

FootfallCam

3D Mini™

Product Code: FC-F3DMI01

FootfallCam Product
People Counter


Key Features

- Anonymous counting with Time-of-Flight Technology
- Performs in low light condition and complete darkness
- Extra low power consumption
- Single Door Coverage
- Bi-directional Counting
- Accurate Counting groups of people walking in close proximity
- Accurate counting for people moving at up to 3 metres
- Configurable threshold to include or exclude people less than a certain height.
- Can be mounted on a wall or ceiling.
- Can be mounted vertically or horizontally (sideways counting)
- FootfallCam 3D Mini™ works seamlessly with FootfallCam people Counter via RF.
- 1-year Manufacturer Warranty

FootfallCam 3D Mini™ is specially designed for anonymous people counting using Time of Flight (ToF) technology to collect anonymous depth image data. The sensor can perform counting regardless of environmental illumination and thus be able to count in low light conditions or complete darkness. It can be installed on the wall or ceiling near or right above a door entrance up to 3 metres in height. Counting direction is configurable for hassle-free installation. Each device is connected to the FootfallCam people counter receivers through a wireless network via Radio Frequency (RF). The data received is then transmitted to the FootfallCam Analytic Manager V8™ software for analytic purposes.

Basic Functions

1. **Visitor Counting.** Counting ins and outs (measure store performance, data collection for analysis of store performance, measure marketing response).
2. **Anonymous Counting.** Track the number of people in the facility without infringing on occupants' privacy by collecting anonymous depth image data, non-intrusive and not capturing any personal identity.
3. **Real-time Occupancy Tracking.** Track the number of visitors in a building at any given time through a smart display with live occupancy updates. Alert staff when the occupancy limit is breached.

Extra Functions

1. **GPIO Functionality.** An optional dry contact GPIO output can be added. Can be used for occupancy-based lighting control.

FootfallCam 3D Mini™

DIMENSION	
Device	94mm (W) x 61mm (D) x 45mm (H)
Packing	120mm (W) x 85mm (D) x 80mm(H)
WEIGHT	
Device	0.270 kg
Packing	1.02kg
CAMERA	
Sensor Type	Time-of-Flight (ToF) Sensor
Field-of-View (FoV)	27°
Emitter	Class 1 940nm invisible laser (VCSEL)
Indicators	Single bright LED
CASING	
Made by ASA Plastic	
IP RATING	
IP30	
STORAGE	
Up to 1000 event timestamps in Flash memory	
IDEAL MOUNTING HEIGHT	
Wall and Ceiling Mounting	1.9 metres – 3 metres
IDEA ENVIRONMENTAL	
Operating environment	Temperature 10°C to 45°C, Humidity 10% - 90%
Storage environment	Temperature -40°C to 80°C, Humidity 10% - 95%
TRACKING TECHNOLOGY	
Depth-sensing Time of Flight Technology. Collects anonymous depth image data.	
FIRMWARE FEATURES	
Over-the-Air (OTA) firmware upgrade	
ORIGIN	
Made in the UK	
INPUT POWER SPECIFICATIONS	
Voltage	7~12 VDC
Power Consumptions	0.4W
Cabling	16-28 AWG
OPERATIONS	
Communications	868/915 MHz ISM band 2-way wireless
Wireless Range	50m Line-of-sight, 20-30m noisy office environment
Topology	Star Network
Wireless Encryption	AES-128
Average Data Transfer Rate*	5.0 kilobytes/hour

*Average Data Transfer Rate is measured with a predefined sample size of 20 requests per hour.

Coverage Table

Mounting Height (m)	Coverage Area(m) (Horizontal FOV x Vertical FOV)
1.9	74 x 42
2.0	78 x 46
2.1	82 x 50
2.2	3.40 x 2.54 m
2.3	3.67 x 2.74 m
2.4	3.94 x 2.93 m
2.5	4.20 x 3.13 m
2.6	4.46 x 3.33 m
2.7	4.72 x 3.52 m
2.8	4.99 x 3.72 m
2.9	5.25 x 3.91 m
3.0	5.51 x 4.11 m

Notes:

1. The horizontal FOV does not indicate maximum permissible door width but simply the ideal case. It is acceptable to have a tolerance of $\pm 10\text{cm}$ as long as the shoulder is within the coverage area.
2. The 3D Mini can only count one person at a time. It is advisable to mount it on a door width suitable for single person entry only.
3. If the 3D Mini is mounted on top of an entrance with a swinging door, the preferable mounting position is in the opposite direction of the swing to minimise interference.
4. The 3D Mini should be mounted no more than 15cm from the top of the door opening. If this is not possible, the 3D Mini should be mounted on the ceiling instead of the wall. The distance from the wall should be no more than 30 cm.

