



FootfallCam People Counter

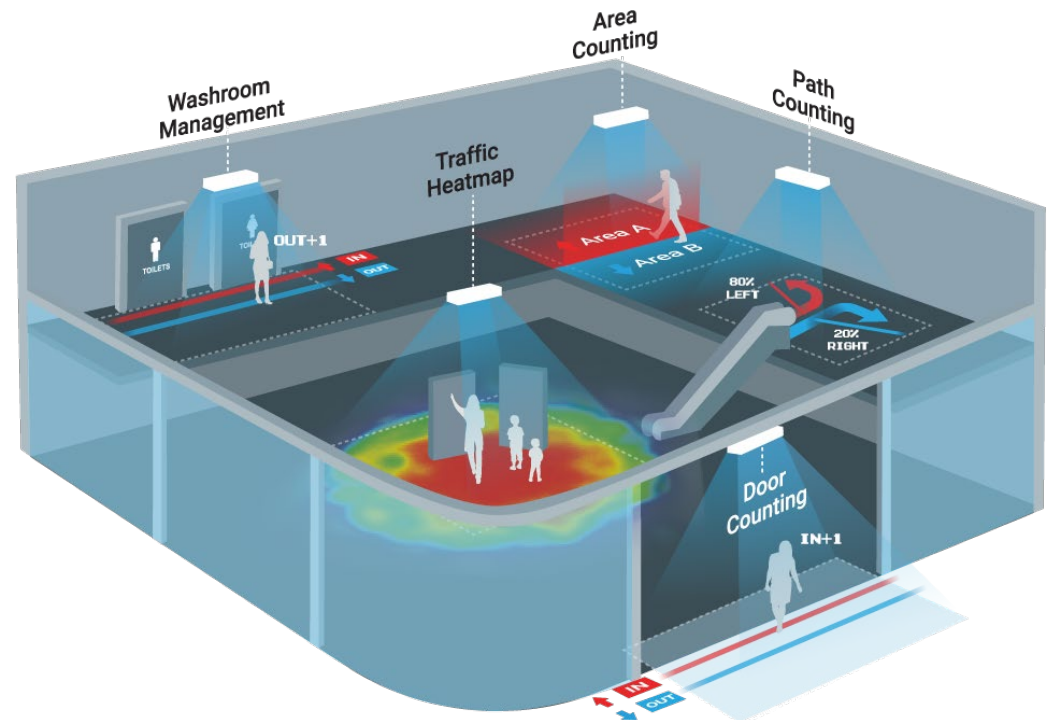
People Counting Solution for Shopping Malls

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 **FootfallCam™**

Why Do Shopping Malls Need People Counting Solution?

- Use traffic data to benchmark shopping mall performance
- Determine the effectiveness of marketing campaigns
- Substantiate the value of retail spaces
- Track customer journey through the mall
- Maximize marketing by strategically placing advertisements



Shopping Mall System Package



- **All-in-one package:** Hardware comes with integrated software
- Hardware: **FootfallCam 3D Pro2™**
 - 98% and above accuracy
 - Mean time to failure of 25 years
 - Widest coverage
 - Wi-Fi Analytic
 - One-cable installation
- Software: **FootfallCam Analytic Manager V8™**
 - Centralized Data Management
 - Management Report
 - Email Scheduler
 - Automated Health Check
 - Ready Made Integration
 - User Account Management
- **Quick and Easy Installation**

Key Features

1. People Counting at Your Entrances

Video Zone Counting



Overview of Traffic Visibility

Count the number of people entering and exiting your shopping malls with 98% accuracy, then compare weekend traffic with weekdays or of previous time to visualize visitor trend.

Understand Customer Behavior

Understand how your shoppers enter the mall and which entrances gain the most usage, so you can set up advertisements along these entrances to gain the most exposure.

Identify Peak Hours

Discover your power hours in which your mall generates the most traffic and manage marketing campaigns during these time accordingly.

Gain the Most Exposure in Your Campaigns

Arrange marketing campaigns during peak hours for maximum exposure in the event, and to captivate the audience.

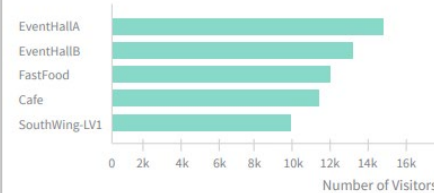
2. Area Counting

Video Area Counting

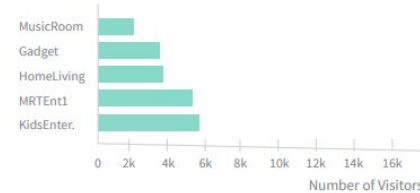
FLOOR 1



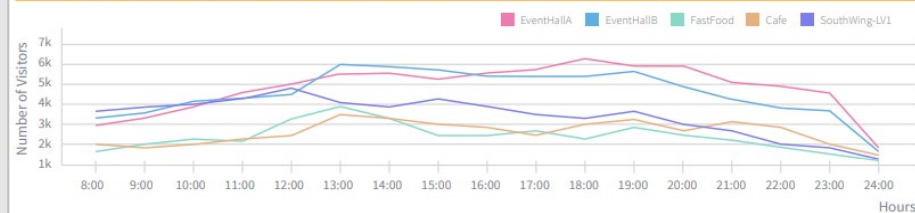
Most Crowded Area



Most Quiet Area



HOURLY TREND - AREA PROFILING



Area	Ranking	Today	Yesterday	Changes (%)	Last Week Same Day	Changes (%)
EventHallB	2	32536	29858	▲ 26.78	34001	▼ 14.65
SouthWing-LV1	5	28468	26591	▲ 18.77	27615	▲ 8.53
EventHallA	1	41512	39116	▲ 23.96	42234	▼ 7.22
KidzEntertainment	7	20100	18667	▲ 14.33	18457	▲ 16.43
MRTEnt1	8	12457	12997	▼ 5.40	10772	▲ 16.85
LuxuryFashion	6	26745	27052	▼ 3.07	25569	▲ 11.76
FastFood	3	31524	30576	▲ 9.48	33628	▼ 21.04
Cafe	4	29685	27411	▲ 22.74	28974	▲ 7.11
Cinema	9	11624	9644	▲ 19.80	8475	▲ 31.49

