

# Smart Multisite Control Solution

Modern and scalable energy management for your Heating & Cooling solutions



**Panasonic AC Smart Cloud**

Home | AC Settings | Visualization | Notification | Schedule | System Settings | User Account

**Location Map**

**Notification**

Site Name	Critical	Non-Critical	IDU Connection	Occurred time	Site Name	Location	Device Name	Alarm Code	View in Map
Site Berlin	1	0	110	20-06-2018 04:25	Site Berlin	Shop	CA_NO22_1-19-17	C17	-
Site Madrid	0	8	8	20-06-2018 04:25	Site Berlin	Shop	CA_NO32_1-20-1	C17	-
Site Paris	2	7	7	20-06-2018 04:25	Site Berlin	Shop	CA_NO22_1-29-1	C17	-
Site Sydney	6	4	4	20-06-2018 04:25	Site Berlin	Shop	CA_NO22_1-22-1	C17	-
Site Tokyo	0	0	0						

**IDU Operating Status**

Location	IDU Name	ON/OFF	Temp 1	Temp 2	Mode
Office	CA_NO31_1-1-1	On	24.0°C	24.5°C	Cool
Office	CA_NO31_1-1-2	On	24.0°C	24.5°C	Cool
Office	CA_NO21_1-1-1	On	27.0°C	27.5°C	Cool
Office	CA_NO31_1-1-3	On	27.0°C	27.5°C	Cool
Office	FA_NP11	Off	14.0°C	16.0°C	Heat

**Energy Consumption**

Bar chart showing Power Consumption (kWh) from 13/06/2018 to 19/06/2018. Values range from approximately 100kWh to 300kWh.

**Hourly Consumption (Today vs Yesterday)**

Bar chart comparing Power Consumption (kWh) hourly for Today and Yesterday. Today's consumption is generally higher than yesterday's.

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## Smart Multisite Control Solution

### One screen endless possibilities

The new Smart Multisite Control Solution from Panasonic allows you to have complete control of all your installations. With a simple click, all your units from several locations, receive status updates in real-time preventing breakdowns and optimising costs.



### Panasonic AC Smart Cloud

#### Centralise control of your business premises, from wherever you are, 24/7/365

The AC Smart Cloud system from Panasonic allows you to have complete control of all your installations from your tablet or from your computer. In a simple click, receive status updates, from all of your installations wherever the location, reducing potential breakdowns and optimizing costs.



### Panasonic AC Service Cloud

#### New solution for service and maintenance companies

Panasonic AC Service Cloud is unique tool for service and maintenance companies, providing advanced remote service capabilities, to increase response time, reduce sites visits and better allocate resources.



#### Installation

Easy installation and configuration



#### Connectivity

A standard LAN connection with Internet access (Fibre or Mobile)



#### Reliability

24 / 7 / 365 days connection



#### Use

Real-time Control from anywhere



#### Roles & Permission

Easily configure different access roles for each user



#### Security

Highly secure communication and complaint with GDPR



## What Panasonic provides you?



### Energy savings

**AC can be between 40-60% of the total Electricity Bill**

Even small setting changes might impact in real huge saving of your buildings.

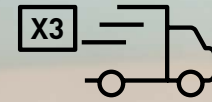
AC Smart Cloud provides you energy consumption data of your site and energy saving functions such as control setting limitation, auto off, scheduling, temperature range limits etc.



### Healthy Comfort

**How to secure comfort environment by avoiding wrong AC operation?**

Wrong temperature settings might drive into people discomfort and also unhealthy environment for employees, visitors or customers. Allow to analyse the set point and room temp history, and fix the right mode and temperature for each room.



### Service speed

**On average, 2-3 AC Technician' visits are required on site when an error/issue appears in an AC system**

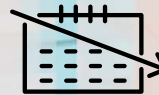
Avoid wasted site visits, analysing the behavior of the AC system remotely without necessity of a technician visit on site.



### Downtime

**System "downtime" can impact the customers buying experience/productivity**

Keep your business always running, reducing the risk of system time down. Detecting potential failures in advance or fixing them quicker if it happens.



