

Control & Connectivity range 2023 / 2024

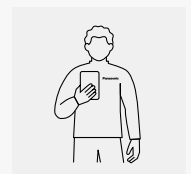
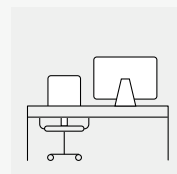
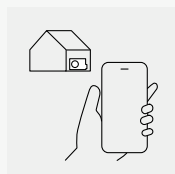
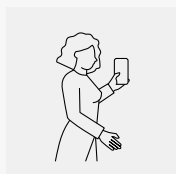
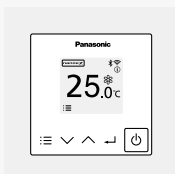




Control and connectivity

Panasonic has developed a wide range of control systems to offer the best options for commercial and residential needs, from the individual remote controllers, to the newest technology capable of controlling your building anywhere in the world. The simple to use cloud software can even be used from a portable device.

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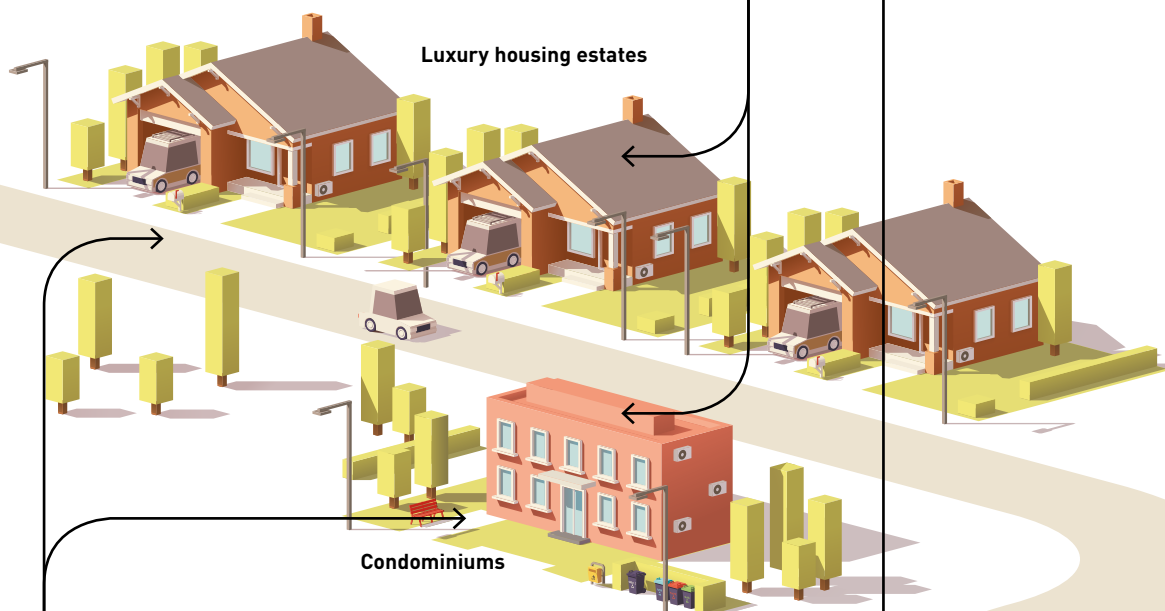


Control and connectivity map for Panasonic business areas

A wide range of control and connectivity solutions to suit a variety of applications. Integration capability, scalable solutions and smart connectivity offer a unique portfolio to meet every customer's needs.

Integration with Home Automation or KNX.

Simple and flexible solution to integrate Panasonic heating and cooling systems into smart home energy solutions.



CONEX.

Simple and intuitive control with smart apps availability ¹⁾. Each of the specialized apps, for owners or HVAC&R professionals, support daily operation. Allows connection of one, or a group of indoor units, to Panasonic Comfort Cloud App, which provides control, monitoring, scheduling and error alerts. Compatible with Voice Control ²⁾.

[+ REFER TO PAGE 20 FOR MORE DETAILS](#)



1) App connectivity available with CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW and CZ-RTC6BLW.

2) Alexa, Google Home.... Giving indication of compatible options.

3) Panasonic AC Smart Cloud connection required to access Panasonic AC Service Cloud.

4) 2 DI on standard version and 4 DI/DO available on Modbus version.

5) 128 indoor units as standard, additional communication adaptor required for 256 units.



Panasonic AC Smart / Service Cloud.

Smart multi-site solution provides users with complete scalable control for all business installations, 24/7, from any connected location.
Panasonic AC Smart Cloud for business owners and Panasonic AC Service Cloud³⁾ for HVAC service/maintenance companies.

+ REFER TO PAGE 12 FOR MORE DETAILS

VRF Smart Connectivity+.

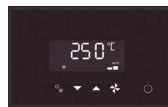
Control the air quality of guest rooms utilising CO₂ and humidity sensors. Easy BMS integration for entire building management.



+ REFER TO PAGE 6 FOR MORE DETAILS

Controller for hotel application.

Intuitive controller allowing up to 4 digital inputs and outputs⁴⁾. Perform the most common operations in hotel rooms, such as key cards and window contacts.



+ REFER TO PAGE 32 FOR MORE DETAILS

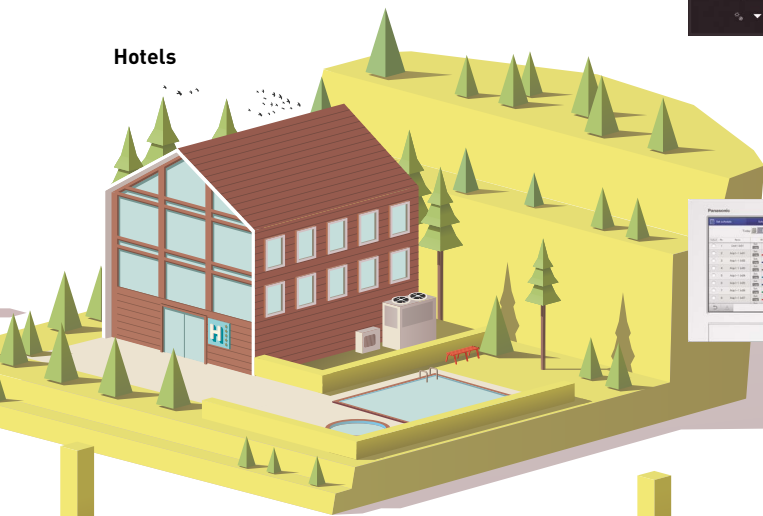
Intelligent controller.

Centralized controller with large LCD touch screen display. Maximum 256⁵⁾ indoor units connectable, ideal for larger buildings.

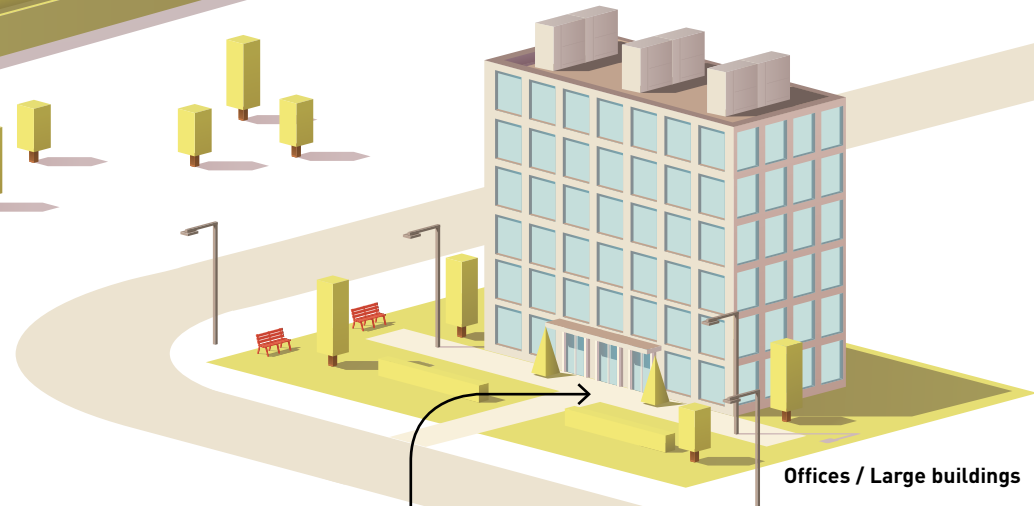


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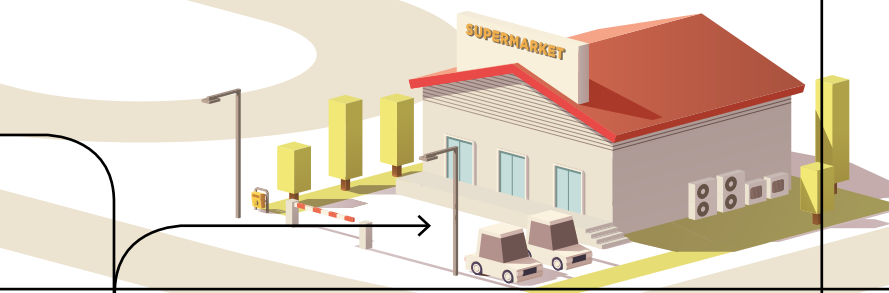
Hotels



Offices / Large buildings



Supermarkets



Integration with BACnet or Modbus.

Easy and reliable solution to integrate Panasonic heating and cooling systems into the building management systems in your business.

VRF Smart Connectivity+

Through thorough energy management, Panasonic's VRF Smart Connectivity+ is a state-of-the-art solution providing energy saving and comfort as well as simple installation, operation and running.



VRF Smart Connectivity+ solution offers efficient energy management, high IAQ (indoor air quality), and air conditioning control.

Panasonic **Schneider Electric**



Dramatic reduction of OpEx with outstanding IAQ.

3 built-in sensors:
Temperature, RH and occupancy.
ZigBee wireless sensors:
CO₂ / temperature / RH%,
window / door,
ceiling / wall / water
leakage.
Relay Pack, Hotel room
controller.



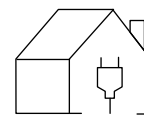
Ultimate customisation.

Customisable colour
background.
Custom display/icons,
messages.
Programmable logic (also
stand alone).
Various controls and
various external connection
devices.



User-/owner-friendly.

Colour touch screen.
Simple and easy to use.
22 languages.
Easy-to-understand error
description.



Easy design and Plug & Play to reduce CapEx.

Simple Plug & Play VRF
connection to Building
Energy Management
System (BEMS).
Stand alone or BEMS
connected.
Easy installation of ZigBee
sensors.

Energy management system for rooms.

Each room is monitored by precision sensors, making it possible to provide high comfort levels without wasting energy.



Management system for the entire building.

A Building Energy Management System (BEMS) can also be connected with Plug & Play centralised control of the entire building's energy consumption.

VRF Smart Connectivity+
SER8150.

1 Air quality control

Optimum IAQ is realized using the CO₂ and humidity sensors. The interior environment remains comfortable, while heating and cooling costs are minimized.
The CO₂ sensor can control ventilation systems, which contribute to improving the room's air quality.

2 Easy installation and integration

A single device is all that's required for occupancy and optimum automatic indoor air quality (IAQ) control. Simple operation with an interface that it is not an owned device contributes to increased energy efficiency and productivity for reduced capital expenditure (CapEx) and operating expense (OpEx).

3 Other equipment control

One room controller manages various devices including lighting and the blinds.
Control ventilation systems and other external connection devices with this BEMS.



Door/window sensor.

Door and window contact detection sensor to monitor opening and closing.



Wall/ceiling motion/temperature/humidity sensor.

Wall and ceiling sensor to detect the presence or absence of occupants.



CO₂ /temperature/humidity sensor.

Monitor indoor air quality, review data on interfacing devices, and control fresh air inside customisable zones.



Water leakage sensor.

Two sensing pads under the body activate when water is present between the two pads. Detecting the water, the sensor reports the event to the controller (and BEMS).



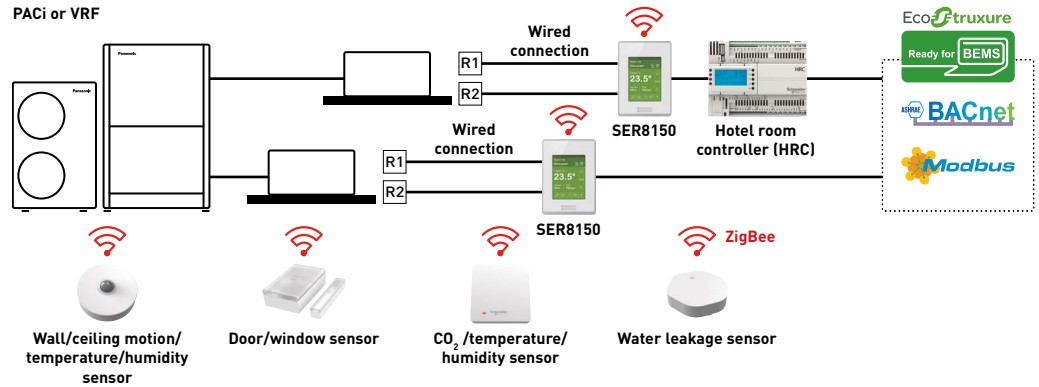
Hotel room controller (HRC).

The Hotel room controller controls connected guest room devices and aggregates data, making it visible to guest room and property management systems.

VRF Smart Connectivity+

Energy management system for rooms.

By installing a wall/ceiling motion temperature sensor, window/door sensor, and CO₂ sensor in the room, ideal, waste-free air conditioning is achieved.

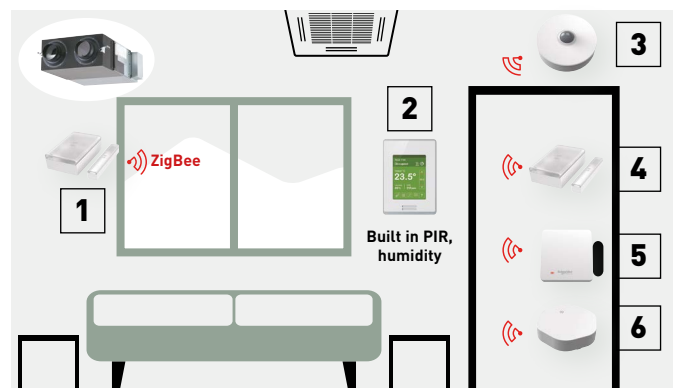


Sensing and control technology


Using sensors from Schneider Electric, high-quality occupancy and automatic IAQ control are realised. The sensors detect the presence or absence of occupants, and the opening and closing of doors and windows to achieve the most efficient energy management and exceptional air-conditioned comfort.