Real Time Traffic Visibility

Count the number of people entering and exiting your shopping malls in real time with 98% accuracy, then compare weekend traffic with weekdays or of previous time to visualize visitor trend.

Justify Retail Tenant Rents

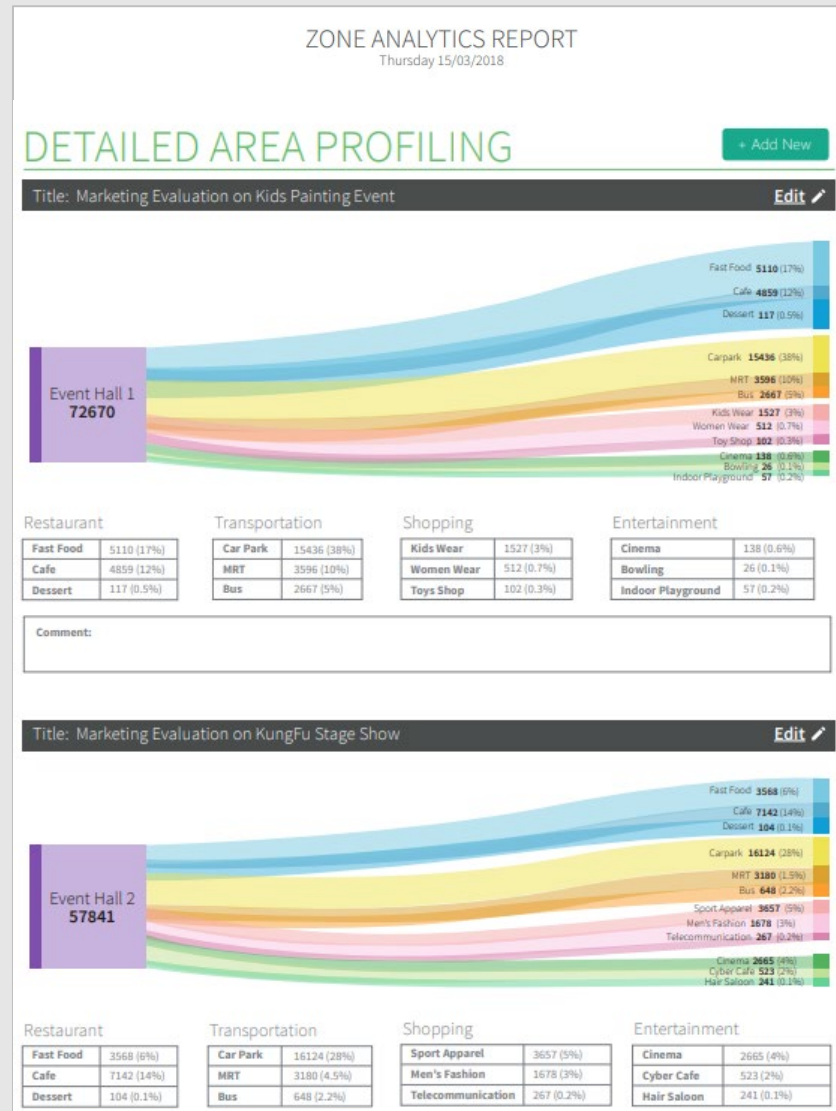
With area counting, optimize the estate value of key spaces with insights into the number of visitors in each zone and adjust for tenant rental rates accordingly.

Measure Anchors' Occupancy

Track how attractive your anchor tenants are, measure the number of visitors that visit your food courts, cinema, hypermarkets, so you can allocate rents of nearby stores accordingly.

3. Zone Analytics

Wi-Fi Flow Analytics



Visualise Traffic Flow

Determine which pathway are mostly used by shoppers by visualising the traffic flow patterns of visitors, to plan display placement to attract shoppers into specific pathway.

Shopper Profiling per Zone

Showcases where visitors go after visiting a promotional event, to offer objective evidence on retail opportunities available to retail tenants.

Gain the Most Exposure in Your Campaigns

Arrange marketing campaigns in the places with the highest traffic flow for maximum exposure in the event, and to captivate the audience.



Click [here](#) to view the showcase for SpaceOccupancy™ in Shopping Mall.

