





### Introduction to



# Daikin Cloud Plus

Daikin Cloud Plus is a cloud-based remote control and monitoring solution for Daikin commercial HVAC installations. Using enhanced control, monitoring and predictive logic, Daikin Cloud Plus provides real-time data and support from Daikin experts to help you identify cost-saving opportunities, increase the lifetime of your equipment and reduce the risk of unexpected issues.

# The ultimate control over your indoor climate and air quality

- > Save energy & reduce costs
- $\qquad \qquad \text{ } > \text{ Enhance comfort \& satisfaction} \\$
- > Smart control from anywhere
- > Ensure healthy indoor environment
- Maximize uptime (remote prediction, monitor & diagnose)
- > Integrates easily with building systems

# Supporting your business and helping you succeed

- > Maximize comfort and satisfaction of your staff, customers, tenants, ...
- > Save energy & reduce costs
- > Facilitate your sustainability goals
- > Cost effective control and energy monitoring of HVAC and other facility systems such as lighting
- $\,\,{}^{\backprime}$  Limits the necessity for on-site interventions
- > Minimizes downtime and engineer call outs

### Benefits

### Easy control of multiple sites

- ▼ Remote control and manage sites remotely
- ▼ Floor plan control per site
- ✓ Multi-site access
- **▼** Permission based access

# Save energy & meet sustainability goals

- ✓ Monitor energy consumption trends
- ☑ Smart control of systems to save energy
- ✓ Insights to improve HVAC system performance
- ▼ Reduced costs
- ✓ Contribute to carbon neutrality

# Connectivity and integration possibilities

- ✓ Simple to advanced edge controllers
- ✓ Various interfaces
- ✓ Advanced security

## Manage, monitor and control indoor climate from anywhere

- ☑ Limits the necessity for on-site control
- Minimizes downtime and engineer call outs
- **✓** Optimized maintenance
- ✓ Monitoring of indoor air quality

#### From one to ∞ sites



### Main applications

### Light commercial and commercial systems



Non-food

retailers



Hotels



Offices





Schools

Healthcare

### Ranges

VRV and Skyair, air curtains. Integration through I/O. BACnet available in 2024.

- Direct integration with lights and other facility systems Daikin Cloud Plus as master of the building
- Integration with BMS, Daikin Cloud Plus as part of the system

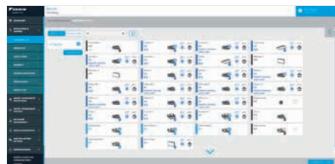




# Cloud application interface

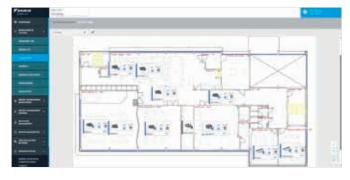






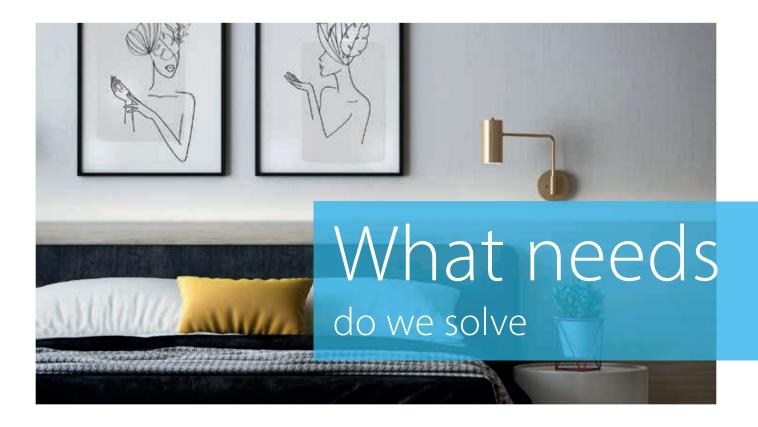
Dashboard Equipment List





Energy Consumption Layout View

<sup>\*</sup> Features depend on unit compatibility and region.
Images are indicative and might change if the product evolves.



## Were you aware that HVAC systems account for as much as 40% of the total energy consumption in buildings?

- > Daikin Cloud Plus logs historical data and allows you to monitor, compare HVAC consumption
- Daikin Cloud Plus allows you to integrate with energy meters so you can monitor not only HVAC but also other energy consumers (facility, gas, water, ...)
- Daikin Cloud Plus allows you to configure and control the system smarter to save energy with restrictions, "if this than that" rules, schedules, etc.

## Are you interested in tracking the progress of sustainability goals or the sustainability policies you put into action?