Flexible installation is possible to match different applications and building features such as walls, ceilings and proximity to doors and windows. No wiring means extra installation versatility.


Batteries last for up to five years (10-year battery for CO₂ sensor) and are easy to install and replace.



- 1 | Window sensor (option).
- 2 | Room controller.
- 3 | Ceiling motion sensor (option).
- 4 | Door sensor (option).
- 5 | CO₂ sensor (option).
- 6 | Water leakage sensor (option).



Pana Net Con, RH, No PIR, SE Brand, R1R2.
SER8150R0B1194



Pana Net Con, RH, PIR, SE Brand, R1R2.
SER8150R5B1194



Wireless ZigBee® Pro communication card.
VCM8000V5094P



Hotel room expansion module 14 indoor units.
HRCEP14R



Hotel room controller 28 indoor units.
HRCPBG28R



Hotel room controller w/display 42 indoor units.
HRCPDG42R

* Those accessories require system integrator support on site.



Sensor with room CO₂, temperature and humidity.
SED-C02-G-5045



Sensor with room temperature and humidity.
SED-TRH-G-5045



Door/window sensor.
SED-WDC-G-5045



Wall/ceiling motion/temperature/humidity sensor.
SED-MTH-G-5045



Water leakage sensor.
SED-WLS-G-5045



Cover frame. Silver.
FAS-00



Cover frame. White.
FAS-01



Cover frame. Glossy translucent white.
FAS-03



Cover frame. Light tan wood.
FAS-05



Cover frame. Dark brown wood.
FAS-06



Cover frame. Dark black wood.
FAS-07



Cover frame. Brushed steel finish.
FAS-10

Up to 5 year battery life (batteries included). Battery life of CO₂ sensor up to 10 years. Battery level is a data point.

VRF Smart Connectivity+

Smart management solutions.



1 Hotels

Room key card or key cardless solutions for hotels.
The SER8150 and ZigBee sensor automatic detection function offer optimal air conditioning regardless of whether there is a hotel room key or not. Sensors detect the presence or absence of occupants and the opening and closing of doors and windows for the optimum air-conditioned environment guests expect. Automatic control ensures the most efficient operation when guests are away or when windows are open. This contributes to an appreciable reduction in operating costs.



2 Small and medium offices

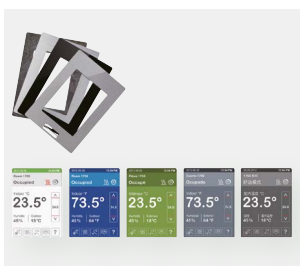
CO₂ sensors (option) and humidity sensors.
CO₂ sensors take measurements in units of ppm, and humidity sensors enable fine air quality control. This creates the most comfortable space for occupants while contributing to improved employee satisfaction.



3 Super markets

Humidity sensors.
Humidity sensors enable automatic dehumidification for the optimum IAQ regardless of climatic conditions. This creates an even more comfortable environment for customers and employees.

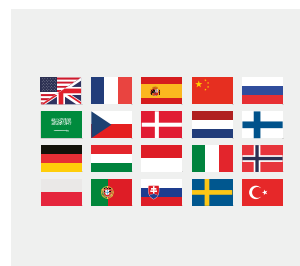
Innovative and unrivalled advantages



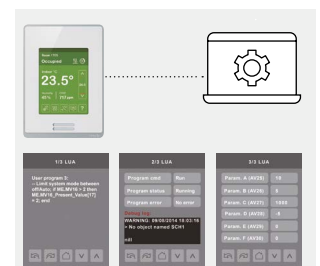
Colour and design to match office interiors.
Colour combinations and design can be set to match different facilities.



Easy-to-understand error description.
Error description during an emergency is easy to understand, enabling staff to respond quickly.



Customisation in 22 languages possible.
The display can be customised to match the native languages of guests to enable smooth, stress-free communication for hospitality at its finest.



Programmable logic.
Full customisation and updating of remote controller logic to match conditions.

Smart multi-site control solution

Modern and scalable energy management for your Heating & Cooling Solutions.

Smart multi-site control solution. One screen with endless possibilities.

The smart multi-site 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 User: 0001, Customer-

Home AC Settings Visualization Notification Schedule System Settings User Account

Location Map

Notification

Site Name	Critical	Non-Critical	IDU Connection
Site Berlin	80 units	46 units	110 2
Site Madrid	0	8 units	8 0
Site Paris	2 units	2 units	7 0
Site Sydney	6 units	2 units	4 0
Site Tokyo	1 units	0	0 0

Occured time	Site Name	Location	Device Name	Alarm Code	View in Map
20/06/2018 04:25	Site Berlin	Shop	CA_NO22_1-19-17	C17	-
20/06/2018 04:25	Site Berlin	Shop	CA_NO22_1-30-1	C17	-
20/06/2018 04:25	Site Berlin	Shop	CA_NO22_1-29-1	C17	-
20/06/2018 04:25	Site Berlin	Shop	CA_NO22_1-23-1	C17	-

IDU Operating Status

Location	IDU Name	ON/OFF	Temp	Temp	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_NO31_1-11-1	On	27.0°C	27.5°C	Cool
Office	CA_NO31_1-11-3	On	27.0°C	27.5°C	Cool
Office	CA_NO31_1-11-3	On	26.0°C	26.0°C	Cool

Energy Consumption

Hourly Consumption (Today vs Yesterday)

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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 and 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.

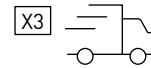
Even small setting changes can provide a huge impact in energy savings for your buildings. Panasonic AC Smart Cloud provides you energy consumption data of your site(s) and energy saving functions such as control setting limitation, auto off, scheduling, temperature range limits, etc.



Healthy comfort.

How to secure a comfortable environment by avoiding incorrect AC operation?

Incorrect temperature settings can create discomfort for users as well as an unhealthy environment for employees, visitors or customers. 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 the need of a technician visit on site.



Downtime.

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

Keep your business running, reducing the risk of system downtime. Detect potential failures in advance or fixing them swiftly should issues occur.



Maintenance.

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

Remotely check all the advanced parameters of the system and plan the maintenance properly. Assign the right engineer for the required task.



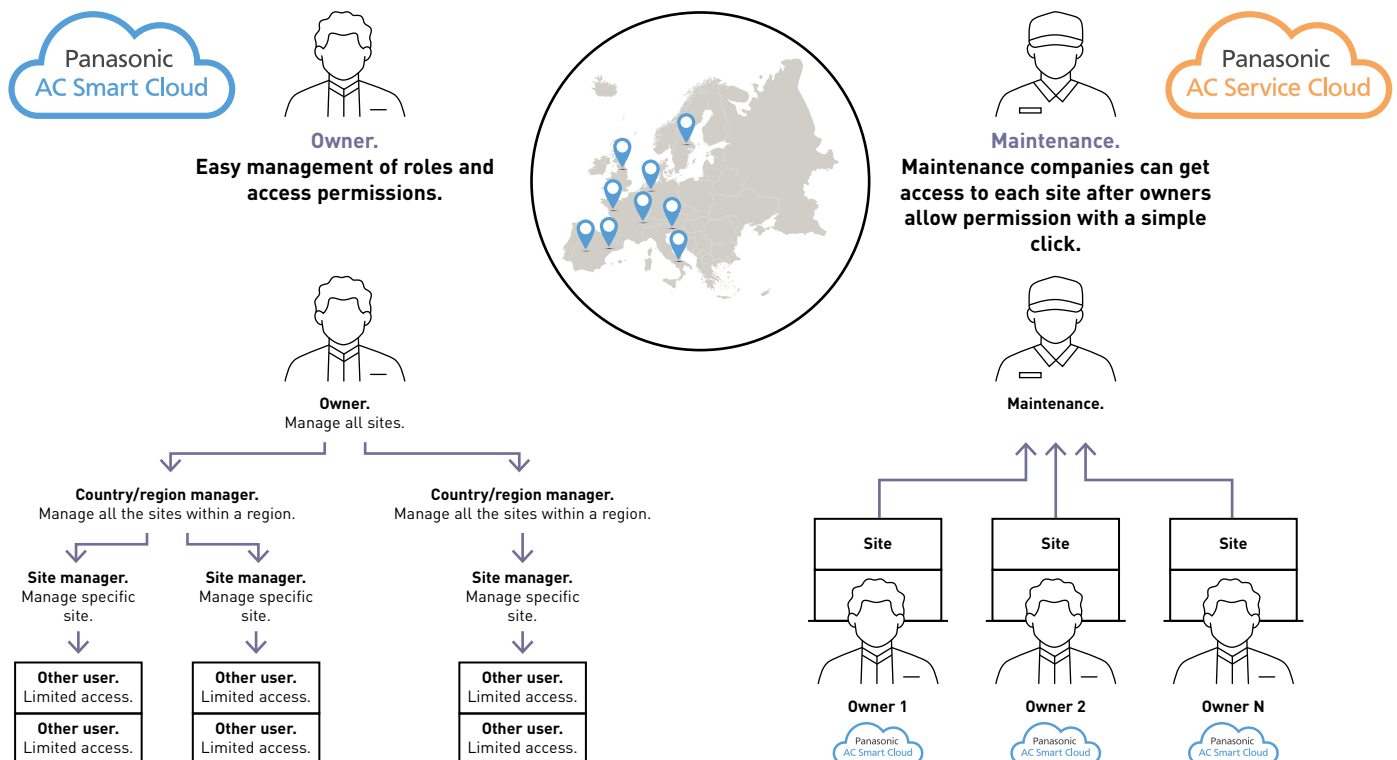
Life of system.

Replacing 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 will also keep the expected performance operation.

Full multi-site and user control

Panasonic Smart and Service Cloud is based on location. Each location can allow access for multiple users whether in the same building or via remote access. The scalability allows addition of multiple sites and customise the access of your team and the access of your trusted service partner.



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 optimising costs.



1 Comfort
Keep the comfort of workers, visitors, and customers to increase satisfaction and productivity.

2 Return on investment
Optimising 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
Controlling settings in real-time and monitoring energy consumption contributes to reducing your energy bill.

Flexible solution for your business

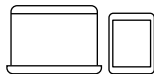
Scalable solution for your business



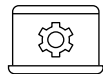
Anytime



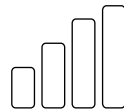
Anywhere



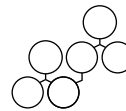
Multiplatform



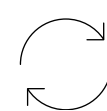
Internet browser



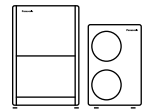
Small to large



1 to multi-sites



Upgrade features ¹⁾



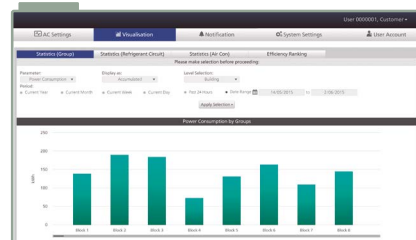
RAC²/PACi/ECOi/ECO G

1) Customized to meet user demand / Continuous upgrades: new functions and product introductions / IT smart management. 2) CZ-CAPRA1 is required.

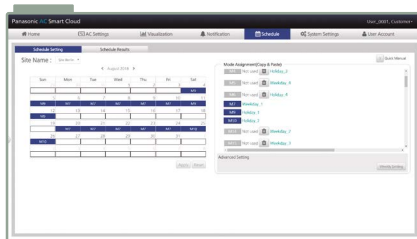
Key functions and uniqueness



Multi-site monitoring.
· It doesn't matter how many sites you have. It is easy to manage, operate, compare sites, locations and rooms.



Powerful statistics for energy savings.
· Power consumption, capacity and efficiency level can be compared with different parameters (yearly / monthly / weekly / daily basis)



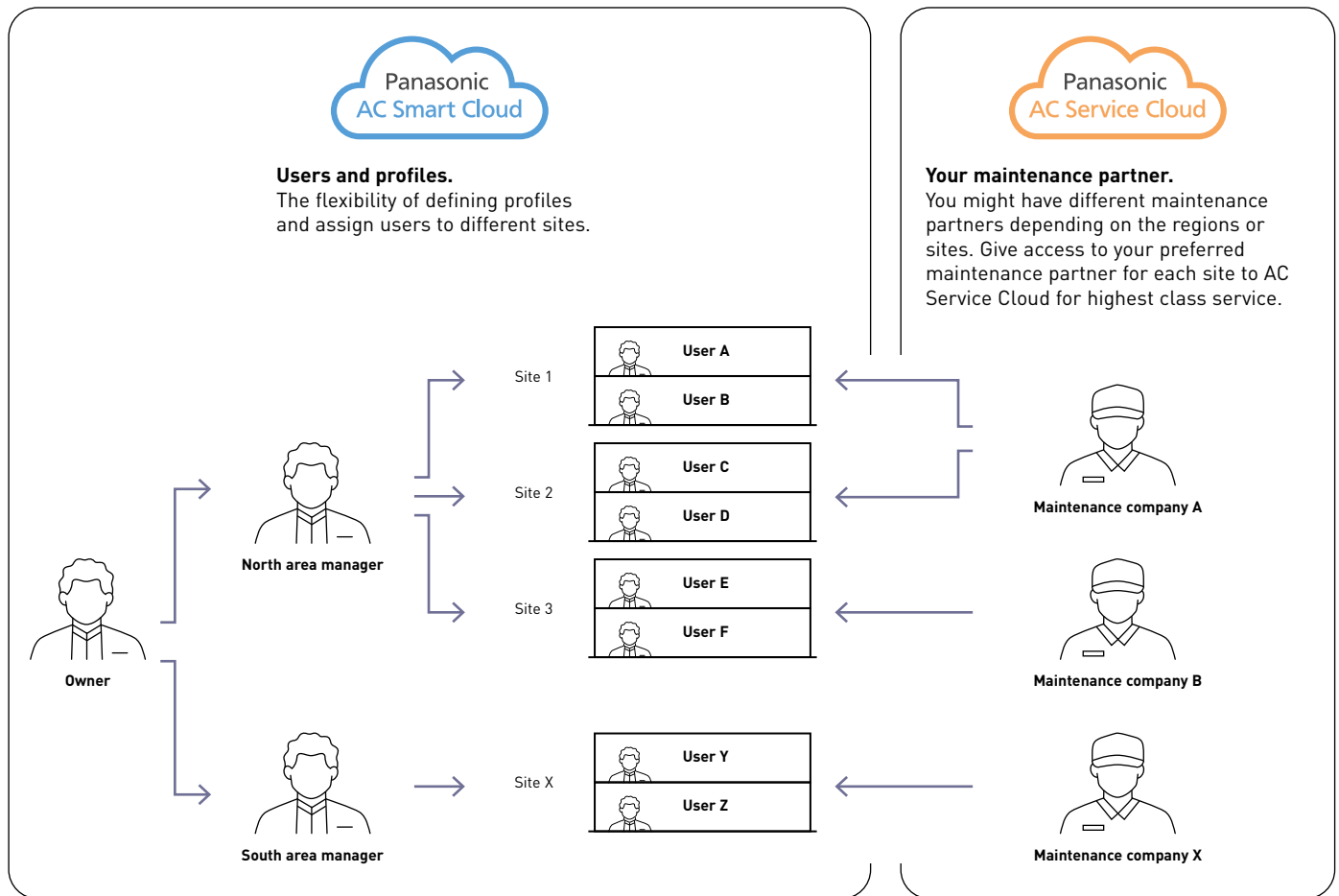
Schedule setting.
· Set yearly / weekly / holidays timers as you please



Maintenance notification.
Receive an error notification by email with floor layout:
· Maintenance notification of ECOi / ECO G outdoor units
· Remote service checker function

Controller multi-site.