### Maintenance

**A proper maintenance schedule prevents future malfunctions and reduces energy consumption**

Check remotely all the advanced parameters of the system and plan the maintenance properly. Assigning the right engineer for the required task.



### Life of system

**Replacing to new HVAC is a huge impact on investment**

Making good use of the system, taking earlier action when abnormal signal occurs and keeping regular maintenance will expand the life your system, but also will keep the expected performance operation.

### Full multisite and user control

Panasonic Smart and Service Cloud is based in location, each location can have multiple users in the same building or remotely. The scalability allows to add more sites and customise the access of your team and the access of your trusted service.



**Owner**

**Easy management of permission roles and access**

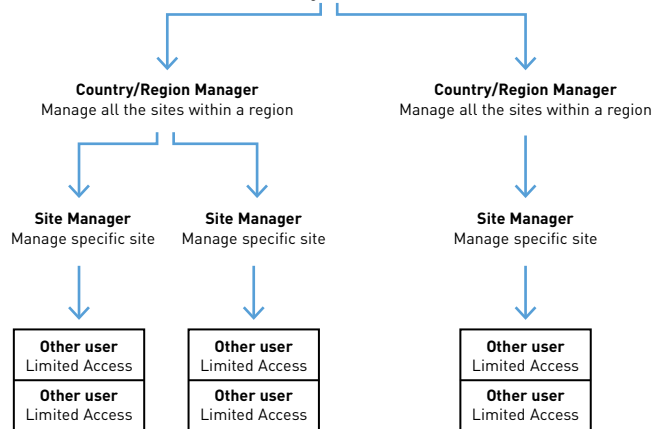


**Maintenance**

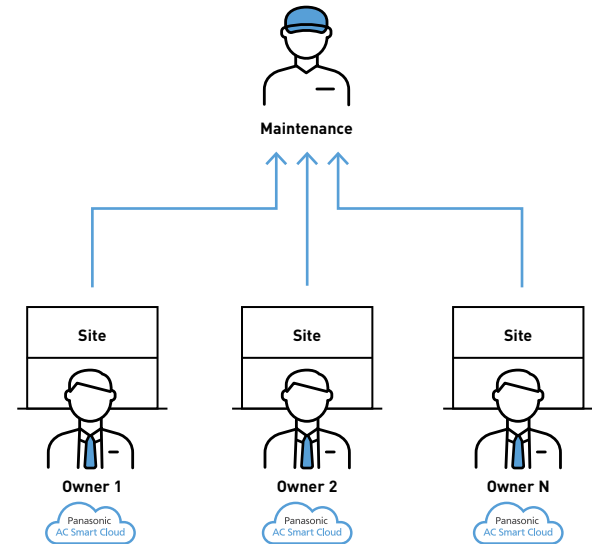
**Maintenance companies can get an access of each sites after owners allow permission to you a simple click**



**Owner**  
Manage all sites



**Maintenance**



## AC Smart Cloud

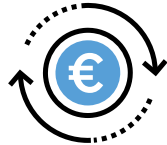


Take the control of your business and optimise heating and cooling operation



### 1 Comfort

Keep the comfort of workers, visitors and/or customers to increase satisfaction and productivity.



### 2 Return of investment

Optimizing the operation of your heating and cooling system and the possibility to monitor remotely can expand the life of your assets.



### 3 Lower running cost

The control of settings in real time and the energy consumption monitor contributes to reduce your energy bill



### More than a Centralized control

Using CAC Smart Cloud there are not restrictions of single centralized control device. Allowing the access from different areas in your building and even giving access from remote locations.

### More than BMS

Unlike typical BMS, there is full control of the heating and cooling system and its internal parameters. Operation cost can be improved with e-cut function\* which are 5 advanced energy saving settings. It expands the possibilities of optimize the comfort and operation cost.

\*Detailed explanation is in P.9.