- Daikin Cloud Plus allows you to monitor, analyse and compare HVAC energy consumption
- Daikin Cloud Plus allows you to remote control and manage new cooling or heating related policies (e.g. heating setpoint of 1° lower)

## How do you ensure maximum comfort and minimal interruptions of cooling and heating?

- Daikin Cloud Plus can predict failures to anticipate and prevent unplanned downtime of the heating or cooling
- Daikin Cloud Plus real-time system error notifications to ensure a direct response in case something goes wrong
- Daikin Cloud Plus logs all events in the system and visualized the temperature evolutions
- Daikin Cloud Plus remote system access to indoor and outdoor unit operational data reduces engineering visits on site

## How to manage and remote control one or multi-site building estate and apply uniformization in climate control?

- > Daikin Cloud Plus allows you to monitor, manage and control multiple sites from anywhere
- > Daikin Cloud Plus allows to compare multiple sites

### How give peace of mind about indoor air quality?

- Daikin Cloud Plus integrates with IAQ sensors and can take automated actions or provide warnings where needed
- Daikin Cloud Plus allows to monitor and analyse the indoor air quality in order to take necessary actions

### How to control my other systems at the facility?

- Daikin Cloud Plus provides possibilities to integrate with other facility systems as a stand-alone system, such as integration with lighting system
- Daikin Cloud Plus provides possibilities to integrate with other facility managment systems like BMS or BEMS

### Daikin Cloud Plus

# Service packages

CONTROL & MONITORING

## Put you in the driving seat of your energy management

- Centralised control and monitoring of all your premises wherever you are
- Get actual operational data of all your systems
- Check errors remotely without having to go on site
- Visualise energy consumption and reduce energy waste by comparing different sites

2
REMOTE SUPPORT
& DIAGNOSTIC\*

### Enjoy Daikin specialist supervision and focus on your core business

- Early warning of system deviations to maximise system uptime and avoid emergency repairs
- Service providers have access to operational data so they arrive on site prepared
- Remote expert assistance by Daikin experts in case of errors

ADVICE &
OPTIMIZATION\*

## Get the best out of your system through expert advice

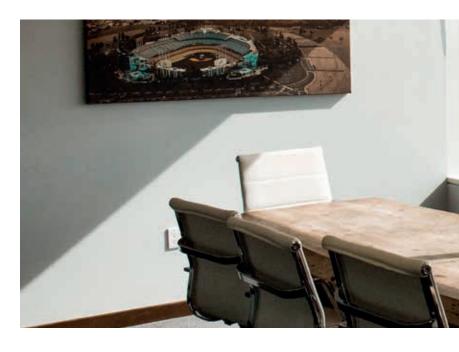
- Periodical analysis and optimisation report by Daikin experts
- Personalised actions to maximise energy efficiency and comfort
- Increased system lifetime as the system runs as it should



### Available for Edge & Edge Lite

	1 CONTROL & MONITORING	<b>2</b> REMOTE SUPPORT & DIAGNOSTIC*	3 ADVICE & OPTIMIZATION*
Remote Control, Demand Control & Scheduling	<b>√</b>	<b>✓</b>	<b>√</b>
Energy Monitoring	✓	✓	✓
Interlocking	✓	✓	✓
Multi-site Management	✓	✓	✓
Building Integration	✓	✓	✓
Alarm History & Email Notification	✓	✓	✓
Power Consumption Distribution	✓	✓	✓
Remote Field Settings	✓	✓	✓
Site History	Х	✓	✓
Prediction & Email Notification	Х	✓	✓
Operational Data Access	Х	✓	✓
Indoor and Outdoor Units Analysis	Х	✓	✓
Remote Diagnostic & Support by Daikin	Х	✓	✓
Periodical Analysis & Optimisation Advice by Daikin	Х	×	✓
Combinable with Maintenance Contract: - Technical Inspection - Preventive Maintenance - Comprehensive Maintenance	Complementary	Complementary	Complementary

Daikin Cloud Plus Features



# Main features



### Remote Control, Demand Control and Scheduling

Control and monitor the climate of your buildings at any time, from anywhere. From a web browser, it is possible to adjust your units' parameters, including temperature setpoints, fan speeds, heating or cooling operation modes and much more. All these parameters can be scheduled for maximum convenience during weekdays, weekends, holidays, office hours, opening hours, etc. Schedules are stored on the controller so the units are functioned as scheduled despite the internet connection. Additionally, units can be positioned in a visual floor plan to make it easier to locate an unit and change the setpoints remotely. Demand control reduces the peak consumption with minimal impact on comfort by predicting future needs and adjusting the operational capacity of the units accordingly.