Occupancy Report for Mall Management



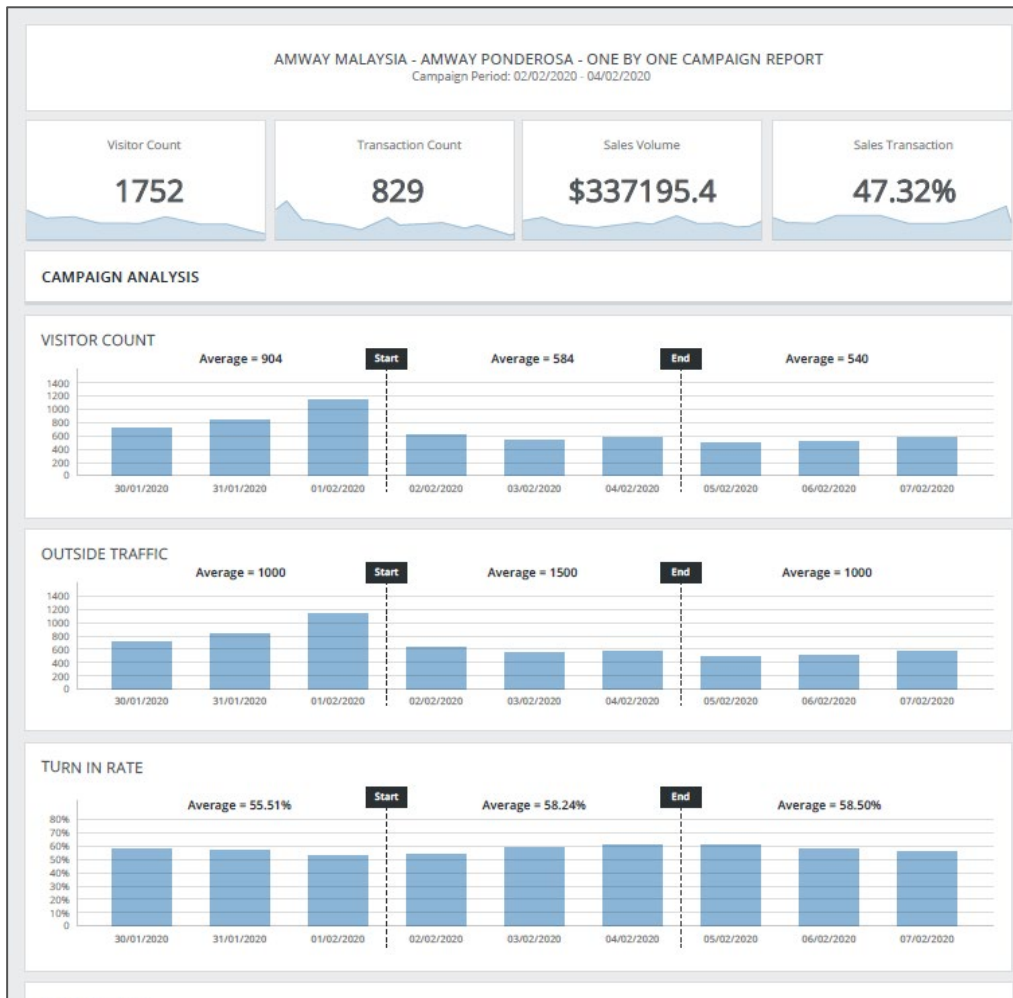
Keep track of store occupancy level:

- Ensure that each store is operating in compliance with social distancing guidelines
- Clear insight into the occupancy trend based on historical data
- Assign more staff on duty during high occupancy periods

Overview of the occupancy limit

- Monitor the staff's performance based on how long the occupancy limit is breached
- Keep an eye on the number of times the occupancy limit is triggered
- Managements can view the occupancy reports on site-level and company-level

Marketing Effectiveness Report



Purpose

- Monitor the campaign effectiveness with the measurement for
 - Visitor Count.
 - Outside Traffic.
 - Turn In Rate.
 - Visit Duration.
 - Transaction Count.
- Campaign configuration is available.

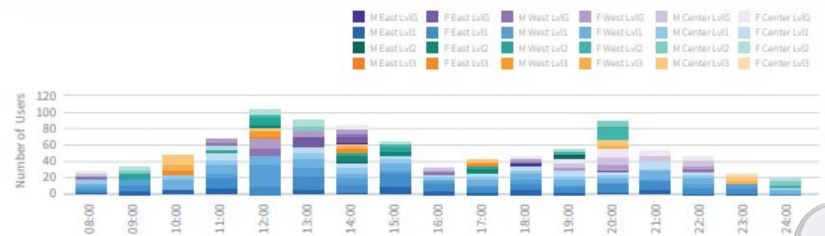
Additional Functions

1. Smart Washroom Management

Restroom Management



TOTAL USAGE BY HOURS



TOTAL USAGE BY RESTROOM



DETAILED RESTROOM PROFILING

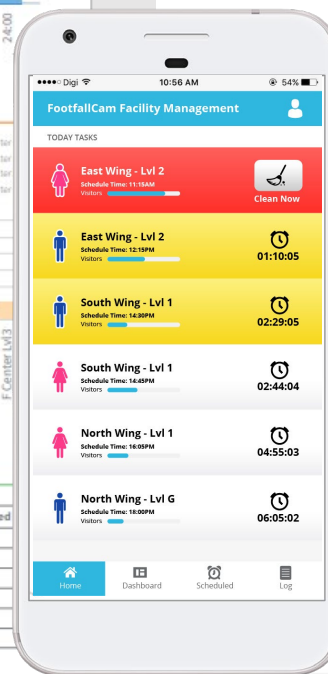
Name	Team	Total Users	Total Clean	Total Alert	Total Missed
M East Lvl1	A	385	5	2	-
F East Lvl1	A	421	5	2	-
M West Lvl1	B	267	4	1	1
F West Lvl1	B	243	5	-	-
M Center Lvl1	C	361	4	-	-
F Center Lvl1	C	239	3	1	1

Cleanliness Reassurance

People counters can be placed at entrances to restrooms, to provide a clear view of how resources are being used. Management will be able to identify which restrooms are being underutilized or over-flowing with people. With this knowledge, management level can ensure cleaning staff perform their duties according to as scheduled and the restroom cleanliness are maintained at a satisfactory level. This will create a better experience for shopper.

