irisys Vector 4D

Vector 4D is the latest innovative product from Irisys. Developed based on customer feedback over many years, it is highly accurate and boasts advanced dwell and staff detection features. This objective data goes beyond people counting and enables businesses to make informed decisions that improve customer experience, save money and increase profits.

KEY FEATURES:

- 99% accuracy
- Employee detecting
- Dwell time measuring
- Works in darkness
- Easy installation
- Connect up to 32 units seamlessly
- Remote configuration and validation
- Unaffected by reflective or shiny surfaces
- Accurately detects children and adults
- Edge IoT device

SOLUTIONS:

- Optimise customer service
- Increase store conversion rates
- Reduce labour costs
- Shorten customer queuing time
- Save space, energy and money

FULL STORE TRACKING | **STAFF DETECTION** | **DWELL TIME** | **HIGH ACCURACY**

Customer Dwell
Dwell time in defined zones can be measured in seconds. Data can be visualised in histograms.

Employee Detection
Employees wearing lanyards made of a special material can be excluded from counts or counted specifically. This detection is passive and requires no additional setup, RFID tags or batteries.

Multi Unit - Full Store Tracking
Up to 32 devices can be connected together seamlessly at the edge, eliminating the need for 3rd party application servers. Algorithms ensure that people moving between sensors are not lost or counted twice.

Count Lines and Zones
Each counting network can have up to 32 different count lines or zones.

Easy Installation and Configuration
Fast and easy thanks to a HTML5 web based, mobile friendly, GUI which can be accessed locally and remotely.

Local and Remote Device Manager
Check the health of your device network, perform data validations and upgrade remotely for new features.

Future Proof
Built on robust hardware.

Customer Engagement
Utilising the employee detection functionality, Irisys algorithms can measure how long customers wait for service and how long it takes staff to serve them.

Heat Map
Visualisations built in to the Estate Manager platform allow you to easily identify trends.

Time of Flight technology
The device emits invisible infrared light, which illuminates the scene below. Reflected light is detected and the time taken for it to return is used to identify people from objects and track their movements.

Extreme Light and Darkness
Using infrared light, Vector 4D works perfectly in extreme sunlight or darkness. Not affected by shadows or reflections and works accurately in high contrast environments.

Demographic Data
Using height data that is accurate to +/- 2cm, customer demographics can be inferred.

Integration
Via MQTT, REST API, HTTP POST or BACnet/IP.

Compatible Deployment
Built to work with Irisys' Estate Manager platform, the Vector 4D can be deployed with other Irisys products.

PEOPLE COUNTING | **SMART RETAIL ANALYTICS** | **QUEUE MANAGEMENT** | **SMART BUILDINGS**

TECHNICAL SPECIFICATIONS:

Technology	Infrared - Time of Flight
Mounting Height	2.0m to 4.5m
Auto Height Setup	Yes
Field of View Width	1.6m to 5.1m
Coverage	Varies based on mounting height @ 2.5m = 2.27m x 1.63m @ 4.0m = 4.41m x 3.16m
Counting Modes	Lines - addition, subtraction, sequential, alternative, exclusion Zones - count, duration, exclusion, staff call(1), staff attend(1)
Height Measurement	Yes - accurate to +/- 2cm
Dwell Measurement	Yes - with histogram output(1)
Detection Speed	5 m/s (max)
Required Illumination	N/A - works in total darkness
Configuration Interface	HTML5 web configuration Access remote/local Mobile device compatible
Data Interface	HTTP POST (JSON formatted), REST API MQTT, BACnet/IP(1)
IP Interface	IPV4, IPV6 ready Fixed IP address / DHCP IP connections secured using TLS v1.2
Video Validation	Low resolution Setup and audit purposes only
Sensor Dimensions	195mm x 110mm x 32mm
Sensor Weight	550g
Housing Material	Cast aluminium alloy
Origin	Manufactured in UK
Power Supply	PoE IEEE802.3af Class 3 (<12.95W)
Operating Temperature Range	0˚C - 40˚C

PRODUCT VARIANTS:

		Vector 4D Analytic	Vector 4D Count
Part Number		IRC6637-AW	IRC6637CAW
Indoor Use		Yes	Yes
Outdoor Use			
Validation Camera		Yes	Yes
Remote Validation		Yes	Yes
Max. Count Registers (Lines and Zones)		32	32
Counting Modes	**Line Counting**	Yes	Yes
	Advanced Count Line Logic	Yes	Yes
	Group Counting	Yes	Yes
	Portal Counting	Yes	
Zone and Dwell	**Instantaneous Zone Count**	Yes	
	Zone Dwell Histogram	Yes	
Staff Detection Functions	**Staff Exclusion / Staff Count**	Yes	Yes
	Staff Call / Attend	Yes	
Height Measurement Functions	**Height Measurement**	Yes	Yes
	Height Filtering	Yes	Yes
	Height Histograms	Yes	Yes
Implementation Features	**Auto Height-Set / 3D Background Mapping**	Yes	Yes
	Multi Unit (Max. Devices)	32	4
	Tilt Support	Yes	
Path Mapping and Flow	**Internal Path Map**	Yes	Yes
	Export of Target Location Data (X&Y)	Yes	
I/O, Data Output & Special Functions	**Relay Output**		
	I/O Module Support	Yes	Yes
	MQTT Support (Basic)	Yes	Yes
	MQTT Support (Target X&Y Location Data)	Yes	
	BACnet/IP Support	Yes	
Warranty (Years)		1	1

(1) Vector 4D Analytic only. See product variants for more information

We are here to help

Get in touch now to find out more and let us know how we can help you

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