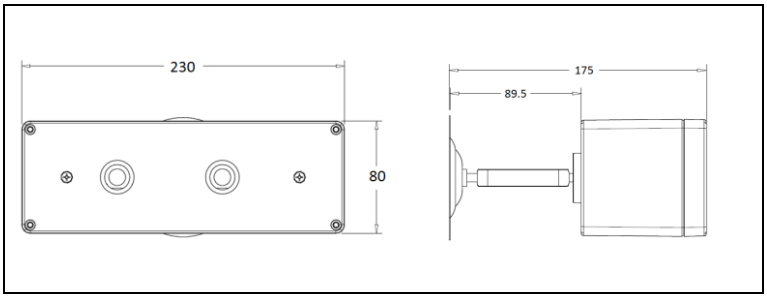
Detector



System



Mechanical Dimension



Mounting

The sensor is mounted at 3 – 4.5 m (10-15 ft.) above the floor. Field of view is 58x45º. Standard Power-over-Ethernet restrictions apply: Maximum Ethernet cable length 100m (330 ft.) from injector or PoE switch.

Important:

Data is based on samples and believed to be representative. Design and specification changes reserved without prior notice. For more specific information on the products, their installation and application please refer to the installation manual or contact the manufacturer.