Cleaning Staff Optimization

By measuring the usage of facilities in the shopping mall, management can create staff schedules that accurately reflect the condition of the restroom with busier areas receiving more attention. By reducing the workload staff spends on areas they are not needed, management can make cost savings decision and reduce the burden of the management in manually creating the schedules.

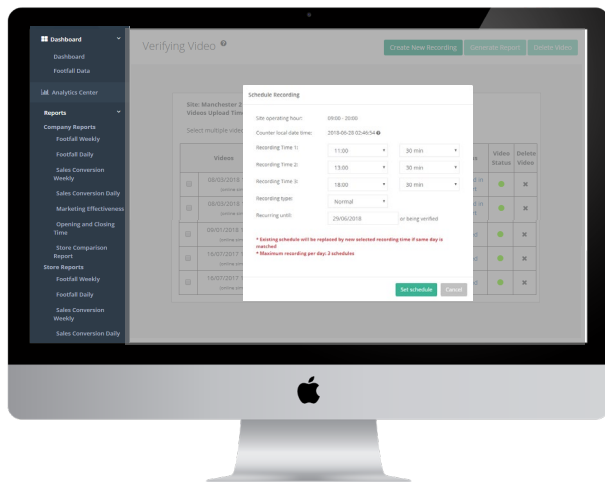


Services

Our expert team will support you in all parts of the product lifecycle, from planning to installation, from operation and maintenance to modernization and product replacement.

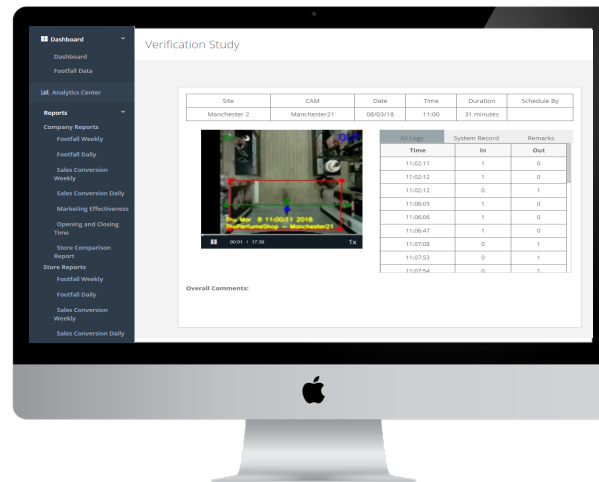
Accuracy Audit

How do we audit the accuracy?



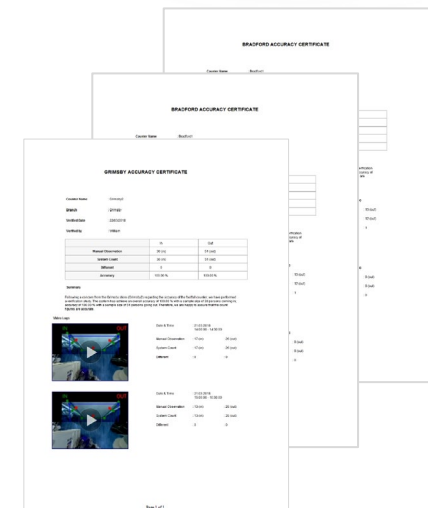
1 Schedule video recordings

Schedule video recordings of peak hours to ensure there is sufficient sample size for to audit the accuracy of the counter.



2 Compare system count and manual count

Compare the system count generated by the FootfallCam device against manual observations to determine the accuracy of the FootfallCam.



3 Generate verification report

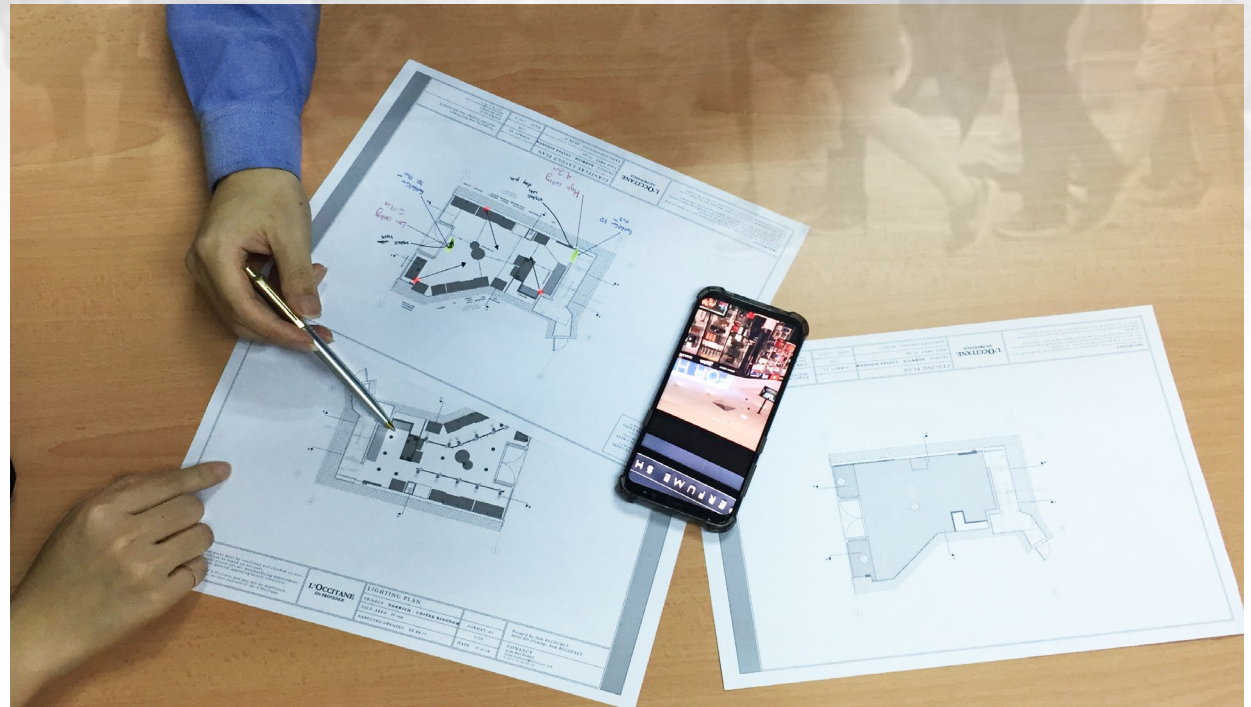
Once there is sufficient sample size and the accuracy is satisfactory, a verification report with the video proof used in manual observation can be generated.