### Flexibility that grows with you

#### Flexibility / Growing with you / License base on location (not user). Scalable solution

Great advantages for one single site installation but even better for multi sites, the solution is adapting to your grow with just limited initial investment per site

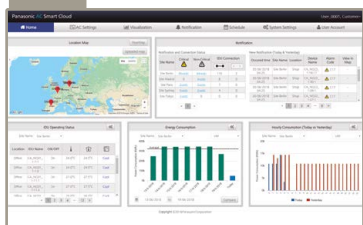
#### Free license User management

You decide who is having access to what and what actions each profile can do. Define profiles and assign to multiple users without additional fees.

#### Empower your maintenance

You know who is the best that can take care of your HVAC installations in each of your sites. Empower each of them giving access to AC Service Cloud, professional heating and cooling portal to your installations. Select which level of access you allow them to have.

### Key functions and uniqueness



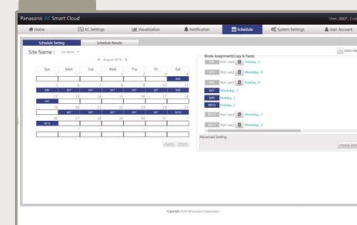
#### Multi site monitoring.

· It doesn't matter how many sites you have, easy to manage, operate, compare sites, locations, rooms.



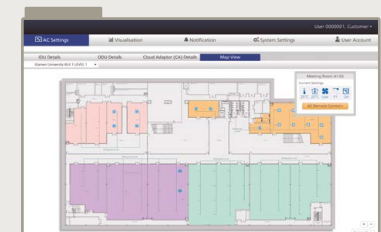
#### Powerful statistics for energy savings.

· Power consumption, capacity, efficiency level can be compared with different parameters (Yearly / monthly / weekly / daily bases)



#### Schedule setting.

· Yearly / weekly / holiday timer setting as you want



#### Maintenance notification.

· Error notification by email and with floor layout  
· Maintenance notification of ECOi / ECO G outdoor units  
· Remote service checker function



## AC Smart Cloud



### Central Controller One Site

With AC Smart Cloud, you can manage the heating and cooling settings, fix yearly scheduling, set up energy saving modes and see statistics directly or giving full or limited access to different users.



#### Users and profiles

- Customised roles: Define different roles that can be assigned to different users. Allow different level of control to each role.
- Unlimited users. Create as many users as necessary and assign the appropriate role.
- Zones assignment. Assign the users to a group of unit that are allowed to manage. This can be a part of building or even an individual unit.



#### Your maintenance partner

- AC Service Cloud is a high class maintenance portal to empower maintenance to fix any issue quicker than ever.
- Give Access to your heating and cooling maintenance trusted partner to AC Service Cloud.



- Owner**
- Remote building control
  - All Heating and Cooling parameters
  - Scheduling
  - Individual Control limitations
  - Define profiles and create users without additional fees



Different users from different places in the building can access to heating and cooling system. Having Access if necessary to limited area and/or functions.



- Maintenance Company**
- Optionally give Access to your preferred maintenance Company.

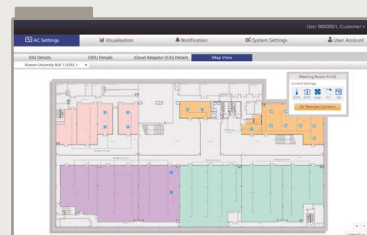


*"The AC Smart Cloud is giving me a lot of flexibility for my hotel with one solution, I can easily adapt the heating and cooling according to the level of occupation and at same act quickly if some issue occurs."*



### Mapping

- Group and name the units and different building areas freely.
- Include the floor map of building for more intuitive view.