Including all advantages for single site, the scalability of AC Smart Cloud offers you an excellent toll for multi-site management.



List of features

Panasonic AC Smart Cloud	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	CO ₂ 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

Panasonic AC Service Cloud

Panasonic AC Service Cloud provides maintenance companies a unique tool to deliver advanced service and maintenance features, decreasing response times, reduce sites visits and better allocate resources.



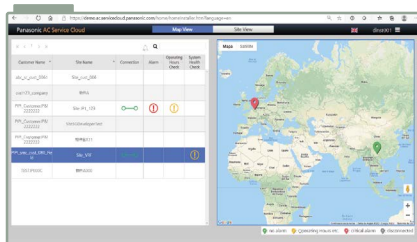
1 Response time and zero down time
 Providing technical information about abnormalities and checker functions enables the AC installer and maintainer to remotely identify and fix issues more quickly, even before they occurs.

3 Maintenance planning
 With a simple click, easily identify the nature of potential issues, enabling issue classification, prioritisation of resources and better planned site visits, assigning the right engineer for the job.

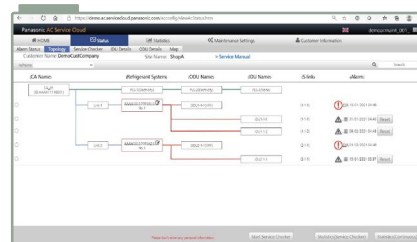
2 Reduce unnecessary trips
 It reduces the cost of unnecessary trips, reducing the CO₂ emissions associated with transport.

4 All at a glance with scalability
 Remotely view all sites requiring maintenance of Panasonic HVAC. Increase the number of sites maintained, taking advantage of future updates and features of the Panasonic AC Service Cloud.

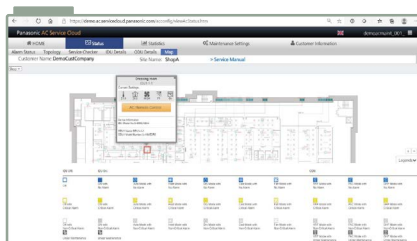
Key functions



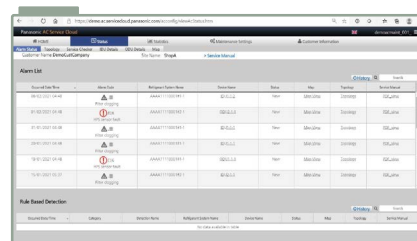
All sites at a glance.



Topology.



Floor map view.



Alarm status.

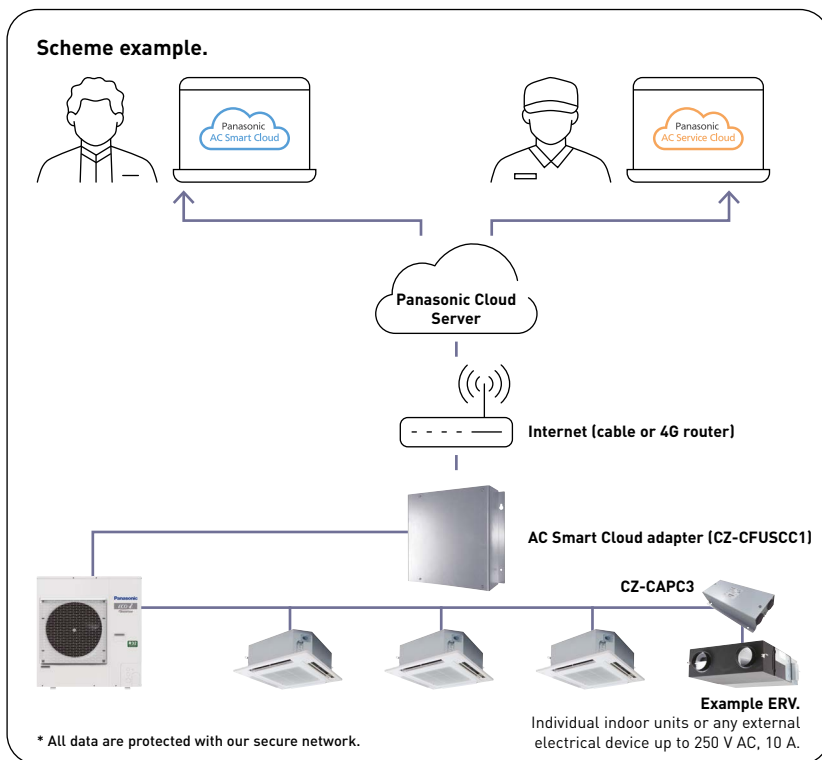
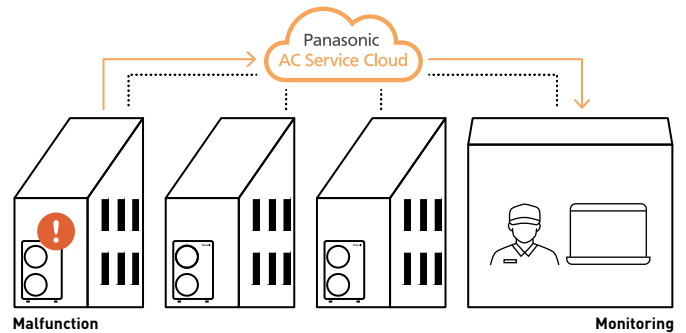
Owners can manage different maintenance companies for each site, enabling or disabling access with just one click. Maintenance companies can have access to all sites where different owners allow permissions.

System health check function

Self diagnosis function is available in the AC Service Cloud. It automatically predicts potential malfunctions and helps to speed up your service process.

- Consecutive automatic monitoring at 15 minute intervals
- Key notifications in the event potential malfunction is detected
- 2D graph display to help with detailed analysis
- Threshold values can be easily adjusted

* For compatible models, please contact an authorized Panasonic dealer.



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 adaptor, extendable by additional communication adapters (CZ-CFUSCC2)
- CZ-CAPC3 - ON / OFF monitor and control

Systems supported by AC Smart Cloud adapter:

- ECOi
- ECO G
- PACi / PACi NX
- RAC (CZ-CAPRA1 interface is required)
- ERV (CZ-CAPC3 interface is required)

List of features

Panasonic AC Service Cloud 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 adaptor	Cloud adaptor 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
System health check function*	Self diagnosis function is available in the Panasonic AC Service Cloud. It automatically predicts potential malfunctions and helps to speed up your service process

* Optional.

1 Panasonic AC Smart Cloud packages

Get the cloud base kit (CZ-CFUSCC1 + start up) and register to one of the subscription periods with or without data connectivity.

The selection of the right Panasonic AC Smart Cloud package depends on the size of the installation.

	Product	Reference	Items included in a kit	Description
Up to 32 indoor units	Cloud base kit	KIT-ACSCBASE32	CZ-CFUSCC1	Cloud adapter for ECOi, PACi and ECO G ¹⁾
			SR-ACSCSTART32	AC Smart Cloud start up to 32 indoor units
	AC Smart Cloud access fee		SR-ACSC1Y32	AC Smart Cloud access fee for 1 year
			SR-ACSC3Y32	AC Smart Cloud access fee for 3 years
			SR-ACSC5Y32	AC Smart Cloud access fee for 5 years
AC Smart Cloud access fee with data connectivity	SR-ACSC1Y32CNT		AC Smart Cloud access fee for 1 year with data connectivity	
Up to 64 indoor units	Cloud base kit	KIT-ACSCBASE64	CZ-CFUSCC1	Cloud adapter for ECOi, PACi and ECO G ¹⁾
			SR-ACSCSTART64	AC Smart Cloud start up to 64 indoor units
	AC Smart Cloud access fee		SR-ACSC1Y64	AC Smart Cloud access fee for 1 year
			SR-ACSC3Y64	AC Smart Cloud access fee for 3 years
			SR-ACSC5Y64	AC Smart Cloud access fee for 5 years
AC Smart Cloud access fee with data connectivity	SR-ACSC1Y64CNT		AC Smart Cloud access fee for 1 year with data connectivity	
Up to 128 indoor units	Cloud base kit	KIT-ACSCBASE128	CZ-CFUSCC1	Cloud adapter for ECOi, PACi and ECO G ¹⁾
			SR-ACSCSTART128	AC Smart Cloud start up to 128 indoor units
	AC Smart Cloud access fee		SR-ACSC1Y128	AC Smart Cloud access fee for 1 year
			SR-ACSC3Y128	AC Smart Cloud access fee for 3 years
			SR-ACSC5Y128	AC Smart Cloud access fee for 5 years
AC Smart Cloud access fee with data connectivity	SR-ACSC1Y128CNT		AC Smart Cloud access fee for 1 year with data connectivity	
Up to 512 indoor units	Cloud base kit	KIT-ACSCBASE512	4x CZ-CFUSCC1	Cloud adapter for ECOi, PACi and ECO G ¹⁾
			SR-ACSCSTART512	AC Smart Cloud start up to 512 indoor units
	AC Smart Cloud access fee		SR-ACSC1Y512	AC Smart Cloud access fee for 1 year
			SR-ACSC3Y512	AC Smart Cloud access fee for 3 years
			SR-ACSC5Y512	AC Smart Cloud access fee for 5 years
AC Smart Cloud access fee with data connectivity	SR-ACSC1Y512CNT		AC Smart Cloud access fee for 1 year with data connectivity	

1) The adapter has to be sold always together with start up. * One cloud adapter is required per 128 indoor units. ** Model references up to 192/256/320 indoor units are also available.

2 Panasonic AC Service Cloud

	Product	Reference	Description
Service function	Panasonic AC Service Cloud	SR-ACSC1Y32M	AC Service Cloud access for 1 year up to 32 indoor units
	System Health Check ²⁾	SR-ACSC1Y32SHC	System Health Check access for 1 year up to 32 indoor units

2) AC Service Cloud is required to use this function.

3 Optional services


Product	Reference	Items included in a kit	Description
Floor map ³⁾	SR-ACSC1FLRUP		Upload 1 floor map or maximum 32 units
Floor map ³⁾	SR-ACSC1FLRCP		Create 1 floor map or maximum 32 units
Indoor assign ³⁾	SR-ACSC32ASSIGN		Assign indoors up to 32 units
4G connectivity kit ⁴⁾	KIT-ACSC4GCNT	PAW-ACSCRTR4G	AC Smart Cloud 4G connection kit including 4G router and SIM card
		PAW-ACSCSIM	
4G Router	PAW-ACSCRTR4G		4G Router for Panasonic AC Smart Cloud
SIM card	PAW-ACSCSIM		SIM card without data amount

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

Selection steps

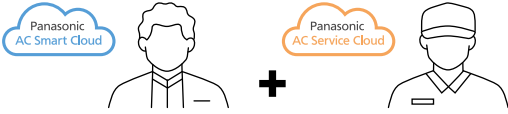
What service do you need? There are 2 options as follows.

AC Smart Cloud only.



Please follow step: **1**



AC Smart Cloud + AC Service Cloud.



Please follow step: **1 2**

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

1 Setup for AC Smart Cloud.

1 | Determine your number of indoor units.


2 | Select the appropriate cloud base kit.

3 | Choose your subscription length.
The subscription with data connectivity is also available.

1, 3 or 5 years

* One cloud adapter (CZ-CFUSCC1) is required per site.

2 Setup AC Service Cloud



The service cloud subscription (SR-ACSC1Y32M) is for up to 32 indoor units as standard. For larger systems exceeding this indoor unit quantity, multiple packages are required. For example, please order 2 units of SR-ACSC1Y32M if the number of indoor units is from 33 to 64. If system health check function is required in AC Service Cloud, choose SR-ACSC1Y32SHC.

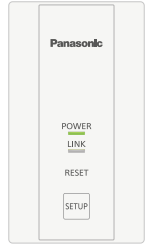
3 Choose optional services to suit your needs.

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



Commercial Wi-Fi Adaptor

Panasonic CZ-CAPWFC1 interface adaptor, allows connection of one or a group of indoor units to Panasonic Comfort Cloud App, which provides control, monitoring, scheduling, and error alerts. Control PACi, ECOi, and ECO G indoor units with your smartphone whenever and wherever you are, by using Panasonic Comfort Cloud App and Commercial Wi-Fi Adaptor.



1 From 1 to 200 units
 User can control up to 10 different sites, with up to 20 units / groups per site. Additionally, one adaptor can be connected to 1 indoor or to a group of up to 8 indoors.

