

Smart Buildings for a **Sustainable Future**



AIRUX - 8

Sustainable Buildings of Tomorrow

The Future of Work



SYSTEM INTRODUCTION

As a lighting automation integrator since 1992, we are on a mission to provide a holistic and sustainable solution to help buildings reduce their carbon footprint, which accounts for 40% of total energy consumption in the world today. This is why we created AIRUX8, to enable Autonomous Buildings of Tomorrow.

Co-developed by OTTO in 2019, Airux 8 is a modular building management system, with the ability to provide Data Analytics/ Fault Reporting and integration for various systems. Built from the ground up to be as energy efficient as possible while being uncompromising on the occupant experience, Airux-8 is the solution for the future.

Our development partner, Tranzas International, is a Japan-based listed company in manufacturing and sale of IoT and communication equipment, as well as system and software development.

PRODUCT BENEFITS

Leveraging on data analytics and cutting-edge software, Airux-8 is able to calibrate itself to its environment to provide an optimal climate, while providing comprehensive data reports for different user groups, from General Managers to System Engineers.

ENERGY EFFICIENT

With AI-driven logic, we enable buildings to be extremely energy efficient, reducing wastage when and where possible.

With improved efficiency all around, a green future is within reach for every building.

COST EFFECTIVE

By tracking energy usage, occupancy data and system behaviour, Airux-8 offers detailed data/utility reports, as well as fault reporting capabilities.

As such, facility managers have a much easier time pinpointing and rectifying faults, saving time and cost in the long run.

ENHANCED COMFORT

With its primary focus on occupant experience, Airux-8 delivers on 24/7 optimal comfort for building occupants, while retaining its energy efficiency.

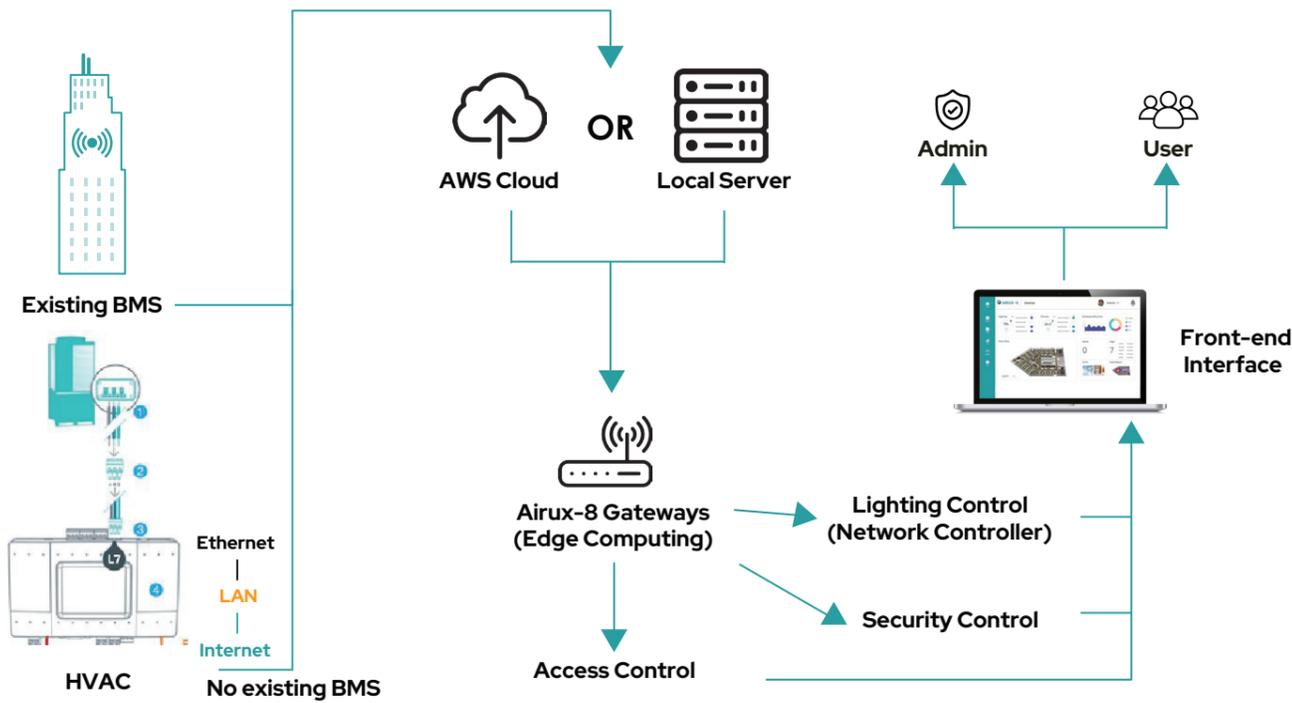
Due to its modularity, Airux-8 is extremely customisable, being able to integrate various smart verticals.