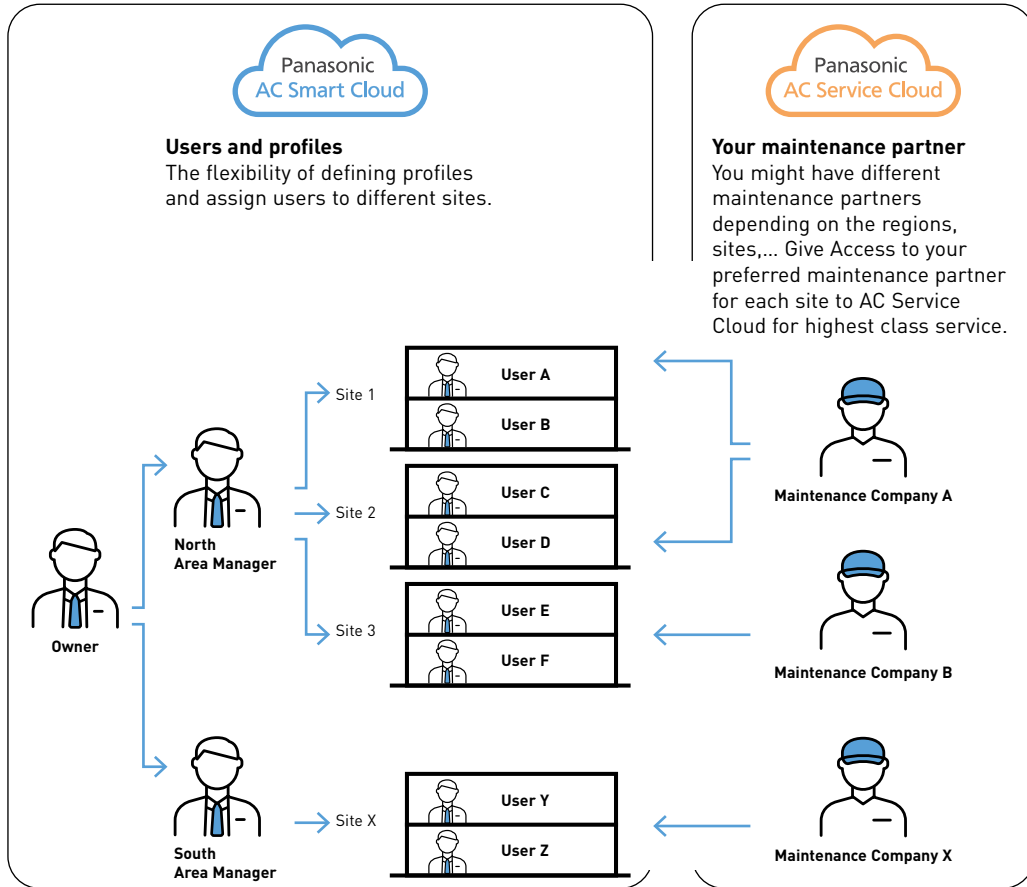


## AC Smart Cloud



### Controller Multi Site

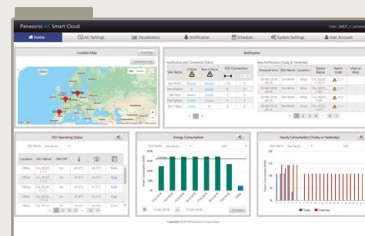
Including all advantages for Single site, AC Smart Cloud scalability offers you a excellent tool for Multi site Management.



*"This solution brings me a new view of the shops that I had not before. Empowering to improve the running cost and ensuring the comfort of our customers at same time"*

### Location map and View

See in geographic map all the sites you control see details with one simple click. Name and group the sites in different regions.





## AC Service Cloud



### Empower your maintenance service

Panasonic AC Service Cloud provides to your maintenance staff or company a unique tool to deliver advanced maintenance to increase response time, reduce sites visits and allocate better the resources. This advance and unique tool is available for service and maintenance professionals.

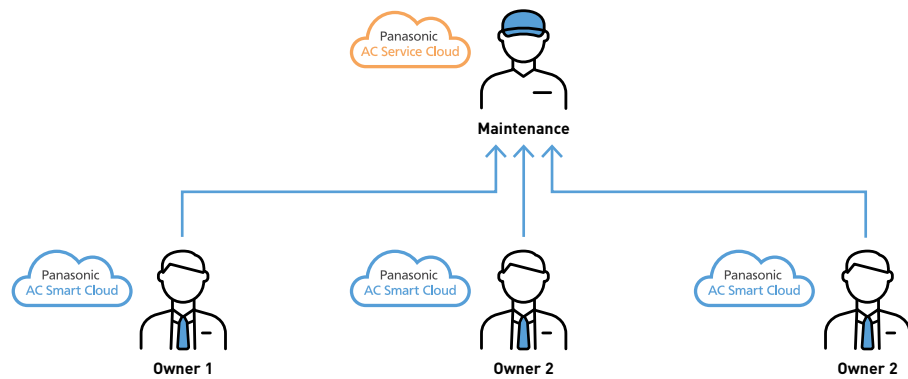
### Remote matters

For service and maintenance time matters, remote access to one installation status monitoring to all unit parameters for its analysis makes the difference in resolution speed and at same time saving unnecessary sites trips.