2 Voice control compatible
 Registering the unit to Panasonic Comfort Cloud App makes it compatible with the most popular voice assistants.

3 Multi user
 The Panasonic Comfort Cloud App allows multi-user access control, whilst allowing user restriction to specific units.

4 Easy scheduling
 Complex weekly scheduling made simple. Not only for one unit, but across multiple sites, and from a smartphone.

5 Energy monitor
 See the estimated power consumption and compare with other periods, to see how energy consumption can be further reduced. Check list of units that provides consumption*.

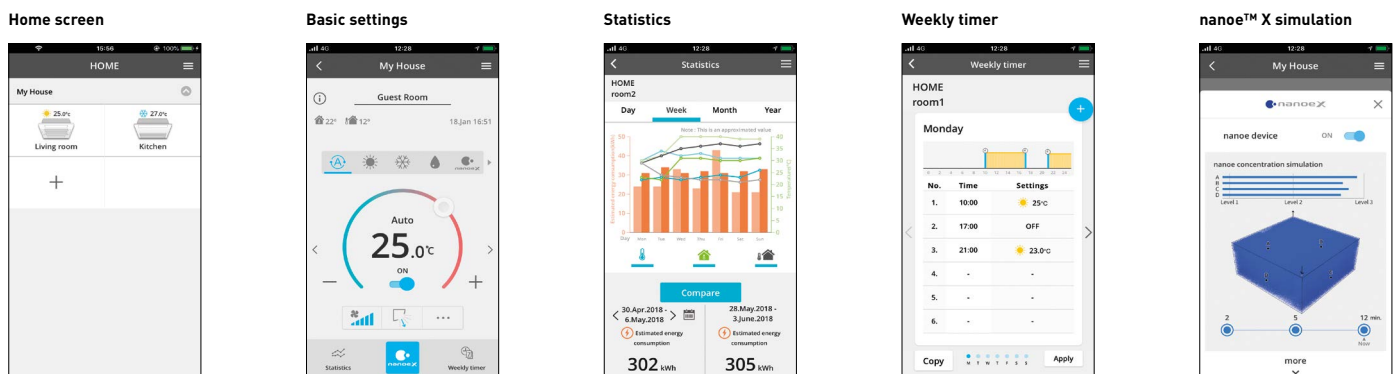
* Function available depending on the model.

6 Error codes
 Error code notification through the App, provides early notification and allows for faster repair.



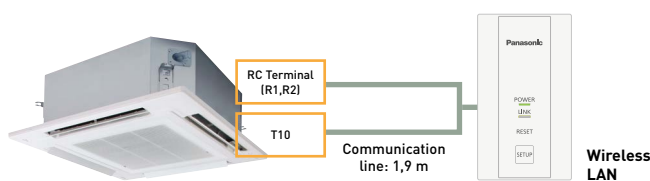
Advanced smartphone control

This scalable solution is ideal for one system, one site or multiple locations. Coupling the adaptor with the already feature rich systems, makes it an ideal solution for residential and commercial applications.



Connection Diagram

Commercial Wi-Fi Adaptor wiring length is 1,9 m and connects to indoor unit via T10 connector and R1/R2 terminal connectors.



Input Voltage	DC 12 V (supplied from T10 connector)
Power Consumption	Maximum 2,4 W
Size (HxWxD)	120 x 70 x 25 mm
Weight	190 g (including communications lines)
Interface	1 x Wireless LAN
Wireless LAN Standard	IEEE 802,11 b/g/n
Frequency Range	2,4 GHz band
Operating range	0 ~ 55 °C, 20 ~ 80 RH%
Connectable indoor unit	1 unit
Length of communication line	1,9 m (included)

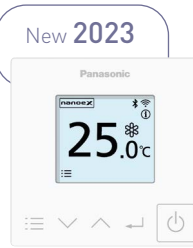
Download free app: Panasonic Comfort Cloud App.

Other hardware requirements: Router and Internet (purchase and subscribe separately).

Panasonic Cloud Server is designed, operated and managed by Panasonic.

CONEX. Devices and apps

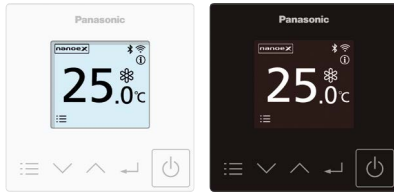
CONEX provides comfort and control for varying user needs. Accessible, flexible, and scalable with different controllers and apps. Perfectly meeting requirements of modern controls for end user, installer, and service. With nanoe™ X function, technology with the benefits of hydroxyl radicals.



Intuitive operation with simple and modern design panel.
 Sophisticated design with white or black flat panel and compact body. From residential to commercial, the wired remote controller series perfectly matches with all kinds of modern building.
 It enables user to recognize each function with a simple glance.

1 Intuitive control with stylish design

- Simple operation at a glance
- Clean face with full flat and LCD display
- Compact body, only 86x86 mm



2 Control comfort with your smartphone

- Flexible control options with IoT integration
- Panasonic H&C Control App for daily remote control operation
- Panasonic Comfort Cloud App for remote operation 24/7/365

3 Easy maintenance with service support app

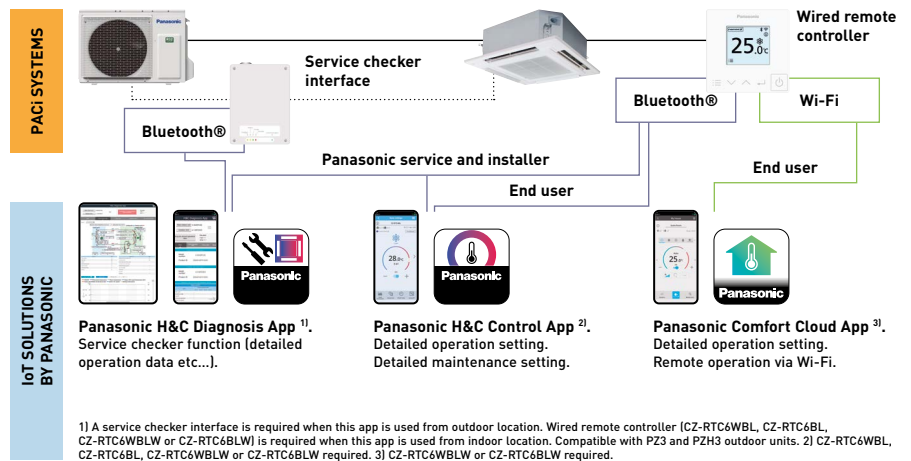
- Quick and easy app set-up for system setting
- Panasonic H&C Diagnosis App enables the user to obtain detailed system operation data*

* The use of apps depends on the remote controller model.

CONEX with IoT integration



The wired remote controller series is fully integrated with IoT solutions developed by Panasonic. Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.



Service checker interface.

The service checker interface provides easy access to service parameters and service checker data via Bluetooth®.

- A Service checker interface for PACi NX Series*
- Bluetooth® connection
- Panasonic H&C Diagnosis App

* Available as a spare part, compatible with PACi NX Series.

Input voltage	220-240 V ~ 50-60 Hz (supplied from outdoor unit)
Power consumption	Maximum 2,4 W (including outdoor units)
Size (HxWxD)	175 x 125 x 50 mm
Weight	—
Interface	Bluetooth® 4.2 or later
Frequency range	2,4 GHz band*
Operating range - Temperature / Humidity	0 ~ 40 °C / 20 ~ 80% (no condensation)

* Frequency band in which the radio equipment operates; 2402 - 2480 MHz.

* Maximum radio-frequency power transmitted in the frequency bands in which the radio equipment operates; +0 dBm.



CONEX. Devices and apps

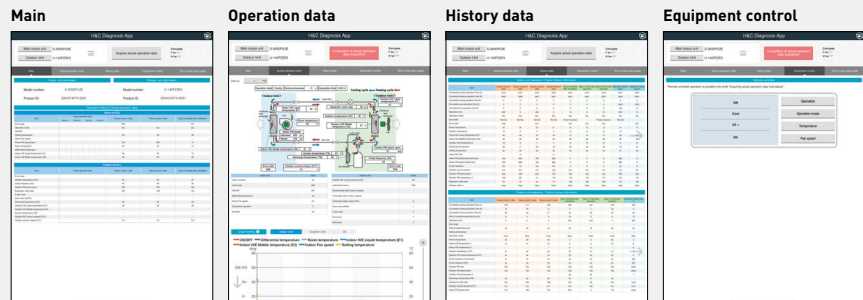
Flexible control options with IoT integration. 3 different apps for individual usage.

Panasonic H&C Diagnosis App for service and installer

Tool for diagnosis and troubleshooting.

Available functions:

- AC control
 - System view
 - Refrigerant circuit view
- Real-time data
 - Indoor unit
 - Outdoor unit
- Refrigerant cycle diagram and graph
- Data recording
- History data
- Error code tables



Panasonic H&C Control App for end user, service and installer

Detailed operation setting. Detailed maintenance setting.

Available functions:

- ON / OFF, mode, temperature, air flow volume, air flow direction
- Weekly timer
- All energy saving functions
- Alarm display and history
- Filter sign
- Test run
- Sensor value monitor
- Simple setting mode
- Detailed setting mode
- Key lock
- Ventilation fan control
- Display contrast adjustment
- Rotation, redundancy
- Quiet mode
- nanoe™ X
- Power consumption
- Unit naming

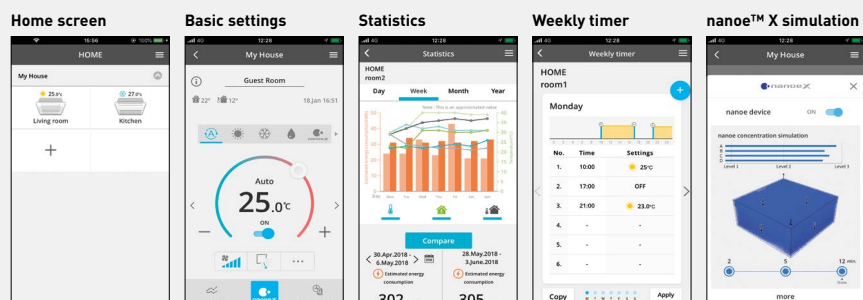


Panasonic Comfort Cloud App for end user

Remote operation via Wi-Fi.

Available functions:

- ON / OFF
- Mode
- Temperature
- Air flow volume
- Air flow direction
- Weekly timer
- Temperature setting range limitation
- Energy monitoring
- Alarm display
- nanoe™ X



Connectivity matrix.



White model ¹⁾	CZ-RTC6W	CZ-RTC6WBL	CZ-RTC6WBLW
Black model	CZ-RTC6	CZ-RTC6BL	CZ-RTC6BLW
Wired connection compatible with	PACi, PACi NX, ECOi, GHP	PACi, PACi NX, ECOi, GHP	PACi NX only
Wireless functions	No wireless capability	Bluetooth®	Bluetooth® + Wi-Fi
App compatibility			
Panasonic Comfort Cloud App	—	—	✓
Panasonic H&C Control App	—	✓ PACi, PACi NX, ECOi, GHP	✓ PACi NX only
Panasonic H&C Diagnosis App ²⁾	—	✓ PACi NX only ³⁾	✓ PACi NX only ³⁾
Outdoor unit settings (remote controller connected to indoor unit)	✓ PACi NX only ³⁾	✓ PACi NX only ³⁾	✓ PACi NX only ³⁾

1) Available in Autumn 2023. 2) Compatible with U-71/100/125/140PZH3E5/8 and U-100/125/140PZ3E5/8. 3) When connected to PACi NX indoor and outdoor unit combination.

Function comparison

This shows the functions provided:		Remote controller functionalities	Panasonic H&C Control App	Panasonic Comfort Cloud App		
a) by the remote controllers						
b) by the apps						
		CZ-RTC5B	CZ-RTC6W / CZ-RTC6	CZ-RTC6WBL(W) / CZ-RTC6BL(W) + app	CZ-CAPWFC1 + app	CZ-RTC6WBLW / CZ-RTC6BLW + app
Basic operation	ON / OFF, mode, temperature, air flow volume, air flow direction	✓	✓	✓	✓	✓
	Time display	✓	—	✓	✓	✓
Timer functions	Easy ON / OFF timer	✓	—	✓	—	—
	Weekly program timer	✓	—	✓	✓	✓
	Outing function	✓	✓	✓	—	—
Energy saving	Temperature auto return	✓	—	✓	—	—
	Temperature setting range limitation	✓	—	✓	✓	✓
	OFF reminder	✓	—	✓	—	—
	Energy saving mode	✓	—	✓	—	—
	Schedule demand control	✓	—	✓	—	—
	Energy monitoring	✓	—	✓	✓	✓
	Econavi	✓	✓	✓	✓	✓
	System failure information (alarm history)	✓	✓	✓	—	—
Maintenance	Alarm display	✓	✓	✓	✓	✓
	Service contact registration	✓	—	✓	—	—
	Filter sign	✓	✓	✓	—	—
	Test run	✓	✓	✓	—	—
	Sensor value monitor	✓	✓	✓	—	—
	Simple setting mode	✓	✓	✓	—	—
	Detailed setting mode	✓	✓	✓	—	—
Others	Key lock	✓	✓	✓	—	—
	Ventilation fan control	✓	—	✓	—	—
	Display contrast adjustment	✓	✓	✓	—	—
	Rotation	✓	—	✓	—	—
	Quiet operation mode	✓	—	✓	—	—
	nanoe™ X	✓	✓	✓	✓	✓

Remote controller with Econavi

Easy to use, attractive, clear design, with demand control functions and energy consumption display! This useful feature makes this remote controller unique!



1 Design

The CZ-RTC5B wired remote controller is ideal for integration into the most demanding interior architectures.

The touch panel features a very sleek and easy to use display, which with its compact display is only 120 x 120 x 16 mm.

2 Key functions

- Easy setup of the timer and settings of the indoor unit
- Energy consumption display (for all R32 PACi line-up)
- Limitation of the energy consumption (Demand control) by timer.

3 Display of information

The information is mainly based on pictograms to ensure easy understanding. The minimal amount of text is available in 6 languages (English / German / French / Spanish / Italian / Polish).

