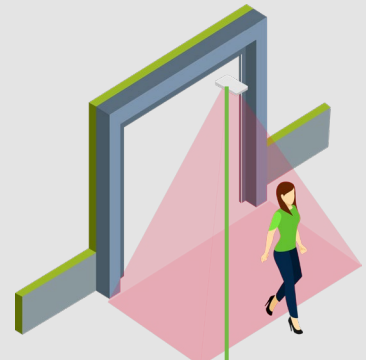# Footfall Sensors

Scalable sensing solution for buildings, floors, zones and rooms

- Gain insight into how your real-estate is truly used by anonymously measuring people movement.

- Unparalleled levels of accuracy ensure data can be trusted for important strategic decision making.

- Maximize return on investment by only deploying sensors at key locations and entryways.

MEASURE live building & room occupancy
MANAGE real-estate more effectively
OPTIMIZE space utilization

Our entryway sensing solution is designed to measure occupancy and people movement at building, floor, zone or room level. The solution uses the high-performance Irisys Vector 4D device at key locations (entryways), plus an optional Fine Motion Room Sensor to enable real-time room release and booking cancellation.

- **Private and anonymous sensing:** No video cameras used in detection. Uses active Time of Flight infrared, making it impossible to identify individuals.

- **Unrivalled accuracy:** Over 99% counting accuracy (proven in real world), with real-time error correction from fine motion sensor in room.

- **Easy deployment:** Over 500,000 Irisys devices have been deployed world-wide with configuration tools optimized to reduce rollout costs.

- **Fast installation:** Single cable required for data transfer and power (Power over Ethernet device)

- **Auto-setup:** No calibration required, device learns its surroundings and adapts for optimal accuracy.

- **Unaffected by the environment:** Works in darkness, changing light, changing temperature, 24/7 reliability.

- **Objective data collection:** Live zone occupancy, average occupancy, peak occupancy; (& more)

Fine Motion Room Sensor

Footfall Sensor – Vector 4D

SKUs

IRC6637-AW	Footfall Sensor – Vector 4D
IRTRM2210	Fine Motion Room Sensor
IRTRM2220	USB Bluetooth Receiver (for Vector 4D)

**Sensing you can rely on
Data you can believe in
A partner you can trust**

irisys™
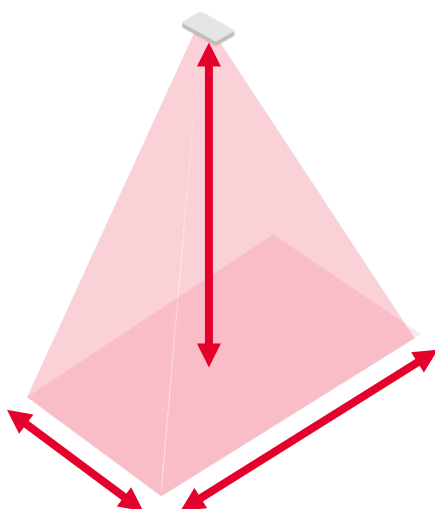A Fluke Brand

Footfall Sensor – Vector 4D

Part Number: IRC6637-AW

The Irisys Vector 4D is a highly accurate and custom designed, IoT people counting sensor. Typically installed on the ceiling at entryways and egress points, this discreet sensor anonymously measures the movement of people in its field of view – in all directions. Used extensively in retail stores, this sensor is tried and tested, reliably counting people in high traffic areas and in bright/no light conditions.

Installation Details

Mounting Height Range	2.0m to 4.5m above floor level
Sensor Coverage	Depends on mounting height @ 2.5m = 2.27m x 1.63m @ 4.0m = 4.41m x 3.16m

Advanced Features

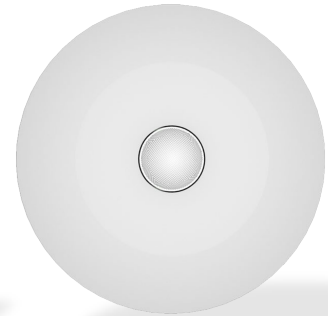|	
Multi-directional counting	Yes. Up to 32 directions.
Remote validation	Yes. Onboard low resolution camera for setup and audit.

Technical Specifications

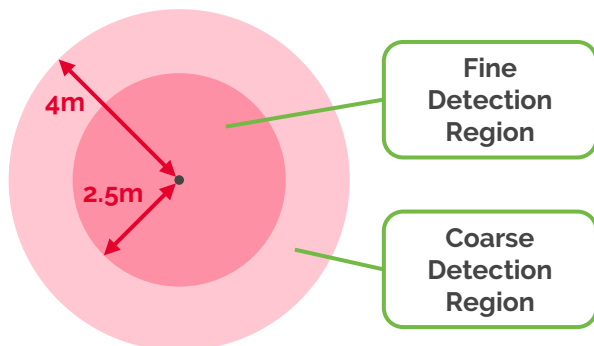|	
Sensing Technology	Infrared - Time of Flight
Housing	Cast aluminium alloy
Dimensions	195mm x 110mm x 32mm
Weight	550g
Required Illumination	N/A - works in total darkness
Data Interface	REST API, MQTT, BACnet/IP, HTTP POST
IP Interface	IPV4, IPV6 ready TLS v1.2
Configuration Interface	HTML5 web configuration Access remote/local Mobile device compatible
Auto-setup	Yes, intelligently self-calibrates
Security	Encrypted data transmission. Penetration tested. No storage of PII (Personal Identifiable Information)
Usage	Indoor use only
Operating Temp. Range	0°C - 40°C
Power Supply	PoE IEEE802.3af Class 3 (<12,95W)
Origin	Manufactured in UK

Fine Motion Room Sensor

Part Number: IRTRM2210

The Fine Motion Room Sensor is a custom designed, highly sensitive, passive infrared sensor. Optimized for meeting rooms, the sensor can detect very small motions, such as those exhibited by people sitting in a meeting. It works wirelessly, passing all data over Bluetooth to a nearby Vector 4D sensor. It can operate on its own in a room to provide a binary occupied or unoccupied signal (when connected to a nearby Vector 4D device) or it can operate in conjunction with a Vector 4D at the meeting room entryway to boost accuracy and enable dynamic room booking and release.