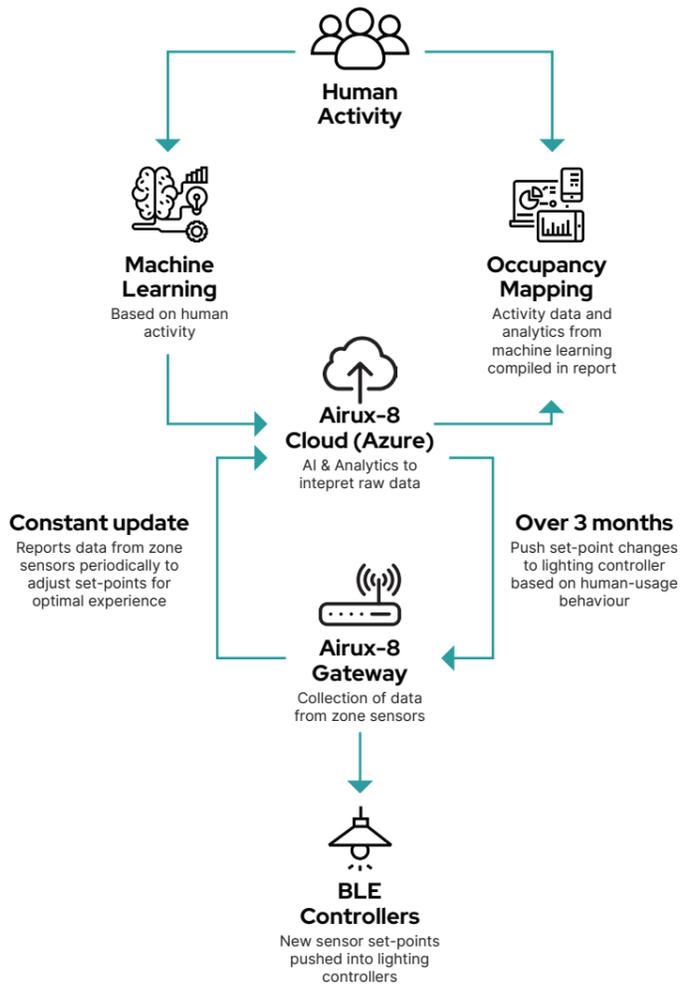
The Smarts of the System

SYSTEM TECHNOLOGY

A natural fit for new buildings or a welcome addition to existing buildings already equipped with a building management system, Airux-8 can enhance the capabilities of building operations, and provide building owners with relevant information at their fingertips.



LOGIC FLOW (LIGHTING)



LOGIC FLOW (HVAC)