The screen is back lit to enable reading even during the night.

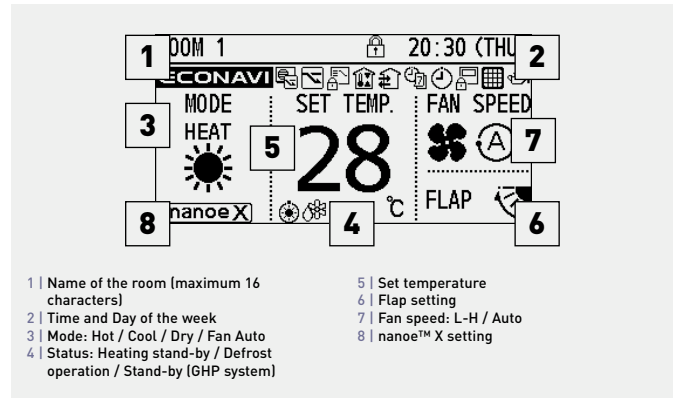
4 Easy access to the menus

With the pictograms, the navigation, the selection and the settings are simple and easy to follow.

Basic function (operation display and indication).

All functions are easily available on the remote controller.

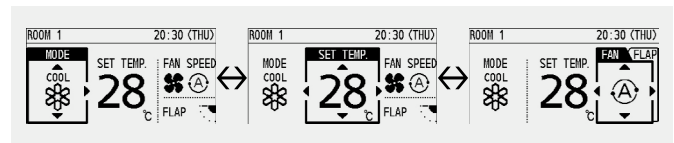
- ON / OFF timer
- Weekly timer
- Quiet operation
- Remote controller sensor
- Operation prohibit
- Filter sign
- Energy saving
- Centralized control indication
- Mode change prohibit
- Automatic temperature return
- Temperature range limitation
- OFF remind
- Schedule demand control
- Ventilation
- Out Function



- 1 | Name of the room (maximum 16 characters)
- 2 | Time and Day of the week
- 3 | Mode: Hot / Cool / Dry / Fan Auto
- 4 | Status: Heating stand-by / Defrost operation / Stand-by (GHP system)
- 5 | Set temperature
- 6 | Flap setting
- 7 | Fan speed: L-H / Auto
- 8 | nanoe™ X setting

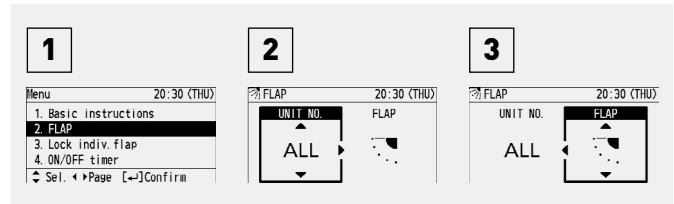
Easy operation and quick access to all menus

- 1 | Set temperature will be selected, when any arrow button is touched
- 2 | Select the item (Mode or Fan speed) by left/right ◀▶ key
- 3 | Change the setting by up/down ▲▼ key



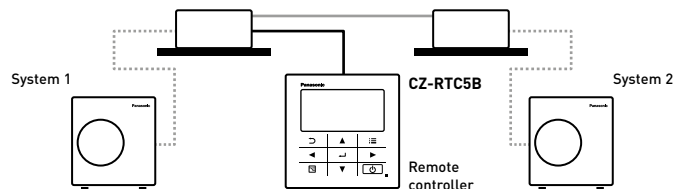
Example of easy access to the functions: air direction setting

- 1 | Select "Air direction" and press "Enter" key
- 2 | Select the unit number by up/down ▲▼ key
- 3 | Select the flap position by up/down ▲▼ key
- 4 | Press "Return" key to go back the Menu display



Backup control by using CZ-RTC5B

Group wiring of 2 systems of PACi can do auto individual control: Rotation operation, backup operation and support operation.



Functions available on the CZ-RTC5B

Control item	Controllability	Indoor units	
		PACi	VRF
Basic operation	Operation, Mode, Temperature setting, Air flow volume, Air flow direction	✓	✓
Timer function	Time display	✓	✓
	Easy ON / OFF timer	✓	✓
	Weekly program timer	✓	✓
	Outing function	✓	✓
Energy saving	Temperature auto return	✓	✓
	Temperature setting range limitation	✓	✓
	OFF remind	✓	✓
	Energy saving mode	✓	✓
	Schedule demand control	✓ ¹⁾	✓
	Energy monitoring - R32	✓	—

Control item	Controllability	Indoor units	
		PACi	VRF
Maintenance	System failure information	✓	✓
	Service contact registration	✓	✓
	Filter sign (rest time display) and reset	✓	✓
	Auto-address, Test run	✓	✓
	Sensor value monitor	✓	✓
Others	Simple / Detail setting mode	✓	✓
	Key lock	✓	✓
	Ventilation fan control	✓	✓
	Display contrast adjustment	✓	✓
	Remote controller sensor	✓	✓
	Quiet operation mode	✓ ¹⁾	—
	Prohibit setting control from central controller	✓	✓

1) Not available with PACi Standard R410A line up.
+ All specifications subject to change without notice.

Datanavi

Datanavi, a simple way to connect.
Simple and easy support tool with your smartphone.



Overview of datanavi system.

Just holding up your smartphone to the LED display on a remote controller (CZ-RTC5B) to receive useful AC system information super fast by Panasonic Light ID Technology. Datanavi also connects to Panasonic Cloud Server for the quick view of manuals, saving data received by Light ID.



- Fast and intuitive
- Easy access to manual database
- Accurate service data on your smartphone

Key functions.

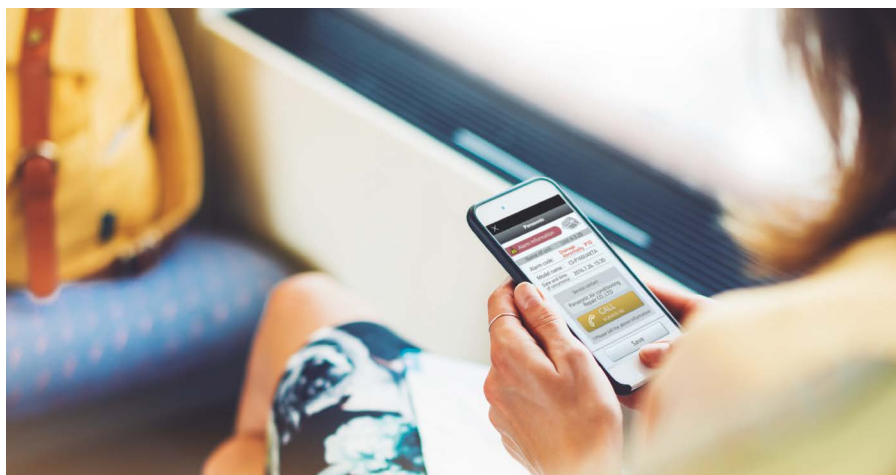
- Scan and Save AC system info
- Easy access to manual database
- Commissioning, F-Gas check data history

What is the Light ID technology developed by Panasonic?

Visible light transmission technology, which enables to transmit information by high-speed and invisible flashing of an LED light source.

User / administrator (person in charge of AC) functions

- Fast and intuitive.** Regular operation data, energy consumption data display
- Easy access to data base.** Getting manuals related on demand
- No idea what to do when an error happens?** You can share error information and contact service easily

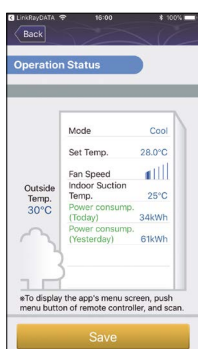


Installer / service company functions

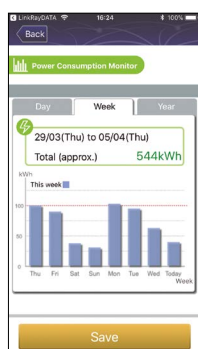
- Getting technical data depends on your need**
Service manual. Q and A list. Test run information
- Accurate error information**



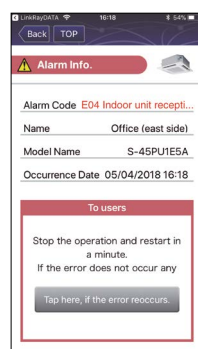
Regular operation



Energy management



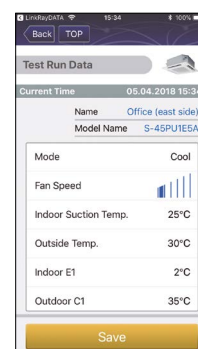
Malfunction notice



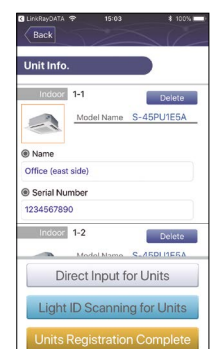
Operating manual



Test run info



Service data



* User interface image may be updated without notification.

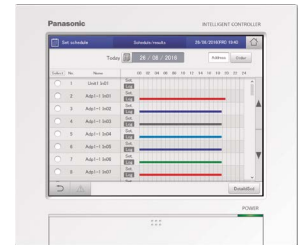
- Simple F-gas regulation check list
- Repair speed check list

Download free apps, try datanavi!



Intelligent controller

This controller is the smart solution for your advanced requirement in buildings.



Intuitive operation.

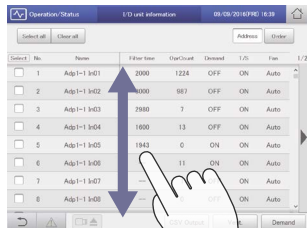
The screens used for operations all follow a common pattern, with the screens being easy to read and easy to use.

- Enlarged screen (10,4 inch) with colour LCD
- Smartphone-like gestures (flick, swipe, touch)

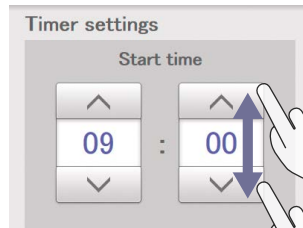
Large screen display. Enlarged by 60%.



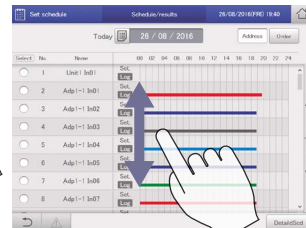
Easy swipe or flick operation.



Swipe.
This is an operation where the finger is slid in a direction (up or down) on the touch panel. This is used to scroll slowly.



Select.
This is an up and down movement of the finger touching the screen, used to pick settings in elements such as spin boxes.

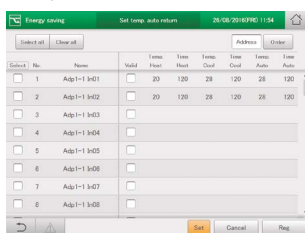


Pull out.
This is an operation where the finger on the touch panel is flicked in a direction (up or down). This is used to scroll quickly.

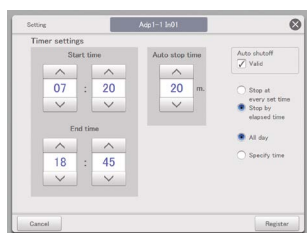
Enhanced functions for energy saving as standards

- Set temperature auto return settings, Auto shut OFF, set temperature range limit settings
- Demand control function

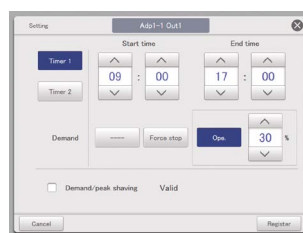
Screen of set temperature auto return setting.



Auto shut OFF.



Screen of outdoor demand control.

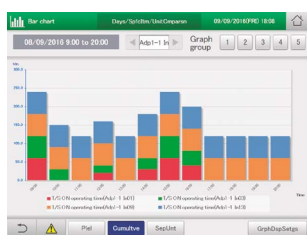
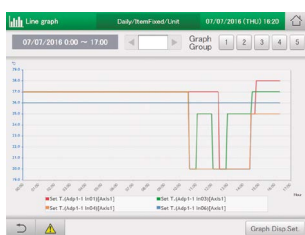


- Outdoor demand input and timer settings possible
- Indoor can be set at ± 1 °C/ ± 2 °C or thermostat OFF
- Indoor units controlled in sequence at 10-minute intervals

Energy visualization

- Energy saving plans are supported with graph display function
- Displays electricity and gas usage distribution

Screen of graph display.



Useful parameters are shown for your better energy saving. Ex.) Bar graph:

Indoor unit: Total operating time, thermostat ON operation time (Min.)
Amount used (electricity, gas)
Electricity or gas charges

Outdoor unit: Outdoor unit operation cycles (# cycles)
Engine time in operation (Hrs.)
Cumulative Inverter power output
Cumulative PV power output

Pulse value selection per different data intervals 1 hour/1 day/ 1 month compared with last year.

Main function

Gesture function (flick, swipe, touch)	✓
Graph display (trends, comparisons)	✓
Web functions (maximum 64 users)	✓
Recipient setting for warning email	✓ (Maximum 8)
Automatic return to setting temperature	✓
Limitation of setting temperature range	✓
Left-on prevention	✓
Quiet operation of outdoor unit	✓
Occupant sensor linkage	✓
Demand function	✓
Charge calculation	✓
Log display	✓ Warning 10000 items. Status change 50000 items
Linked control (event definition 50 events, input: 32, output: 32)	✓
Under maintenance (under inspection registration)	✓

Econavi Sensor

The Econavi sensor detects presence in the room, and quietly adapts the PACi or VRF air conditioning system in order to improve comfort and energy savings.



