

Real-Time People Counting Enables Smart Space & Energy Management at University of Salford

Occupancy data captured by Milesight people counters streamlines campus-wide space scheduling and delivers occupancy-driven, energy-efficient HVAC control for teaching buildings.

Salford, UK

Milesight Partner
Smart Building Products

Location
Salford, UK

Applications
People Counting /
Occupancy / HVAC Control

Related Product
VS133-P×20, VS125-P×6,
VS360×20, VS351×5

Background

As part of long-term campus planning, the University of Salford aimed to gain reliable real-time occupancy insights for its lecture theatres and academic buildings. Limited to manual booking logs and approximate headcounts, its legacy system failed to reflect true room usage, while unregulated HVAC equipment operated at full power irrespective of occupancy and generated unnecessary energy waste. To boost space utilisation and build a more sustainable campus, the university sourced and implemented a real-time occupancy monitoring solution across multiple buildings.

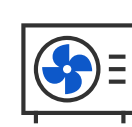


Challenges



Space Visibility Gap

Lacking real-time occupancy data to evaluate actual usage and balance teaching space allocation.



Static HVAC Waste

Running heating and ventilation on fixed timetables without referencing real room occupancy, causing excess energy loss.

Solution

To enable accurate occupancy visibility across diverse campus environments, various Milesight people counting sensors were deployed at entrances of lecture theatres, classrooms, and auxiliary spaces. Each device was selected based on entrance type, foot traffic volume, and integration requirements with the university's Building Management System.

VS125 Series AI Stereo Vision People Counter

Deployed at entrances of large lecture theatres, the VS125 Series uses stereo vision and deep learning for precise people counting in high-traffic scenarios. With native BACnet/IP support, it enables direct integration with the university's BMS for real-time occupancy-based control.



VS351 Mini AI Thermopile People Counter

Deployed at entrances of meeting and teaching rooms, the VS351 delivers compact, privacy-friendly bi-directional people counting via thermopile sensing paired with AI processing, ideal for smaller spaces.



VS133-P AI ToF People Counting Sensor

Installed at entrances of offices and classrooms, the VS133-P delivers bi-directional people counting powered by ToF technology and AI algorithms, achieving up to 99.8% accuracy for consistent real-time occupancy tracking.



VS360 IR Breakbeam People Counter

Deployed along campus corridors and walkways, the VS360 delivers cost-effective bi-directional people counting via infrared break-beam sensing, ideal for large-scale rollout across campus passageways.



Results

Real-Time Campus Space Visibility

The deployment grants the University of Salford live, factual occupancy data across lecture theatres and campus facilities to streamline daily operations and inform long-term campus development.

Optimised Space Allocation

Real-time occupancy readings replace unreliable booking forecasts, enabling precise lecture theatre scheduling and lifting overall campus space utilisation.

Cut HVAC Energy Consumption

Occupancy-linked automatic regulation cuts idle heating, cooling and ventilation in empty or sparsely occupied rooms to slash unnecessary energy waste.

Data-Backed Long-Term Planning

Occupancy-linked automatic regulation cuts idle heating, cooling and ventilation in empty or sparsely occupied rooms to slash unnecessary energy waste.

Centralized Remote Monitoring

Unified remote access to building occupancy eliminates frequent manual site inspections and boosts facility management efficiency.

Discover More about Milesight Products



VS125 Series
AI Stereo Vision People Counter



VS133-P
AI ToF People Counting Sensor



VS351
Mini AI Thermopile People Counter



VS360
IR Breakbeam People Counter

Why Choose Milesight



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Milesight's all-in-one people counting sensors support both LoRaWAN® and BACnet/IP. Cost-efficient and highly scalable, they are ideal for large-scale campus-wide deployment. Featuring native BACnet compatibility, the devices integrate seamlessly with the university's existing BMS without extra gateways. This unified design reduces wiring and installation costs, providing stable occupancy data to greatly streamline daily campus facility management.

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Partner

About Smart Building Products

Smart Building Products delivers intelligent building control hardware alongside HVAC and building automation expertise for contractors and BMS engineers. Boasting over 150 years of combined industry experience, SBP possesses comprehensive knowledge, resources and product lines to deliver specialised support covering all types of building control requirements, and creates expert solutions that help buildings run at their full operational potential.