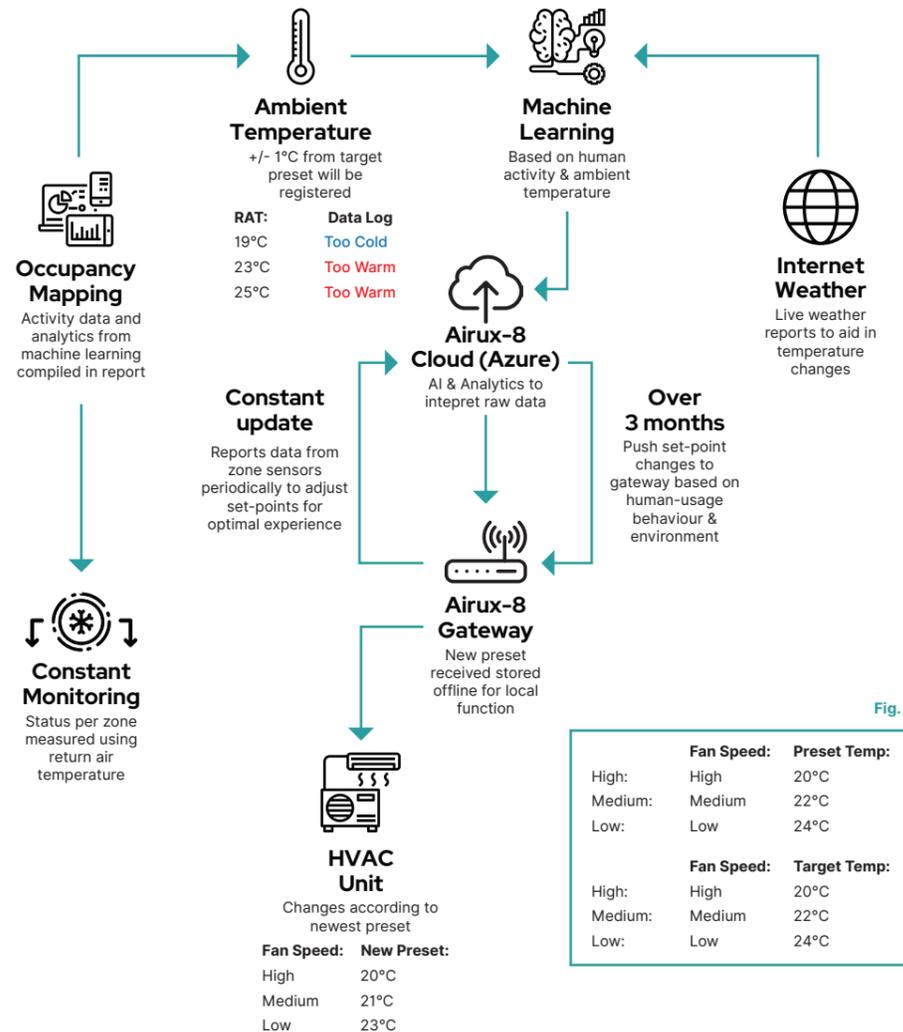


Fig. 1



Personalisation at your Fingertips

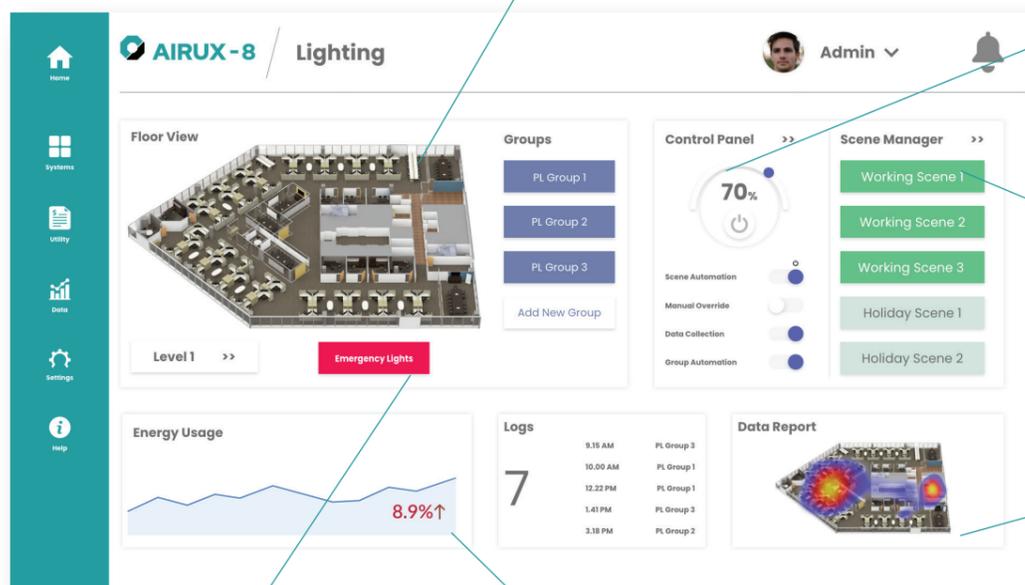
SYSTEM VERTICALS

While being able to integrate with virtually any smart system on the market, there are certain verticals that Airux-8 focuses on, specifically the two verticals of Lighting and HVAC/ACMV. Being the two verticals that consume the most energy in the building, Airux-8 offers its proprietary BLE Mesh Lighting System and HVAC System as its base package.

LIGHTING

2D/3D FLOOR VIEW

Expanded floor view of current level with PL Groups highlighted for easy viewing/editing



CONTROL PANEL

Control lighting brightness, scene automation, individual workspaces, etc.

SCENE MANAGER

Manage different lighting scenes for different times and occasions

DATA REPORT

Data collected from occupant behaviour and lighting sensors is compiled into weekly report

EMERGENCY LIGHTING

Emergency lights are able to be integrated into Airux-8, with fault reporting, periodical testing and management capabilities