- Detects human activity and adjusts temperature by 2 degrees (up or down) to optimise comfort and efficiency
- If there is no activity detected for a set time period, the Econavi will stop the unit or move to a temperature previously set
- The Econavi device is installed independently of the indoor unit, and is located in the area best suited for detection

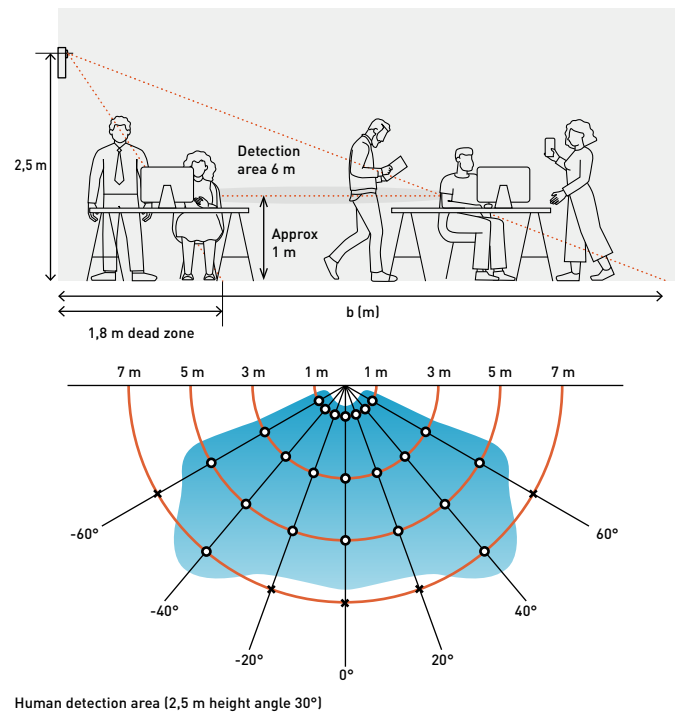
Applications

Saving energy for offices: If the air conditioning is left on after the last employee leaves the office, Econavi will automatically react, reducing or stopping the system. **Increased comfort in hotel rooms:** When presence is detected in the room, the temperature is automatically adjusted to achieve best comfort.

Key points

- Compatible with cassette, wall-mounted, hide-away and Ceiling units
- Improves efficiency
- Better comfort
- Can be installed in the best location within the room for detection purposes

Sensor location image.



Providing outstanding energy saving performance, Panasonic's Inverter system can be connected to Econavi to detect when energy is being wasted. Econavi senses the presence or absence of people and the level of activity in each area of an office. When unnecessary heating or cooling is detected, indoor units are individually controlled to match office conditions for energy saving operation.

Detection of the level of activity enables precise power saving.

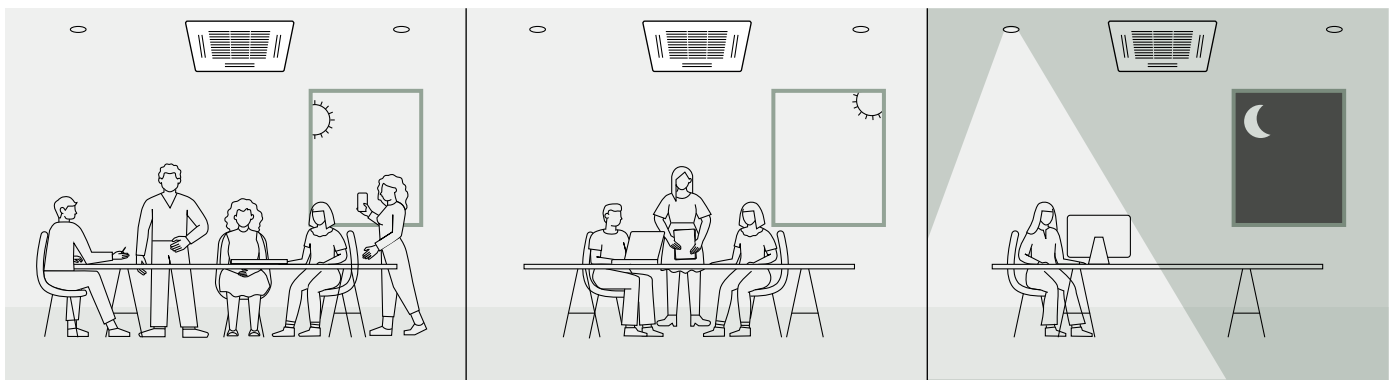
Presence or absence of people at their desks and the level of activity in the office are detected in real time. Set temperature is automatically adjusted to optimise the lower power consumption.

Remote Econavi sensor allows optimum energy operation.

Pillars, walls, cabinets and other fittings obstruct the sensor, reducing the area of detection and lowering the energy saving effect. Taking into consideration blind spots, Panasonic enables the optimum layout for sensors in any office.



Econavi sensor: CZ-CENSC1



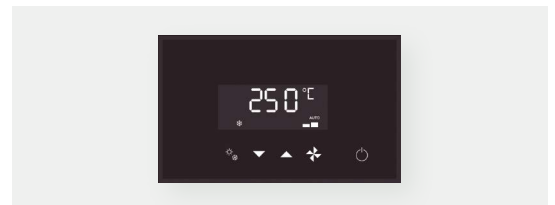
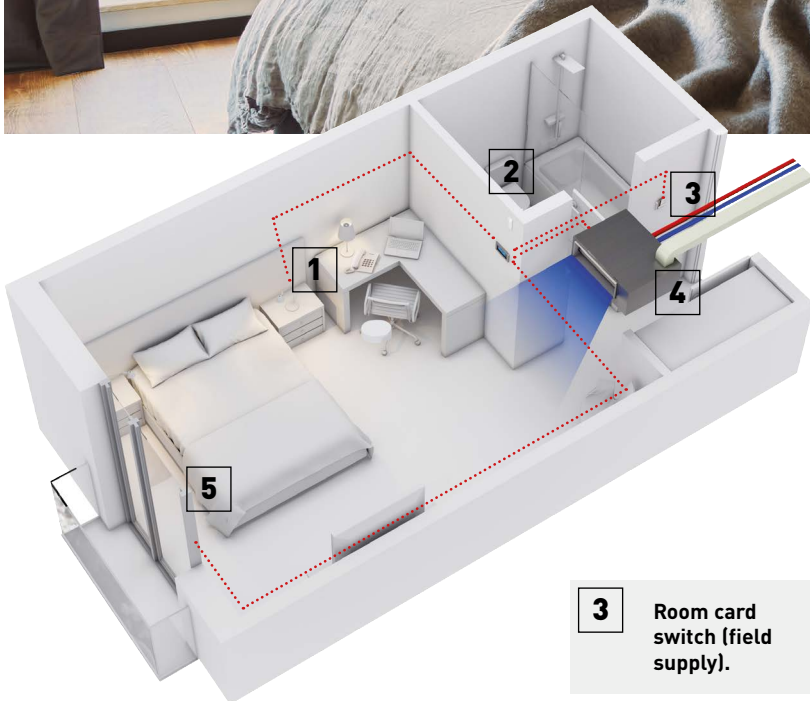
In the morning.
Thorough cooling when there is a high level of activity

In the afternoon.
Reduced cooling when there are fewer people

At night.
Automatic Thermo OFF depending on conditions at the end of the day

Controller for hotel application

Innovative line up of room controllers specially designed for hotel applications. With a modern cosmetic that match room interiors and simple operation for hotel guests.



3 Room card switch (field supply).

Controller to integrate all room hotel needs in one device.
Card switch. Heating and cooling control. Light control. Window control. Possible to connect to Modbus.



Lighting control.



Wall sensor
PAW-WMS-AC (-DC).



Indoor unit. Variable static
pressure hide-away.



Window contact
PAW-DWC.



Ceiling motion sensor
PAW-CMS-AC (-DC).

- Easy to install
- Cost effective installation as all electrical cables are centralized on the remote: The lighting, card contact, motion detector, window contact and the air conditioning are controlled
- Architect inspired attractive design with 2 colors: black or white
- Stand alone and Modbus
- Bespoke finish by special order

Energy saving functions included on the device.

Turns OFF air conditioning and lighting when room is unoccupied. Disables air conditioning when window is open. Configurable maximum/minimum setpoint temperature.

Easy remote controller.

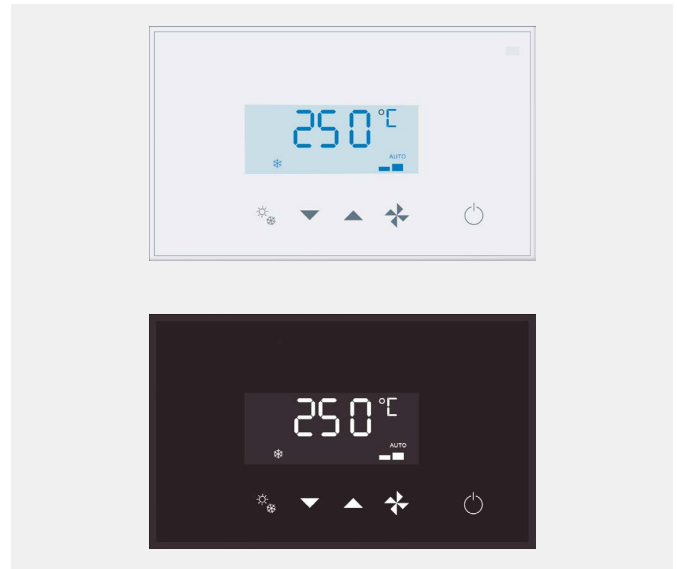
The hotel guest will have access to limited functions to control the air conditioning: ON / OFF, Temperature and Fan speed.

Easy set up.

Stand alone model with easy configuration menu to access all parameters. A pre-define scenario can be uploaded on the remote controller connected to a computer to make installation on site Plug & Play (only on the Modbus models).

NFC fast set up.

With the touch display control and touch room controller setting are quicker than ever. Just touching smartphone with NFC capability the settings will be saved. This function is also possible even when the control is not wired. Giving flexibility to save the setting even before installation.

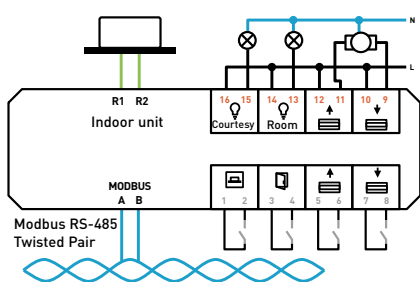


Type	Model	Colors	Digital inputs	Digital output	BMS	Inst. set up	T. sensor
Touch display controller	PAW-RE2D4-WH	White	2			NFC	Built-in
	PAW-RE2D4-BK	Black	2			NFC	Built-in
Touch room controller	PAW-RE2C4-MOD-WH	White	4	4	Modbus	NFC	Built-in
	PAW-RE2C4-MOD-BK	Black	4	4	Modbus	NFC	Built-in

Room controller: 4 digital inputs and 4 digital output

Room controller offers flexibility and easy installation thanks to 4 preconfigured options. This is available in Modbus type. Modbus references: PAW-RE2C4-MOD-WH, PAW-RE2C4-MOD-BK.

Wiring configuration example for option 2 in Modbus type.

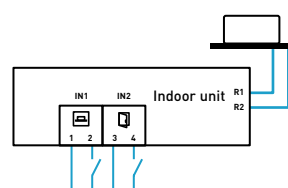


Configurations	4 options available I/O configurations: Inputs				Available I/O Configurations: Outputs			
	Digital 1-2	Digital 3-4	Digital 5-6	Analog 7-8	Relay 15-16	Relay 13-14	Relay 11-12	Relay 9-10
Option 1	Card	Window	Lighting	Temperature	Courtesy	Lighting	Not used	Valve actuator
Option 2	Card	Window	Blinds up	Blinds down	Courtesy	Lighting	Blinds up	Blinds down
Option 3	Motion sensor	Window	Door contact	Temperature	Courtesy	Lighting	Not used	Valve actuator
Option 4	Lighting	Window	Blinds up	Blinds down	Not used	Lighting	Blinds up	Blinds down

Display: 2 digital inputs

Display control allows to handle 2 inputs to perform most common operation in room hotels. References: PAW-RE2D4-WH, PAW-RE2D4-BK.

Wiring example for display controller.



Configurations	3 options available: Inputs	
	IN1 [1-2]	IN2 [3-4]
Option 1	Card	Window
Option 2	Motion sensor	Window
Option 3	Motion sensor	Door contact

Hotel room controller	
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, white
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, black
PAW-RE2D4-WH	Touch display control with 2 digital inputs, white
PAW-RE2D4-BK	Touch display control with 2 digital inputs, black

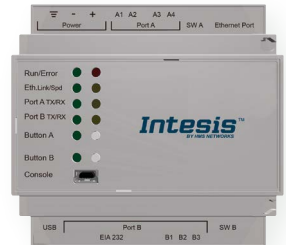
Accessories sensors	
PAW-WMS-DC	Wall silent motion sensor 24 V
PAW-WMS-AC	Wall silent motion sensor 240 V AC
PAW-CMS-DC	Ceiling silent motion sensor 24 V
PAW-CMS-AC	Ceiling silent motion sensor 240 V AC
PAW-24DC	Power supply 24 V
PAW-DWC	Door or window contact

BMS interface with S-Link

BMS interface with Panasonic communication bus helps you to get significant savings.

In addition to reducing the time of configuration and installation, the potential mistakes can be avoided.

Easy to use and reliable interfaces for a straightforward integration.





Modbus®

Home automation



1 Direct connection to S-Communication bus

- No need for additional gateway (CZ-CFUNC2)
- Significant 50% cost saving for BMS interface*
- Avoid mistakes and reduce configuration time.

* In the case of PAW-AC2-BAC-16P by Panasonic calculation.

2 Easy configuration

- Single configuration tool for all models (Intesis MAPS)
- Firmware updates with improvements and features
- Scan: Automatic identification of the units present in the VRF system
- Front cover LED indicators provide easy to check communication status.

