

# People Counting Sensor

## Time-of-Flight technology sensor



Model number:	<b>PCS-T3-IQ</b>
Mounting:	On ceiling
Connects to:	IoT Linker
Operating temperature:	0°C - 40°C
Power Supply:	PoE IEEE802.3af Class 3
Power Consumption:	<12,95W
Dimensions:	195 x 110 x 32 mm
Weight:	550 g
Housing Material:	Cast aluminium alloy
Mounting Height:	2.0 to 4.5 m
Field of View Width:	1.6 to 5.1 m
Coverage @height:	2.5 m = 2.27 m x 1.63 m
Coverage @height:	4.0 m = 4.41 m x 3.16 m
Height Measurement:	Yes - accurate to +/- 2 cm
Detection Speed:	5 m/s (max)
Required Illumination:	Works in total darkness

## 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

## General description

Sensor 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.

## Features

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

**Customer Engagement:** Advanced algorithms can measure how long customers wait for service and how long it takes staff to serve them.

**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.

**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, sensor 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.

**Future Proof:** Built on robust hardware.

**Compatible Deployment:** Built to work with 4S platform, sensor can be deployed with other Robotina products.

**Integration:** Via Robotina HIQ- IOT Linker

# Technical specification

<b>Mounting Height</b>	2.0m to 4.5m
<b>Auto Height Setup</b>	Yes
<b>Field of View Width</b>	1.6m to 5.1m
<b>Coverage</b>	Varies based on mounting height @ 2.5m = 2.27m x 1.63m @ 4.0m = 4.41m x 3.16m
<b>Counting Modes</b>	Lines - addition, subtraction, sequential, alternative, exclusion Zones - count, duration, exclusion, staff call <sup>(1)</sup> , staff attend <sup>(1)</sup>
<b>Height Measurement</b>	Yes - accurate to +/- 2cm
<b>Dwell Measurement</b>	Yes - with histogram output <sup>(1)</sup>
<b>Detection Speed</b>	5 m/s (max)
<b>Required Illumination</b>	N/A - works in total darkness

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