### More than BMS

Data provided for standard HVAC BMS can provide only some basic information. Panasonic CAC Service Cloud offers all Panasonic data in a powerful tool to easily maintain the system.

Maintenance companies can get an access of each sites after owners give permission to you with a simple click.



### Increase service level agreement with your customer whilst optimising your resources usage

#### Time Response and zero down time

Providing remotely technical information about abnormalities and checker functions\* enable AC installer and maintainer to identify and fix issue much quicker even though before it occurs.

#### Reduce unnecessary trips

It reduces the cost of unnecessary trips at least for 1 trip, and reduces the CO<sub>2</sub> emissions related to the transport.

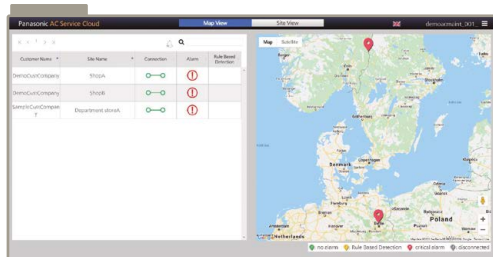
#### Maintenance planning

Identify easily the potential issues classified from less to more critical and jump with simple click to see more details of the site and the potential issue. It allows to plan better your sites visits and assign the right engineer for the work.

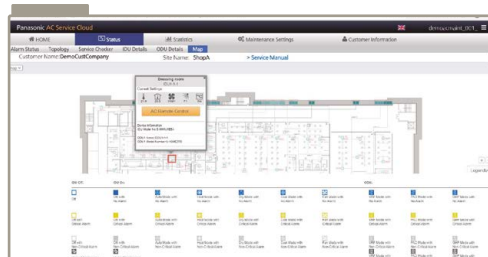
#### All at a glance and scalability

View remotely the various site you take care of maintenance service with Panasonic HVAC. The cloud solution allows to increase the number of contracts and installations without software updates, taking advantage of future features of Panasonic AC Service Cloud.

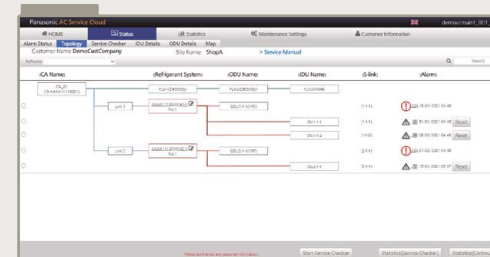
\*Detailed explanation is in P.9.



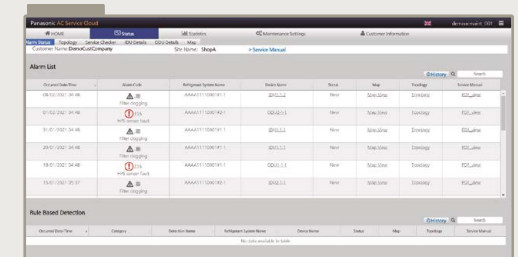
All sites at a glance



Floor map view



Topology



Alarm status



## Special features highlight

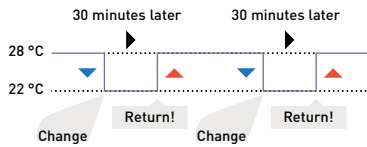
### e-CUT Advance energy saving functions

e-CUT functions are available in Panasonic AC Smart Cloud.  
5 energy saving settings reduces automatically its energy consumption.