Project Management

With a network of resellers situated throughout the globe, finding a person to talk to about FootfallCam is never an issue. We ensure that you can be confident that the FootfallCam is working in excellent working order.

Floor Plan Design

The core of FootfallCam planning support by analysing how many, and where to install the people counter, along with planning guidelines to expedite installation process.

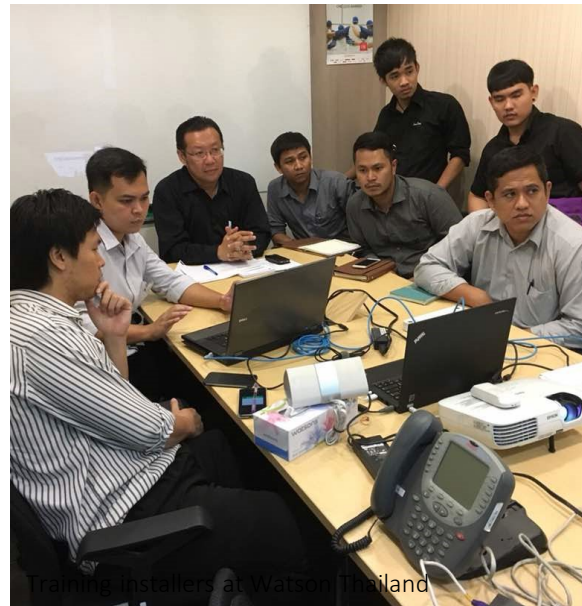


Work with your IT team and contractors

We can work with both your installation engineer and IT team to coordinate the installation and setup of all counters while also providing training through webinars

Dedicated Account Manager

Each customer will get their own dedicated account manager with FootfallCam to address all sales or support concerns to get the support when they need it



Hardware

FootfallCam 3D Pro2™ is engineered for reliability and efficiency in every granularity of data with the aim of enhancing user's experience by delivering high quality product.

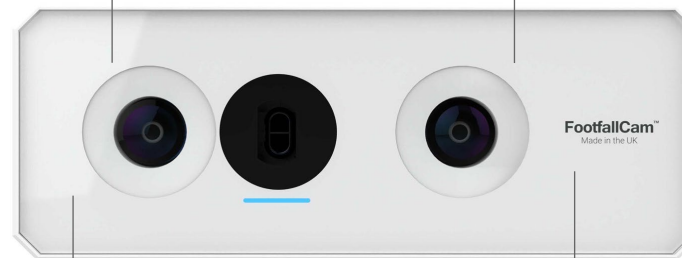
Hardware overview

Most stable

By utilising [aluminum alloy 6063](#), FootfallCam can [dissipate heat](#) similar to laptop casings to prolong the life of electronic components with a life span of 25 years.

Most reliable

FootfallCam expertise in the field of autonomy and contributes to operational efficiency with [automated recovery](#) when a device is down



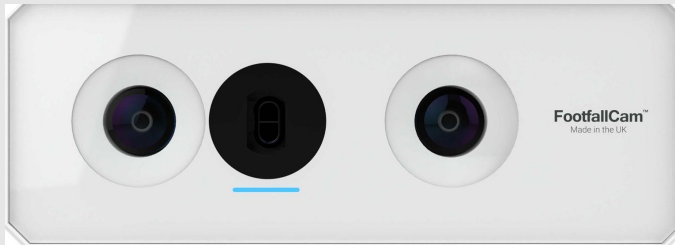
Most accurate

FootfallCam 3D is a mini computer, powered by [quad core processor](#) to run computational intensive algorithm for the most accurate counting sensor ever.

Most powerful

FootfallCam the most [powerful chipset](#) clocking at 1GHz to run complex algorithm and the [widest angled lens](#) for superiority in coverage and accuracy.

FootfallCam 3D Pro2



1

Prolonged Lifespan with Aluminium Casing

By utilising [aluminum alloy 6063](#), FootfallCam can [dissipate heat](#) similar to laptop casings to prolong the life of electronic components with a life span of 25 years.

2

Highly Accurate using powerful processor

FootfallCam the most powerful chipset clocking at 1GHz to run complex algorithm for superiority in accuracy.