Installation Details

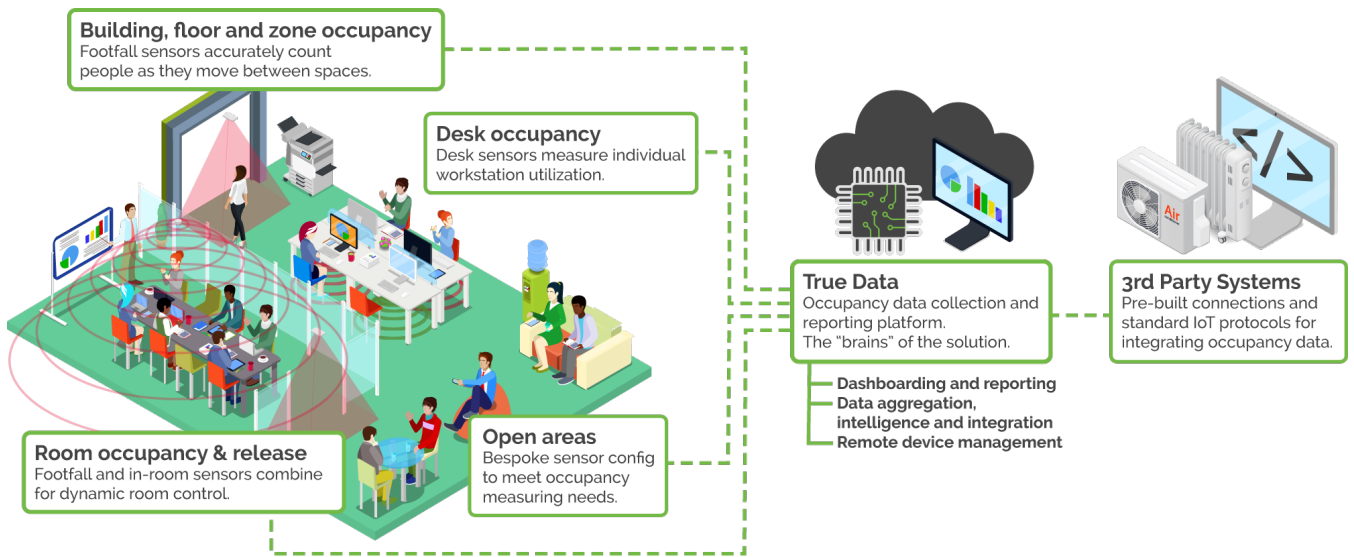|	
Mounting	2 x 5mm screw holes (countersunk)
Mounting Height Range	Maximum mounting height 3m
Detection Coverage	Depends on mounting height. At 3m this gives: - 2.5m radius **Fine Detection** - 4m radius **Coarse Detection**
Detection Sensitivity	**Fine Detection** = small movements, less than 15cm **Coarse Detection** = big movements, approx. 50cm

4m

2.5m

Fine Detection Region

Coarse Detection Region

Technical Specifications

Sensing Technology	Passive infrared
Housing	White ABS UL94 V0
Dimensions	70mm x 70mm x 35mm
Weight	85g (including battery)
Usage	Indoor use only
Operating Temp. Range	0°C - 40°C
Connectivity	Bluetooth BLE - Range 15m (with good line-of-sight) - USB Bluetooth Receiver for Vector 4D (IRTRM2220) req'd.
Battery	Long-life AA, factory fitted
Battery Life	10 years (estimated)
Origin	Manufactured in UK
Certifications	CE, MIC, IC, FCC, KC. Certified for operation in Europe, US/Canada, Japan, Korea, Taiwan.

About True Occupancy

True Occupancy is an occupancy ecosystem that provides essential occupancy data for everywhere that matters to you. Drive strategic decisions and optimize your real estate.

- **Application specific sensing solutions** – Designed for maximum performance and accuracy
- **Intelligent data platform** – Aggregates sensor data and validates with patented heuristics
- **Open integration** – With leading BMS and workplace systems, via industry standard best practices
- **Remote device management** – Trusted by large global corporations
- **Simple, intuitive dashboards** - Straightforward occupancy visualisations and reporting tools
- **Scalable and flexible** – Choose as much or as little of the solution as you need

Building, floor and zone occupancy
Footfall sensors accurately count people as they move between spaces.

Desk occupancy
Desk sensors measure individual workstation utilization.

Room occupancy & release
Footfall and in-room sensors combine for dynamic room control.

Open areas
Bespoke sensor config to meet occupancy measuring needs.

True Data
Occupancy data collection and reporting platform. The "brains" of the solution.

3rd Party Systems
Pre-built connections and standard IoT protocols for integrating occupancy data.

- **Dashboarding and reporting**
- **Data aggregation, intelligence and integration**
- **Remote device management**

Ready to get started?

Talk to one of our occupancy experts today

trueoccupancy.com/demo

True Occupancy is a building occupancy solution by Irisys.

Irisys have provided the essential technology for understanding people movement in buildings for 25 years.

Fluke is a global leader in test and measurement instruments.

www.trueoccupancy.com
www.irisys.net

+44 (0)1604 594200
sales@irisys.co.uk

InfraRed Integrated Systems Ltd
Park Circle, Tithe Barn Way, Swan Valley
Northampton, NN4 9BG, United Kingdom