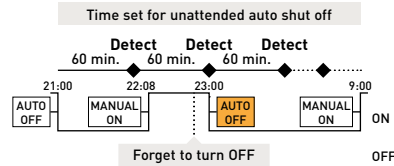
#### 1. Set temperature auto return.

When you want to return to the set temperature after a certain time even if the temperature is changed.



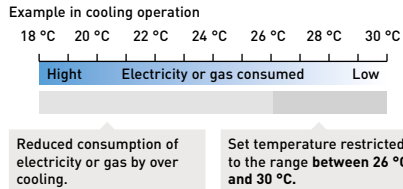
#### 2. Unattended auto shut off.

When you want to operate outside of a schedule but to monitor and stop automatically.



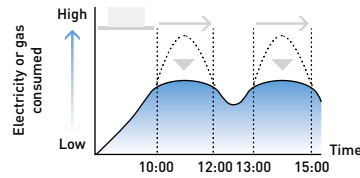
#### 3. Set temperature range limit.

When you want to limit the temperatures that can be set.



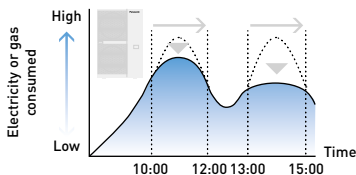
#### 4. Energy saving timer / efficient operation setting.

Specify time slots when you want operation capacity reduced.



#### 5. Demand / peak shaving settings/ peak cut settings.

Specify time slots when you want operation capacity of the outdoor units reduced.



### Remote service checker function

Service checker function helps service and maintenance companies to analyse malfunctions effectively and flexibly.  
All parameters in HVAC systems and even refrigeration circuit are available on the cloud portal for your check in detail.

**Cloud adapter. CZ-CFUSCC1**

**Gathering.** Service checker data from wherever you are.

**Statistic with all parameters in HVAC systems directly via screen in real time!**

### Available measurements highlight

Measurement Method	Countdown scheduling (incl. start now)
Data Duration	Max. 24h
Data interval	10 - 90sec
Test Run Control	Yes
Refrigeration circuit	Yes
Export data	CSV file available for your record & deeper analysis

List of features

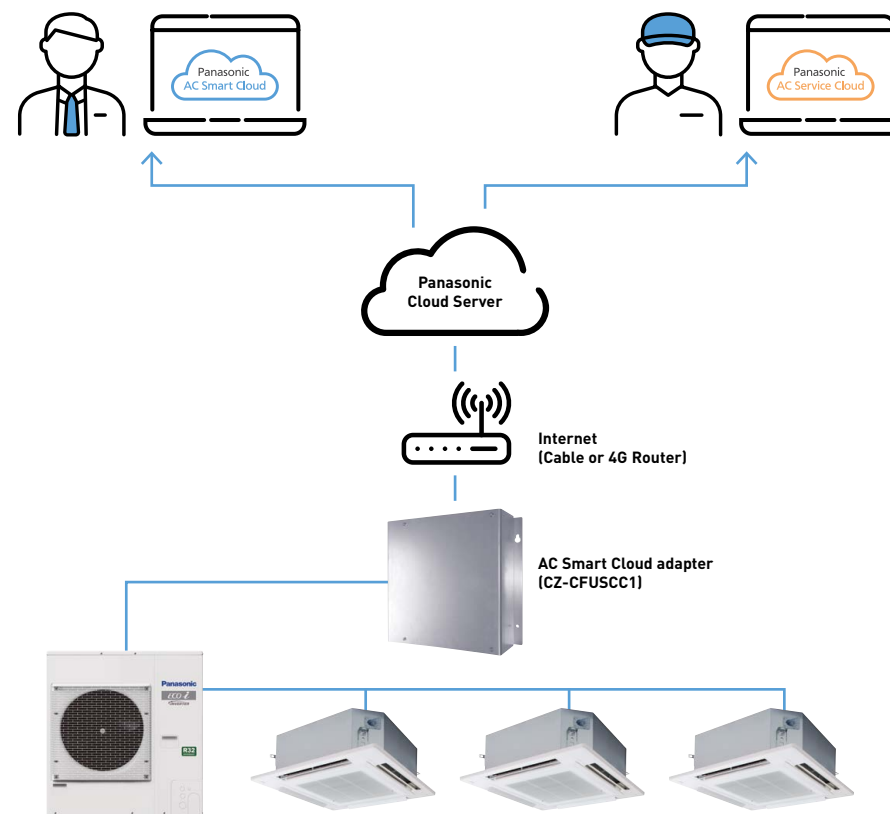
AC Smart Cloud Features	Functionalities
Home screen	Overview of: operating status, location map, weather information, notification, energy consumption, efficiency, eco-friendly building list
AC settings	Indoor unit monitoring and remote control, outdoor unit details, cloud adapter details, floor map view, maintenance notification (installer)
Visualization	Statistical data regarding energy consumption, capacity and efficiency ranking; per indoor unit, unit group or refrigerant circuit
Notification	Warnings and alarms, maintenance intervals
Schedule	Schedule settings and results
Energy saving	Temperature range limits, unattended auto shutoff, temperature auto return, energy saving timer, demand/peak shaving
Demand control	Indoor unit and outdoor unit demand settings
Event control	Control inputs: alarms, digital inputs, indoor units. Control outputs: digital outputs, indoor units
System settings	CO2 factor, distribution groups, area allocation, cut-off requests, site management, group display, site location, software version
User account	New user registration, updating users, user lists, user roles
Floor map Editor	Floor map import and unit assignment
Help	Installer information, alarm mail setting, user data, account management, company/customer information, terms of use, privacy notice, cookie policy, user manual, FAQ. For installers: user manual, technical data, installation instructions
Additional functions for installers	Cloud adapter installation process, remote service checker data recording and download, remote cloud adapter firmware update