3

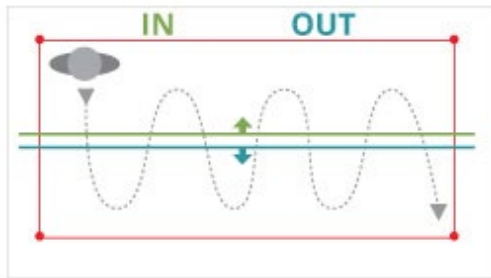
Widest Coverage using less devices

Utilize fish eye lens for widest coverage. Less counters are required to provide maximum coverage

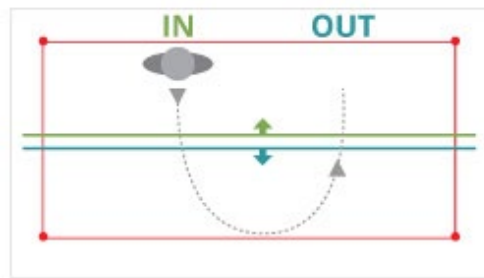
Hardware Specifications

Device Dimensions	(WxDxH): 153.7mm x 58.2mm x 39.5mm Weight: 0.4kg
Lens	160° (2.1m – 4.5m ceiling height)
Casing	Aluminium Oxide Alloy
Minimum Lux	1 Lux
Power	Power over Ethernet: 48V DC, 0.12A (6W)
Output	5PM Omni vision; 5647 Camera Module
Frame Rate	25 FPS
CPU	1.2 GHz Quadcore processor
Storage	Micro SD, 8 GB Memory
Cabling	Cat5, Cat6
Firmware Features	Secure Operating System with Multicore Processor, Adaptive IR based on Lighting Conditions, Device Health Check, Built-in External Watchdog
Origin	Made in UK

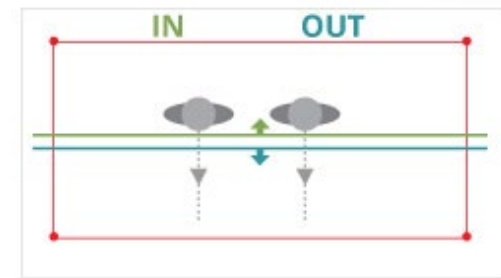
Accuracy overview



Random pattern
3D Count: 1



U-turn
3D Count: 1



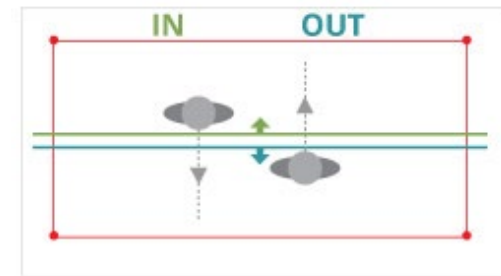
Multiple people
3D Count: 2



Strong shadow
3D Count: 1



Exclude children
3D Count: 1



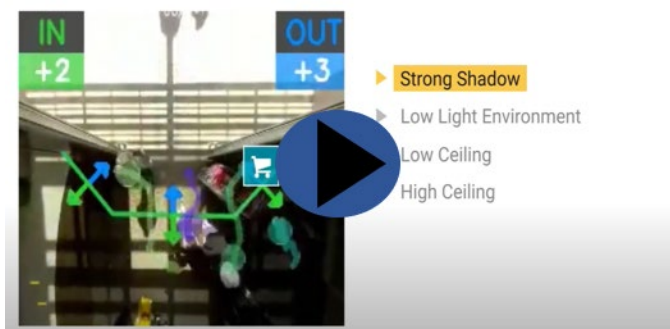
Bi-directional count
3D Count: 1

Consistent accuracy

Accurate in all store environment

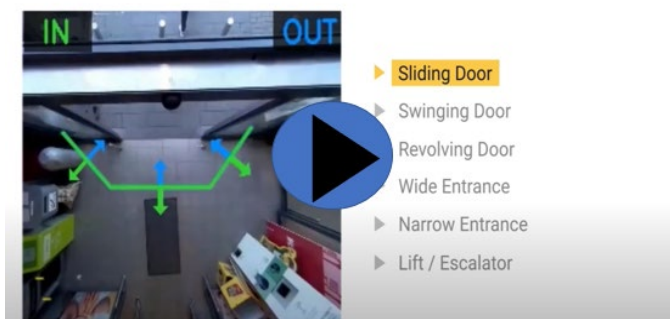
FootfallCam™

Suitable for All Environments



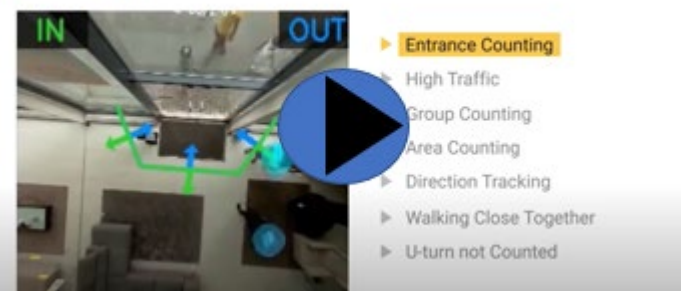
FootfallCam™

Suitable for Different Types of Entrances



FootfallCam™

People Counting at Entrance



View more sample videos of different environment [here](#).

Low ceiling

3D counting can work well in low ceiling height, such as the one in the video where the ceiling height was 2.2 metres.

Strong Shadow

3D Stereo Vision can overcome strong shadowing effect; which would otherwise mistaken as a visitor in 2D video counting.