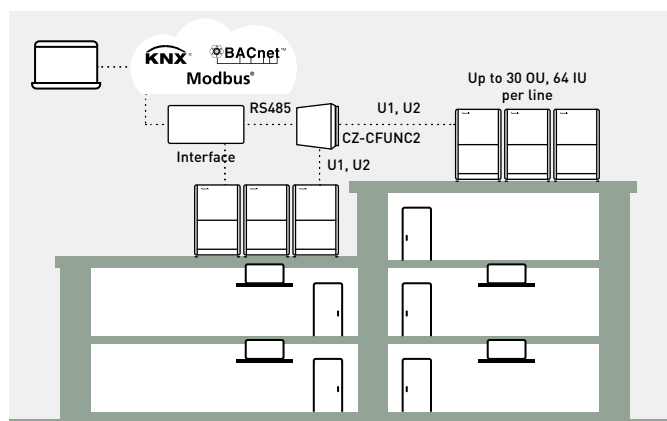
3 Upgraded specifications

- Outdoor unit's signal available for the integration
- BACnet: Version 14 and BTL Certified
- Datalogging through external USB port (for service)

Direct connection to S-Communication bus

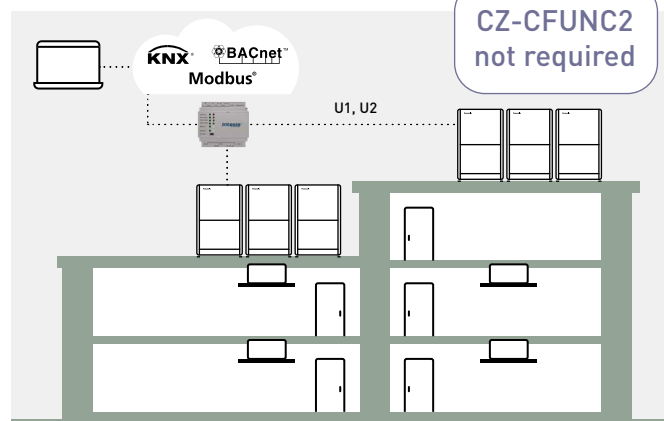
The interface can provide faster, cheaper, easier solution in your projects!

Old interface.



Maximum 128 indoor units can be connected. Panasonic Gateway, CZ-CFUNC2 is required.

Interface with S-Communication bus.



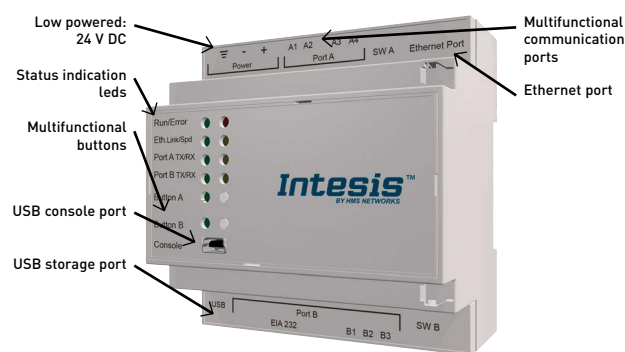
U1U2 link is connected directly to IntesisBox. Support from 16 to 128 per each box.

Home automation compatibility for Smart Home systems for PAW-AC2-MBS

Drivers available for:

- AMX
- Control4
- eedomus
- Elan
- Fibaro
- iRidium
- Eedom
- RTI
- Savant

Creston, Kuju and Vera available soon.



Model for BACnet	Maximum number of indoor units connected
PAW-AC2-BAC-16P	16 indoor units
PAW-AC2-BAC-64P	64 indoor units
PAW-AC2-BAC-128P	128 indoor units
Model for Modbus	Maximum number of indoor units connected
PAW-AC2-MBS-16P	16 indoor units
PAW-AC2-MBS-64P	64 indoor units
PAW-AC2-MBS-128P	128 indoor units
Model for KNX	Maximum number of indoor units connected
PAW-AC2-KNX-16P	16 indoor units
PAW-AC2-KNX-64P	64 indoor units

Version	Connectable indoor units	Connectable outdoor units	Nr. of P- Communication bus port
16	1-16	1-16	1
64	1-64	1-30	1
128	128 (1-64 / P- Communication bus port)	60 (1-30 / P- Communication bus port)	2





Control and connectivity

A wide variety of control options to meet the requirements of different applications.

Centralized control systems

<p>Centralised control.</p>  <p>P-AIMS core software. Up to 1024 indoor units. CZ-CSWKC2</p>	<p>Intelligent controller.</p>  <p>Intelligent controller. Up to 256 indoor units touch screen with web server. CZ-256ESMC3</p>	<p>Panasonic AC Smart Cloud.</p>  <p>Cloud internet control. Up to 128 groups. Controls 128 units. CZ-CFUSCC1</p>
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Connection with general equipment.

 <p>ON / OFF control for external devices such as ERV. Controls 1 unit. CZ-CAPC3</p>	 <p>Demand control for Mini ECOi and PACi outdoor units. Up to 4 outdoor units. CZ-CAPDC3</p>	 <p>Mini Seri-Para I/O Unit 0 - 10 V. Controls 1 indoor unit or a group of 8 indoor units. CZ-CAPBC2</p>	 <p>Communication Adaptor. Up to 128 groups. Controls 128 units. CZ-CFUNC2</p>
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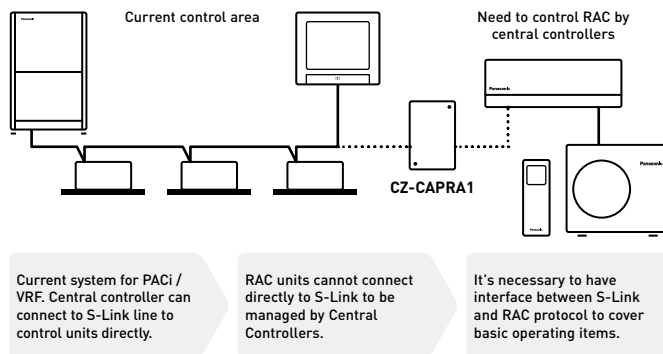
Domestic integration to S-Link - CZ-CAPRA1

Can connect RAC range to S-Link. Full control is now possible.

Integrates any unit in big system control.

- YKEA server room integration ¹⁾
- Small offices with domestic indoors
- Tender for refurbishment (old system Domestic and VRF in one installation)

1) When duty rotation using the remote controller is set up, CZ-CAPRA1 cannot be connected.



<p>Centralized Control Systems: 64 indoor units</p> 	<p>Intelligent controller / Web Server: 256 indoor units</p> 	<p>Panasonic AC Smart Cloud</p> 
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Basic operation items: ON / OFF, Mode select, Temperature setting, Fan speed, Flap setting, Remote control prohibit.

External input: ON / OFF control signal, Abnormal stop signal.

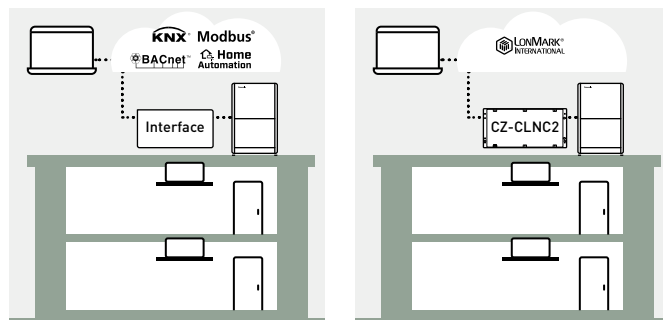
External output for Relay ¹⁾: Operation status (ON / OFF), Alarm status output.









1) Because current CN-CNT connector can not provide the power for external output relay, additional 12 V DC power supply for external relay is necessary.

Easy connection to KNX, Modbus, Lonworks, BACnet and Proprietary Home Automation Systems

Easy and reliable solution to integrate your Panasonic heating and cooling systems into any B.M.S or E.M.S. Fully bi-directional communications with all necessary parameters.

For more information, contact Panasonic.



			Econavi control	Built-in thermostat	Indoor units which can be controlled	Use limitations	Function ON / OFF	Mode setting	Fan speed setting	Temperature setting	Air flow direction	Permit/Prohibit switching	Weekly program	BMS protocol
Individual controllers														
Touch room controller for hotel with Dry Contact and Modbus		PAW-RE2C4-MOD-WH PAW-RE2C4-MOD-BK WH: White, BK: Black. Bespoke finish available on request.	—	✓	1 indoor unit	—	✓	✓	✓	✓	—	✓	—	Modbus + 4 digital I/O signals
Touch display control for hotel with Dry Contacts		PAW-RE2D4-WH PAW-RE2D4-BK WH: White, BK: Black. Bespoke finish available on request.	—	✓	1 indoor unit	—	✓	✓	✓	✓	—	✓	—	Stand Alone + 2 digital inputs
Design wired remote controller		CZ-RTC5B	✓	✓	1 group, 8 units	· Up to 2 controllers can be connected per group	✓	✓	✓	✓	✓	—	✓	—
Wired remote controller		CZ-RTC6W CZ-RTC6 Non-wireless	✓	✓	1 group, 8 units	· Up to 2 controllers can be connected per group	✓	✓	✓	✓	✓	—	—	—
		CZ-RTC6WBL CZ-RTC6BL With Bluetooth®	✓	✓	1 group, 8 units	· Up to 1 controller can be connected per group	✓	✓	✓	✓	✓	—	✓	—
		CZ-RTC6WBLW CZ-RTC6BLW With Wi-Fi and Bluetooth®	✓	✓	1 group, 8 units	· Up to 1 controller can be connected per group	✓	✓	✓	✓	✓	—	✓	—
Infrared remote controller		CZ-RWS3 + CZ-RWRU3W CZ-RWS3 + CZ-RWRY3 CZ-RWS3 CZ-RWS3 + CZ-RWRL3 CZ-RWS3 + CZ-RWRD3 CZ-RWS3 + CZ-RWRT3 CZ-RWS3 + CZ-RWRC3	✓	—	1 group, 8 units	· Up to 2 controllers can be connected per group	✓	✓	✓	✓	✓ ¹⁾	—	—	—
Centralized controllers														
System controller with weekly timer		CZ-64ESMC3	✓	—	64 groups, maximum 64 units	· Up to 10 controllers, can be connected to one system · Main unit/sub unit (1 main unit + 1 sub unit) connection is possible · Use without remote controller is possible	✓	✓	✓	✓	✓ ¹⁾	✓	✓	—
Central ON / OFF controller		CZ-ANC3	—	—	16 groups, maximum 64 units	· Up to 8 controllers (4 main units + 4 sub units) can be connected to one system · Use without remote controller is impossible	✓	—	—	—	—	✓	—	—
Intelligent controller (touch screen/web server)		CZ-256ESMC3	✓	—	Main unit: 128. Up to 256 units can be expanded	· Communication adaptor CZ-CFUNC2 is necessary for connection with more than 128 units	✓	✓	✓	✓	✓ ¹⁾	✓	✓	—

1. Setting is not possible when a remote controller unit is present (use the remote controller for setting). * All specifications subject to change without notice.

Individual controllers wired

CONEX wired remote controller

CZ-RTC6W // CZ-RTC6 // CZ-RTC6WBL // CZ-RTC6BL // CZ-RTC6WBLW // CZ-RTC6BLW ¹⁾

- 3 line-up: - CZ-RTC6W // CZ-RTC6: Non-wireless
 - CZ-RTC6WBL // CZ-RTC6BL: Bluetooth®
 - CZ-RTC6WBLW // CZ-RTC6BLW: Wi-Fi and Bluetooth®
- Colours: 6W: White. 6: Black
- Intuitive control with stylish design profile
- Clean face with full flat and LCD display
- Dimension (HxWxD): 86 x 86 x 25 mm

Panasonic H&C Control App ²⁾.

- Daily remote control operation via Bluetooth®
- Quick and easy App set-up for system setting

Panasonic H&C Diagnosis App ³⁾.

- Easy access to service parameters and service checker data via Bluetooth®

Panasonic Comfort Cloud App

- Especially designed for end users
- Remote operation via Wi-Fi

Basic operation.

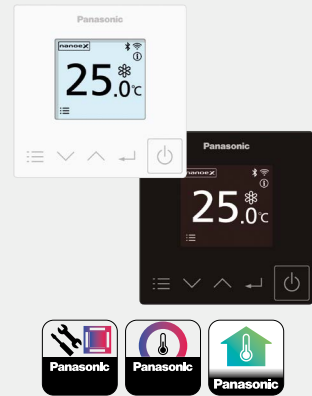
- Mode setting: Heat / Cool / Dry / Fan / Auto
- Temperature setting
- Fan speed: 5 levels
- Air flow direction
- nanoe™ X and Econavi setting
- Weekly program ⁴⁾

1) Compatible with PACi NX Series.

2) CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW or CZ-RTC6BLW required.

3) A service checker interface is required. Compatible with PACi NX Series.

4) Can be set from Panasonic H&C Control App.



Room controller for hotel rooms

PAW-RE2C4-MOD-WH // PAW-RE2C4-MOD-BK

- Easy to install
- Cost effective installation as all electrical cables are centralised on this remote
- Architect inspired attractive design
- Direct connection to the Indoor unit with all primary functions of indoor unit available
- 2 options available: Stand alone and Modbus communication
- Colours: WH: White. BK: Black
- Room controller: 4 digital inputs and 4 digital outputs

From this remote controller.

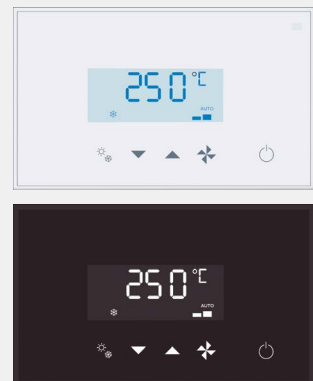
The lighting, card contact, motion detector, window contact and the air conditioning are controlled.

Energy saving functions included on the device.

- Turns OFF air conditioning and lighting when room is unoccupied
- Disables air conditioning when window is open
- Maximum/minimum setpoint temperature configurable

Fast and simple set up.

Set up is simple and easy for room controllers. It is extremely easy and quick with touch models, which can be set up by using smartphone with NFC technology, even when control is not yet installed / powered.



Display control for hotel rooms

PAW-RE2D4-WH // PAW-RE2D4-BK

- Easy to install
- Cost effective installation as all electrical cables are centralised on this remote
- Architect inspired attractive design
- Direct connection to the Indoor unit with all primary functions of indoor unit available
- Stand alone communication
- Colours: WH: White. BK: Black
- Basic hotel function: 2 digital inputs

From this remote controller.

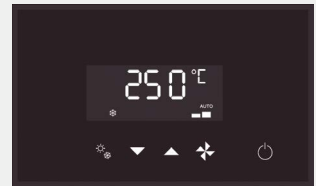
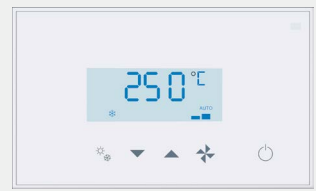
The card contact, motion detector, window contact and the air conditioning are controlled.