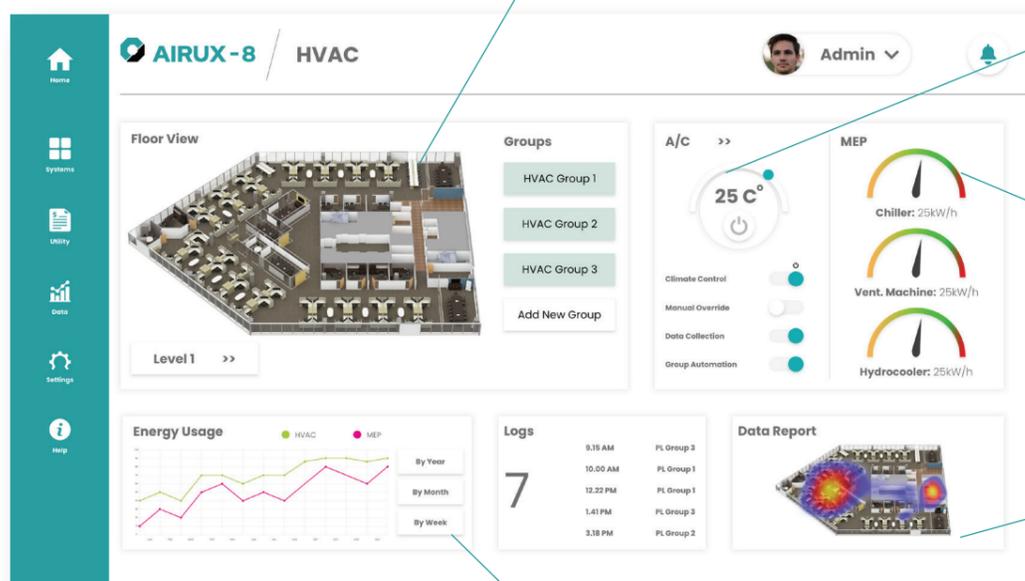
ENERGY USAGE

Energy consumption is tabulated and compiled into weekly report, with detailed breakdown to aid in savings

HVAC

2D/3D FLOOR VIEW

Expanded floor view of current level with HVAC Groups highlighted for easy viewing/editing



CONTROL PANEL

Control climate, scene automation, individual workspaces, etc.

SCENE MANAGER

Manage different climate scenes for different times and occasions

DATA REPORT

Data collected from occupant behaviour is compiled into weekly report

ENERGY USAGE

Energy consumption is tabulated and compiled into weekly report, with detailed breakdown to aid in savings



Proof behind the Concept

PROJECT REFERENCES

BCA-DBS CHALLENGE

Project Status:

POC @ Changi Business Park, Annex Tower

Scope of Work:

Lighting & HVAC Automation

Projected Energy Savings:

Min. 20% Savings (Lighting & HVAC)

Components:

Airux-8 System, Heatmap (Data Analytics), Lighting & HVAC Controllers
TBC



VOLKSWAGEN SINGAPORE

Project Value:

SGD \$1,500,000

Scope of Work:

Lighting Supply & Automation, Mechanical & Electrical

Projected Energy Savings:

60% (Lighting)

Components:

Airux-8 Base, Heatmap (Data Analytics), >1200 light fixtures, Lighting Controllers

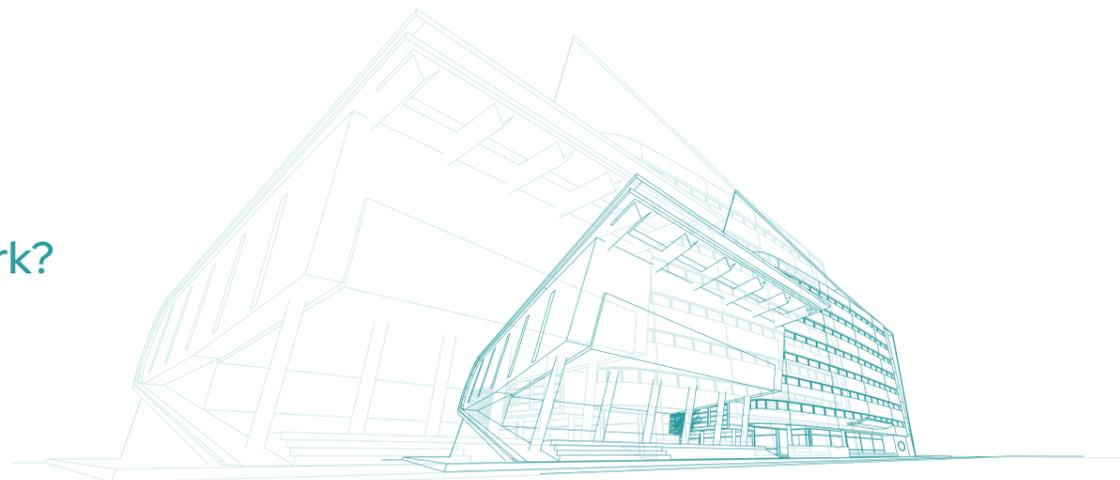
- 1 Sensor per fitting for personal working desk
- Multi-Point Sensor per zone for co-working space & common area
- Timed Schedule for reception areas
- Daylight Harvesting for all zones near windows



Interested in being part of the future of work?

Reach out to us at:

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