Swinging Door

With the use of custom line, start/end zone, floor space masking, and accurate 3D counting, it can count accurately with a swinging door at the entrance.

Multiple entrances

Stores with multiple entrances may install multiple counters and assign the counters under the same branch in the Analytic Manager.

High Traffic

3D imaging allow accurate people tracking, and maintain high accuracy even in high traffic stores.

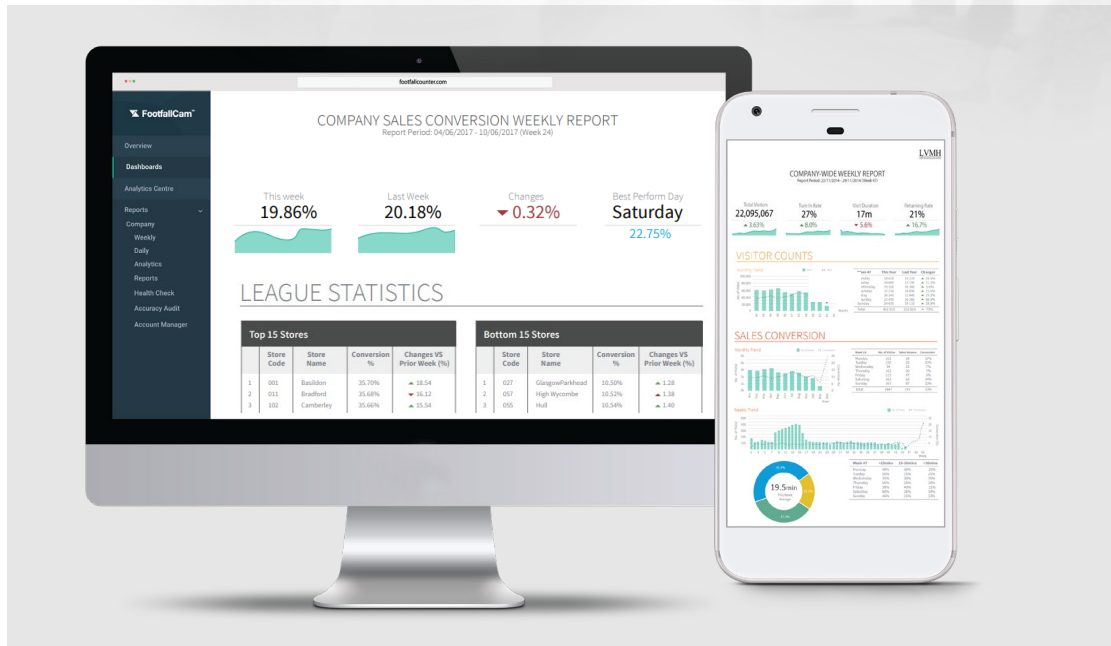
Crowded Area

The use of start/end zone and person tracking would ensure shopper within the store would not trigger the in/out lines.

Software

Enterprise web based control panel that manages all FootfallCam devices by storing the data of all counters in a centrally managed system.

Analytics Manager V8



1 Centrally managed system with Data Analytics

Centralised system that enables users to view all the counters they have installed across all stores anytime, anywhere.

2 Business Reports

With over sixty different ready made reports, users will be able to have better visibility in their store performance that provides managerial executives deeper insights.

3 Autonomous Health Check

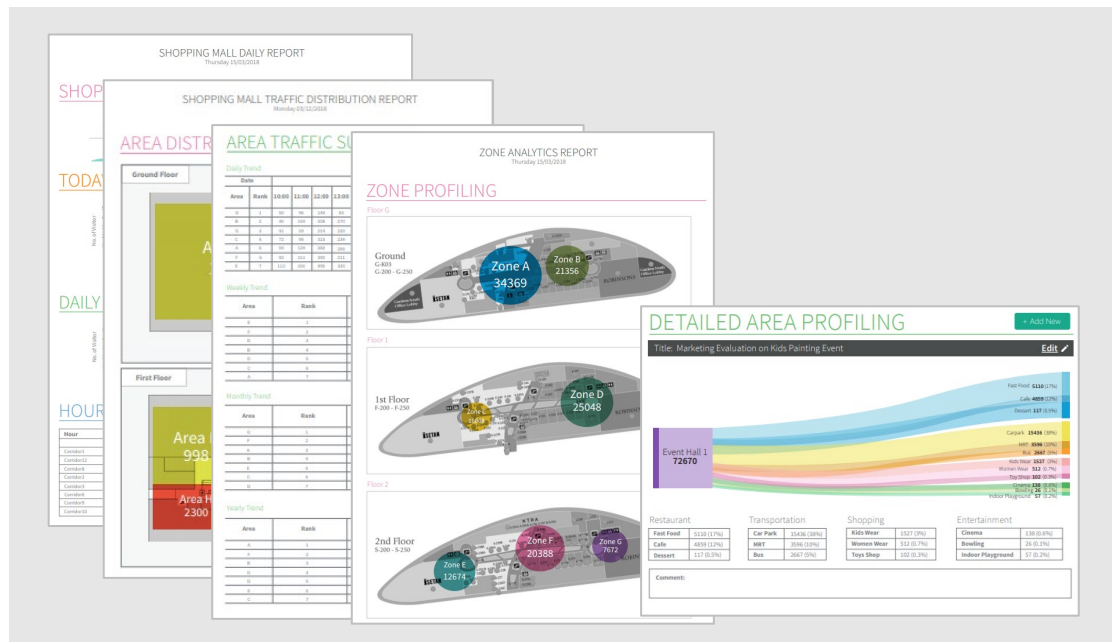
Autonomous and instantaneous management tool that notifies users when a counter is not working to minimise loss of data with a rapid response time

4 Ready Made Integration

Integrate sales data into the FootfallCam Analytic Manager™ through FTP or API, then export to your business intelligence system through FTP or API.