#### **Energy Monitoring**

Get detailed visualization and export energy data of your buildings. Powerful graphs, comparisons and visualisations are available to help you assess the performance and potential improvements to reduce excessive energy and lower your energy costs. Next to detailed energy data of HVAC systems, it is possible to add external meters to measure consumption of lighting and water systems.



#### Interlocking

Smart rules can be integrated to optimize the operation of your units by setting specific triggers and scheduling necessary actions when these conditions happen. Through "if this, then that" principle, both the comfort of users and the efficiency of units can be optimized. For example, a rule can be: "If a window is open, then after 5 minutes, turn off the air-conditioner". Furthermore, the system enables setting restrictions remotely. For example, a user can only change the temperature between certain limits, which gives users control over their comfort while restricting extreme settings.



### Multi-site Management

Get a map view of all your sites with status alerts, benchmark and compare sites to one another. From the map view, you can get direct access to each site to monitor and control the site remotely. This helps to reduce site visits and get insights that lead to opportunities for reducing operational costs while maintaining great comfort levels.



### **Building Integration**

Not only HVAC but other facilities in the buildings can be controlled from the central platform. For example, the lighting system can be included in schedules and integrated with interlocking to have one single point of control and optimize energy efficiency for your buildings.



### **Alarm History & Email Notification**

Get detailed overview of alarms relating to your sites and real-time status of the alarms. Receive alarms notification email with access to alarm details on Daikin Cloud Plus platform.



#### **Power Consumption Distribution**

Proportional distribution of power consumption allows you to calculate the consumption for specific areas in your buildings. For example, you can calculate how much power is used by a tenant on a certain floor. For this function, energy meters are required.



#### **Remote Field Settings**

Field settings of outdoor units can be adjusted remotely. This allows technicians and building operators to adjust, configure and monitor outdoor units from a distance, reducing the need to be at the location, save time and costs associated with travel, labour and maintenance, increase efficiency and overall performance.





### Site History

Trace schedule trigger units or manual actions that were done on the units and sites. Past events, changes, and adjustments, enabling you to identify trends, gauge performance improvements, and strategize for the future. By drawing from historical data, you'll make informed decisions, adapt strategies, and drive continuous enhancements, revolutionizing your HVAC management approach.



#### **Prediction & Email Notification**

Early fault predictive algorithms help to prevent major failures. Based on the alarm and operational data, unit-specific prediction logic allows you to preventively, see whether a unit could run into issues. Prediction logic alarms will be generated in this case, allowing early warnings and ensuring smooth operation.



### **Operational Data Access**

Effortlessly monitor, analyse, and fine-tune HVAC parameters remotely, enabling you to make informed decisions on the go. Real-time access to operational data, performance metrics, and energy usage empowers you to adjust settings, troubleshoot anomalies, and maintain peak efficiency, all while minimizing the need for physical intervention. Operational data can be downloaded for further analysis and periodical reporting.



### **Indoor & Outdoor Unit Analysis**

Dive into comprehensive insights into each unit's performance, energy consumption, and environmental impact. Seamlessly compare data across units, pinpointing inefficiencies and optimizing your system's overall effectiveness. With a holistic view of indoor and outdoor units, you'll achieve unprecedented levels of operational harmony and energy savings.

### Use cases



#### For retailers

- Remote control and monitoring pf all units in different shops from a centralized platform
- X Testing and validating parameters and standardizing settings for shops
- > Energy visualizations and exports
- Remote control over lighting



#### For hotels

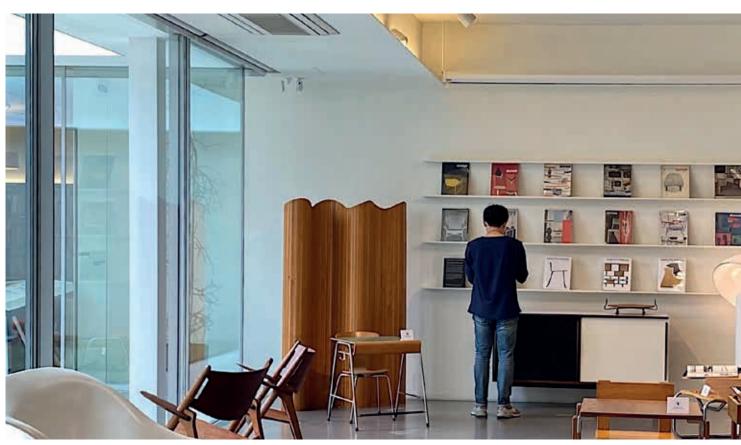
- > petting temperature ranges for rooms to avoid extreme settings by guests
- → Energy monitoring
- Scalability made easier thanks to standardized system settings

