

# Infrared People Counter



## Presence Detection and People Counting with Far Infrared Sensor

People counting is a valuable technology for various applications, providing critical data for optimizing building management systems, enhancing security, and improving energy efficiency. Infrared sensors detect heat signatures, making them effective even in low-light or no-light conditions, where optical cameras might fail. They provide a non-intrusive way to monitor occupancy without capturing identifiable images, thus preserving privacy. Additionally, infrared sensors are less affected by environmental factors such as shadows, reflections, and varying lighting conditions, resulting in more reliable and consistent data. Being able to compute this in an always-on fashion while having a low power profile is a challenging task, making Innatera's Spiking Neural Processor the perfect solution for this problem, allowing the problem to be solved on battery operated devices.

**Use cases:** People Counting, Human Presence Detection, Intrusion Detection, Energy Management (adjusting heating, cooling, lightning based on the number of people in a room)



KPI	Innatera
Accuracy	>85%
Power	0,6 mW
Inference latency	13,8 ms