AC Service Cloud Features	Functionalities
Home screen	Map view and site view with site names, connection status and alarm status
Status	Alarm status, site topology, remote service checker, indoor unit monitoring and remote control, outdoor unit details, floor map view with service manual download
Statistics	Refrigerant circuit view (current data and recorded data), data table view, 2D graph view
Maintenance settings	Notifications and alarms, maintenance intervals setting (operating hours)
Customer list	List of connected customers, requests to access customer sites
Cloud adapter	Cloud adapter installation wizard, remote firmware update
Floor map editor	Floor map import and unit assignment
Help	Alarm mail setting, user data, account management, company/customer information, terms of use, privacy notice, cookie policy, user manual, user manual, technical data, installation instructions, FAQ



Scheme example



\* All data are protected with our secure network

Technical Requirements

- CZ-CFUSCC1 – AC Smart Cloud adaptor
- Internet connection via: LAN with access to internet

Optional hardware

- CZ-CAPRA1 – integration of RAC systems
- Pulse meters (supplied by others): up to 3 pulse meters (gas or power meters) can be connected to the cloud adapter, extendable by additional communication adapters (CZ-CFUSCC2)

Systems supported by AC Smart Cloud adapter

- ECOi
- ECO G
- PACi / PACi NX
- RAC (An interface CZ-CAPRA1 is required)