5 User Account Management

Two user levels up for configuration. Manage unlimited user accounts in one place.



Case study

FootfallCam is a proven solution installed in over 10,000 locations throughout the world and have garnered the satisfactions of thousands of customers.

Marina Mall (Kuwait)

With the large inflow of shoppers, it becomes critical for Marina Mall to maximize customer experience being one of the Middle east's most elegant urban shopping center. Marina Mall aims to understand how customer moves inside the mall and the frequent zones shoppers like to visit. Getting these visibility helps Marina Mall to plan their promotional activities in the mall.



Shopping mall

Measure Marketing Effectiveness

Marina Mall holds events in their mall especially during festive seasons. However, the management is unable to tell whether the events had any impact or the visitor counts that visited the event. There is no evidence to show. FootfallCam has a specialized report to show the marketing effectiveness.

Identify Customer Journey

Marina Mall had insight into traffic analytics to understand how people move within the mall. With this knowledge, footfall trend were produced to identify the most popular pathway to place advertisements. They are able to decide which path is least favorite and implement strategies to attract shoppers to the path.

Staff Planning

Marina Mall is concerned on their staff allocation and scheduling, they do not have the visibility to have the right placement at the right time. The management is able to implement better personnel allocation e.g. more security staff at crowded zones.

A.S Watsons (Globally)

FootfallCam dealt with over 30 business units during the project rollout with AS Watsons.

AS Watsons wanted visibility of all commercial event that occurred in their stores.

FootfallCam had strung all the data back to the HQ, by setting up an FTP connection in every business unit to point all data back to the centralised GIT.



Retail chain

Centrally managed system

A.S Watsons initially installed Brickstream 3D counters in all their store but swapped over to FootfallCam when they needed to data in one centralised location. As opposed to the previous solution when A.S Watsons needed to enter the network of each store to grab data on a daily basis.

Regional comparison of sales conversion

With all counting data in one centralised location, A.S Watsons compared the conversion data of their stores against another country to determine which market they are underperforming in and to identify areas to improve.

Manually optimise each counter to environment

Being a large international business, A.S Watsons had many different type of store environment ranging in entrance types, width, and height. Each counter installed in Watsons is manually calibrated to each specific location for the highest accuracy possible.

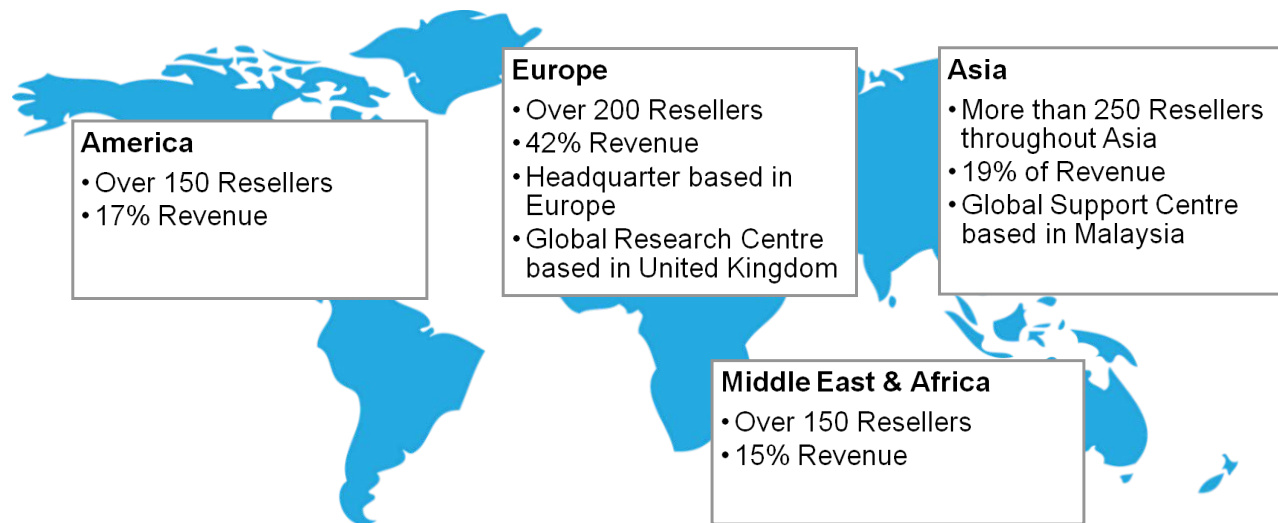
Our Customers



About FootfallCam™

Global Leader in People Counting System

FootfallCam is the global leader in people counting solutions. Headquartered in the United Kingdom, FootfallCam started with a team of experienced engineers with the vision of creating the most advanced people counting system in the market. We are the manufacturer of both hardware and software; all the design and development are 100% in-house made.



- FootfallCam is continuously reinvesting more than 24% revenue into research and development
- **In-house R&D team** dedicated to the development of both hardware and software of FootfallCam
- Combined **over 100 years industry experiences** in developing people counting solution
- **Serving multiple sectors** varying from retail, fast food, restaurants, museums to smart buildings and airports.
- Prior to the Covid-19 scenario, our research team predicted the demand for this solution ahead live occupancy we activated our R&D team to develop our Live Occupancy Control System

Contact Us

You need further information or have a question?
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