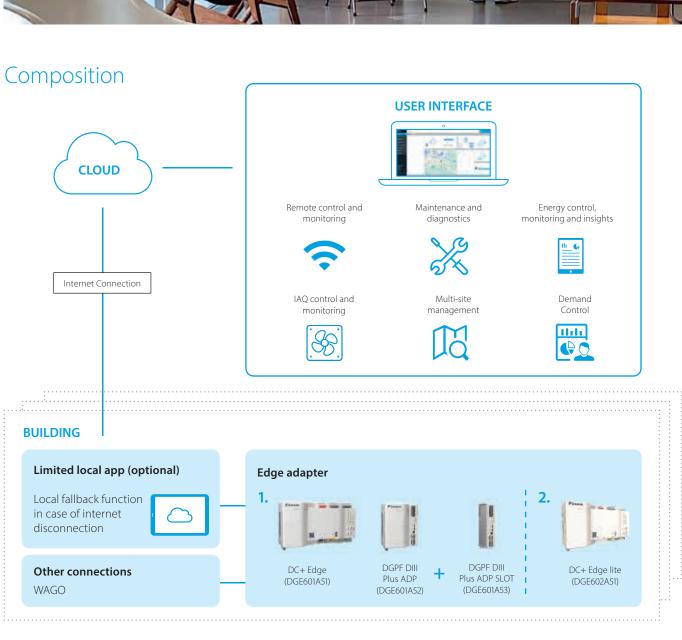


#### For offices

- Setting temperature ranges for office areas
- Detailed energy monitoring and export of data per tenant of different office areas
- Estimation of energy consumption and setting the right pricing for each tenant
- Scheduling and restrict controls to avoid energy waste and save energy costs

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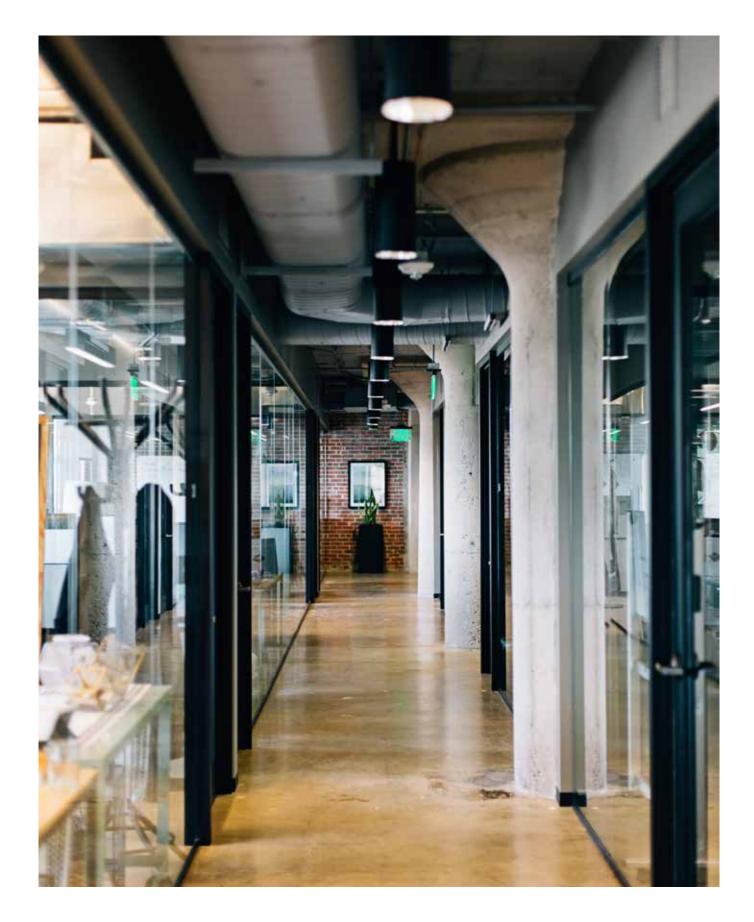


# Controllers & accessories

Controllers and their connections

### Controller Features

				DGE601A51 (Edge)	DGE602A51 (Edge lite)
Controller specification	I/F	DIII	port	2	1
			(Indoor unit connection / port)	64	64
		Ethernet	Internet	1	1
			2nd LAN port (BACnet)	1(N.A. yet)	0
		RS485	WAGO	1	0
		ADP	For DIII NET Plus ADP	1	0
			(Maximum expansion)	6	
		Contact	Di/Pi	8	4
			Do	3	2
	Number of connection	DIII management points	Standard	128	64
			Maximum with ADP	512	-
		Total management points	Including AC and other facilities	1000	76



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