## Panasonic AC Smart Cloud and Panasonic AC Service Cloud packages

Nr. of Indoor units	Options	Items	Reference	Description
Up to 32	Classic	Cloud base kit	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G <sup>1)</sup>
		KIT-ACSCBASE32	SR-ACSCSTART32	Panasonic AC Smart Cloud start up
		AC Smart Cloud access	SR-ACSC1Y32	Access for 1 year
			SR-ACSC3Y32	Access for 3 years
			SR-ACSC5Y32	Access for 5 years
	Full Subscription <sup>2) 3)</sup>	KIT-ACSC1Y32FULL	Yearly access including base kit	
Up to 64	Classic	Cloud base kit	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G <sup>1)</sup>
		KIT-ACSCBASE64	SR-ACSCSTART64	Panasonic AC Smart Cloud start up
		AC Smart Cloud access	SR-ACSC1Y64	Access for 1 year
			SR-ACSC3Y64	Access for 3 years
			SR-ACSC5Y64	Access for 5 years
	Full Subscription <sup>2) 3)</sup>	KIT-ACSC1Y64FULL	Yearly access including base kit	
Up to 128	Classic	Cloud base kit	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G <sup>1)</sup>
		KIT-ACSCBASE128	SR-ACSCSTART128	Panasonic AC Smart Cloud start up
		AC Smart Cloud access	SR-ACSC1Y128	Access for 1 year
			SR-ACSC3Y128	Access for 3 years
			SR-ACSC5Y128	Access for 5 years
	Full Subscription <sup>2) 3)</sup>	KIT-ACSC1Y128FULL	Yearly access including base kit	
Up to 512	Classic	Cloud base kit	4x CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G <sup>1)</sup>
		KIT-ACSCBASE512	SR-ACSCSTART512	Panasonic AC Smart Cloud start up
		AC Smart Cloud access	SR-ACSC1Y512	Access for 1 year
			SR-ACSC3Y512	Access for 3 years
			SR-ACSC5Y512	Access for 5 years
	Full Subscription <sup>2) 3)</sup>	KIT-ACSC1Y512FULL	Yearly access including base kit	

Check other combinations with Panasonic. 1) Only together with start up. 2) Includes first 2 years of Panasonic AC Service Cloud. 3) Requires minimum 4 years of service.

\* Model references up to 192/256/320 indoor units are also available. One cloud adapter is required per 128 indoor units.

### Additional optional services


Panasonic AC Service Cloud	SR-ACSC1Y32M	Panasonic AC Service Cloud 1 year fee
Floor map <sup>4)</sup>	SR-ACSC1FLRUP	Upload 1 floor map or maximum 32 units
Floor map <sup>4)</sup>	SR-ACSC1FLRCR	Create 1 floor map or maximum 32 units
Indoor assign <sup>4)</sup>	SR-ACSC32ASSIGN	Assign indoors up to 32 units
Power meter		For power meter hardware, please discuss with your local sales representative
4G Router	PAW-ACSCRTR4G	4G Router for Panasonic AC Smart Cloud
SIM card	PAW-ACSCSIM	SIM card without data amount
Data amount of SIM card	PAW-ACSCDAT32	Data amount 1 year fee
4G connectivity kit <sup>5)</sup>	KIT-ACSC4GCNT	4G connection kit including 4G Router and SIM card

4) Floor map and indoor assignments can be done by customer without additional charge. 5) Data amount of SIM card is not included.

### Selection steps


What service do you need? There are 2 options as follows.

**AC Smart Cloud only**



Please follow step: 1 3

**AC Smart Cloud + AC Service Cloud**




Please follow step: 1 2 3

\*Panasonic AC Smart Cloud is always required to use AC Service Cloud

**1 Choose one setup (A or B) for AC Smart Cloud**

**A) Classic option**



Cloud adapter (CZ-CFUSCC1) + Start up (SR-ACSCSTART\*\*) + AC Smart Cloud access fee (SR-ACS\*\*Y\*\*)

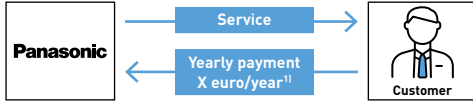
Depending on the size of the installation.

1 or 3 or 5 Years

**B) Full Subscription**  
(KIT-ACSC1Y\*\*FULL)


Yearly payment including the cost of a cloud adapter (CZ-CFUSCC1), start up (SR-ACSCSTART\*\*) and yearly access fee (SR-ACSC\*\*Y\*\*).

It's a great option to minimize your initial investment.



<sup>1)</sup>Depending on the size of the installation. Minimum subscription time is 4 years.

+



**2 Years of AC Service Cloud included for free!**

**2 Choose yearly access fee for AC Service Cloud (SR-ACSC1Y32M<sup>2)</sup>)**

If you choose Full subscription in STEP1, 2 years of AC Service Cloud is included. Please purchase an additional yearly fee after 2nd year.

<sup>2)</sup>Please order multiple by 32 if you have bigger systems.

**3 Choose optional services with your need**

- Floor map
- Power meter
- Floor map creation
- 4G connectivity
- Indoor assign

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