Energy saving functions included on the device.

- Disables air conditioning when window is open
- Maximum/minimum setpoint temperature configurable

Fast and simple set up.

Set up with smartphone with NFC technology, even when control is not yet installed/powerd.



Design wired remote controller

CZ-RTC5B

- Power consumption monitor (only for PACi)
- Flat face design and touch sensor switch for stylish design and operating usability
- Functions such as for energy saving and monitoring and for service use are available on the full dot LCD (3,5" display)
- Improved illumination
- White LED backlit
- Blink when alarm occurs

Datanavi.

- Scan and save AC system info
- Easy access to manual database
- Commissioning, F-Gas check data history

* Panasonic App is required on your smartphone.

Basic Operation.

- Operation
- Mode
- Temperature setting
- Air flow volume
- Air flow direction

Timer function.

- Outing function
- Weekly program timer
- Easy ON / OFF timer
- Time display

Energy saving.

- Outing function
- Temperature setting range limitation
- Temperature auto return
- OFF remind
- Schedule demand control
- Energy saving mode
- Energy monitoring

Others.

- Key lock
- Ventilation fan control
- Display contrast adjustment
- Remote controller sensor
- Quiet operation mode
- Prohibit setting control from central controller
- Rotation / backup control



 datanavi

 nanoeX

 ECONAVI

* Power consumption monitoring is available for all PACi systems except R410A PACi Standard.

* Rotation and backup control with CZ-RTC5B is available for all PACi systems.

Individual wireless controllers

Infrared remote controller

CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRY3 // CZ-RWS3 // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3 + CZ-RWRD3 // CZ-RWS3 + CZ-RWRT3 // CZ-RWS3 + CZ-RWRC3

- Easy installation for the 4 Way Cassette type by simply replacing the corner part
- 24 hour timer function
- Remote controller by main remote controller and sub controller is possible (maximum 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit)
- When CZ-RWS3 is used, infrared control becomes possible for all indoor units (1: when a separate receiver is set up in a different room, control from that room also becomes possible. 2: automatic operation by means of the emergency operation button is possible even when the remote controller has been lost or the batteries have been exhausted)
- Operation of separate energy recovery ventilators (when commercial ventilation fans or heat-exchange ventilation fans have been installed, they can be operated with this remote controller (interlocked operation with the indoor unit or independent ventilation ON / OFF)



nanoeX
ECONAVI

Infrared remote controller and receiver for 4 way 90x90 cassette. CZ-RWS3 + CZ-RWRU3W



Infrared remote controller and receiver for 4 Way 60x60 cassette PY3 (with a panel). CZ-RWS3 + CZ-RWRY3



Infrared remote controller for wall-mounted, 4 way 60x60 with panel and floor console. CZ-RWS3



Infrared remote controller and receiver for 2 way cassette. CZ-RWS3 + CZ-RWRL3



Infrared remote controller and receiver for 1 way cassette. CZ-RWS3 + CZ-RWRD3



Infrared remote controller and receiver for ceiling. CZ-RWS3 + CZ-RWRT3



Infrared remote controller and receiver for all indoor units. CZ-RWS3 + CZ-RWRC3



Remote sensor

CZ-CSRC3

- This remote sensor can be connected to any PACi or VRF unit. Use it to detect the room temperature when no remote controller sensor or body sensor is used (connection to a system without a remote controller is possible)
- For joint use with a remote controller switch, use the remote controller switch as main remote controller
- Batch group control for up to 8 indoor units
- Appearance design based on simplified remote controller chassis
- Dimensions (HxWxD): 120 x 70 x 17 mm
- Weight: 70 g
- Temperature/Humidity range: 0 °C to 40 °C / 20% to 80% (no condensation) (indoor use only)
- Power supply: 16 V DC (supplied from indoor unit)
- Maximum number of connectable indoor units: Up to 8 units



Control contents	Part name, model No.	Quantity
Standard control <ul style="list-style-type: none"> • Control of the various operations of the indoor unit by wired or infrared remote controller • Cooling or heating mode of the outdoor unit is decided by the first priority of the remote controller • Switching between remote controller sensor and body sensor is possible 	High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6W // CZ-RTC6 // CZ-RTC6WBL // CZ-RTC6BL // CZ-RTC6WBLW // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRY3 // CZ-RWS3 // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3 + CZ-RWRD3 // CZ-RWS3 + CZ-RWRT3 // CZ-RWS3 + CZ-RWRC3	1 unit each
[1] Group control <ul style="list-style-type: none"> • Up to 8 units can be connected to 1 remote controller • Operation of all indoor units in the same mode 	High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6W // CZ-RTC6 // CZ-RTC6WBL // CZ-RTC6BL // CZ-RTC6WBLW // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRY3 // CZ-RWS3 // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3 + CZ-RWRD3 // CZ-RWS3 + CZ-RWRT3 // CZ-RWS3 + CZ-RWRC3	8 units
[2] Main/sub remote controller <ul style="list-style-type: none"> • Maximum 2 remote controllers per indoor unit • The button pressed last has priority • Timer setting is possible even with the sub remote controller 	Main or sub.: High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6W // CZ-RTC6 // CZ-RTC6WBL // CZ-RTC6BL // CZ-RTC6WBLW // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRY3 // CZ-RWS3 // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3 + CZ-RWRD3 // CZ-RWS3 + CZ-RWRT3 // CZ-RWS3 + CZ-RWRC3	As required

Centralised controllers

System controller with schedule timer

CZ-64ESMC3

Operation with various functions from central station.

Panasonic unveils state-of-the-art digital controller.

Panasonic's innovative and easy to use interface that offers full functionality with an integrated schedule timer and system controller, making managing heating and cooling systems easier than ever before. The CZ-64ESMC3 includes Panasonic's popular schedule timer, which gives users full flexibility over when they want their property heated or cooled. Users can adjust the system for holidays, pausing operations for long periods of time so that energy isn't wasted heating or cooling an empty home or office. The controller also allows six operations per day to be programmed.

Mix of current 2 controllers: System controller + schedule timer.

System controller will be designed by taking priority on these 2 operations with following technical key points:

- Same operation feeling as wired remote controller by touch-key panel
- High visibility and usability by full-dot LCD
- Based on high wired remote controller
- Maximum 64 group of indoor units, individual control for 64 units
- 4 zone control; 1 zone = maximum 16 groups
- Several energy saving function (based on CZ-RTC5B)
- 6 timer program per day for 1 week (7 days) operation (total 6 x 7 = 42 programs)
- Basic setting items (Temperature, Mode, Fan speed, Flap position) can be set by same manner as CZ-RTC5B

Function list:

Central control functions:

- Central control / individual setting
 - Start-stop prohibition for remote controller
 - Start-stop / Mode change / Temperature setting prohibition for remote controller
 - Mode change / Temperature setting prohibition for remote controller
 - Mode change prohibition for remote controller
 - Select items for prohibition
- Filter information
 - Filter sign
 - Filter sign reset
- Ventilation setting

Timer functions and external I/O:

- Weekly timer
 - Timer setting enable / disable
 - Copy of timer setting
- Maintenance
 - External signal (Start / Stop) (Demand control)
 - Centralized control master-slave setting
 - Alarm history
- Initial setting
 - Clock

Energy saving, maintenance and operating functions:

- Energy saving control
 - Econavi ON / OFF
- Filter information
 - Filter sign and hour counter display
- Maintenance
 - Service contact
- Initial setting
 - Clock display setting
 - Name Setting
 - Operation lock setting
 - Operation sound setting
 - LCD contrast setting
 - LCD backlight setting
 - Select displayed language (EN/FR/IT/ES/DE)
 - Administrator password
- Setting information list



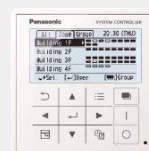
ECONAVI

Sample display image / Operation status display

Operation Status ALL



Operation Status ZONE



Operation Status GROUP



ON / OFF controller

CZ-ANC3

Only ON / OFF operation from central station.

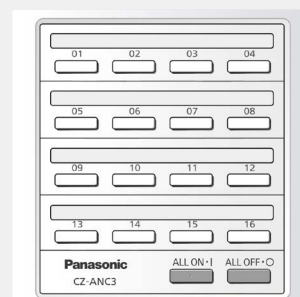
- 16 groups of indoor units can be controlled
- Collective control and individual group (unit) control can also be performed
- Up to 8 ON / OFF controller (4 main, 4 sub) can be installed in one link system
- The operation status can be determined immediately
- Dimensions (HxWxD): 121 x 122 x 14 + 52 mm (embedding dimension)

Power supply: 220 to 240 V AC.

I/O part: Remote input (effective voltage: within 24 V DC): ALL ON / OFF.

Remote output (allowable voltage: within 30 V DC): ON, Alarm.

Note: As operation mode and temperature settings are not possible with the ON / OFF controller, it must be used together with a remote controller, a system controller etc.



Centralised controllers

Intelligent controller (touch screen panel)

CZ-256ESMC3

Simplified load distribution ratio (LDR) for each tenant.

Dimensions (HxWxD): 240 x 280 x 20 (+60) mm.

Power supply: Single phase 100-240 V ~ 50/60 Hz.

Maximum number of connectable indoor units: 256 units (maximum per link: 64 units).

Maximum number of connectable outdoor units: 120 units (maximum per link: 30 units).

· Central control device: Up to 10 units

Enlarged display screen: 10,4 inch touch-panel colour LCD. Pursuing visibility, ease of use. Retrieve data from USB memory: Place the USB port inside the panel (USB memory available in stores).

Communication adaptor: CZ-CFUNC2*.

* CZ-CFUNC2 is required to connect more than 128 indoor units.

Functions:

- Graph display (trends, comparisons)
- Econavi ON / OFF
- Outdoor unit quiet operation ON / OFF
- Energy saving functions: Set temperature auto return settings, Auto shut OFF, Set temperature range limit settings, Energy saving for PAC current value, etc.
- Event control (such as equipment linkage)
- Performs closing at end of any period

Operation and status.

You can check to operational status (ON / OFF, operating mode, alarms, etc.) of all indoor units and outdoor units in real time. You can also select indoor units to change their settings.

Operation scheduling.

You can register daily operation schedules (ON / OFF time, operating modes, set temperatures, etc.) for individual indoor units or groups of indoor units. Operations can be schedule for up to 2 years in advance.

Load distribution calculation for each tenant.

- Air-conditioner load distribution ratio is calculated for each unit (tenant) with used energy consumption data (m³, kWh)
- Calculated data is stored as a CSV type file
- Data from the last 365 days is stored

Web application. Web access and control from remote station.

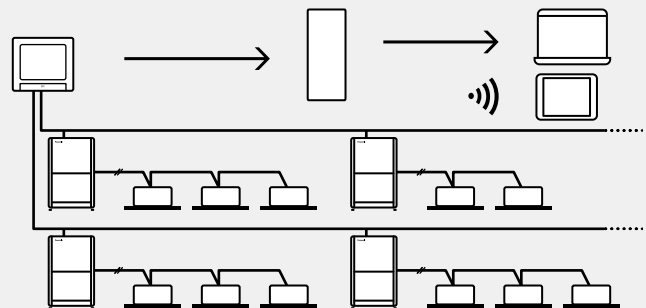
- Accessing from remote PC
- You can monitor/operate system by using web browser



Remote controller.

The LAN terminal on this unit enables you connect it to a network. Connecting to Internet will enable you to operate the unit and check the status using a PC from a remote location*.

* Remote access rights and additional IT infrastructure / programming may be required.



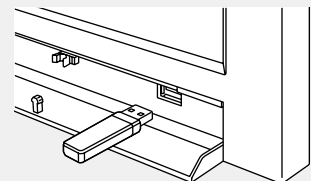
Backup tool to save your commissioning time.

Various data such as distribution, setting, log history etc. can be saved by CSV file.

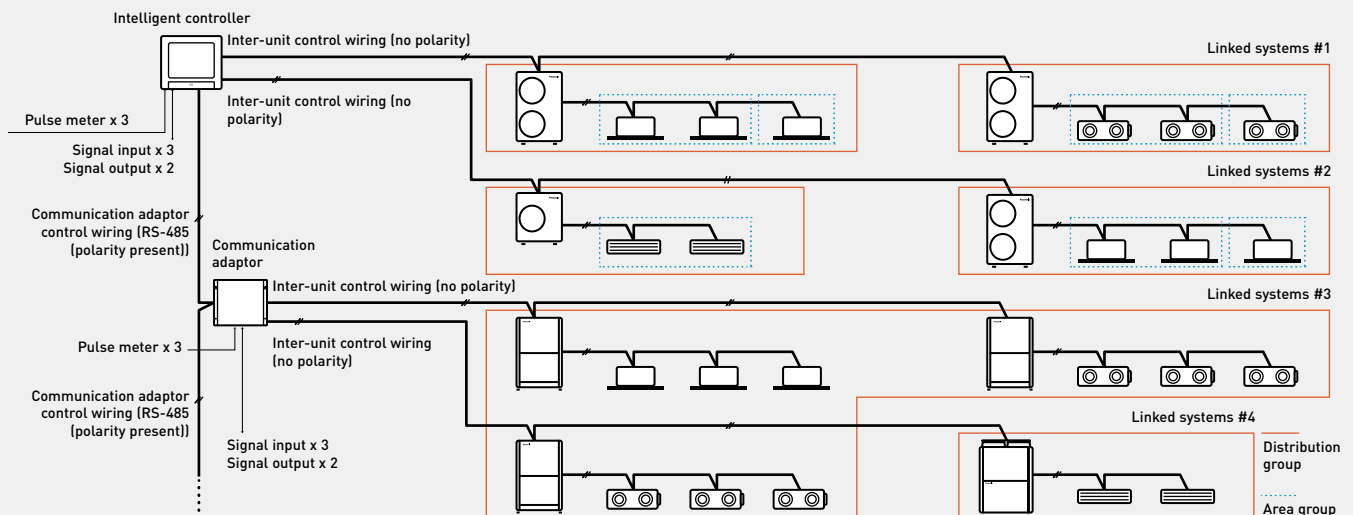
Setting data of CSV file is available to edit and import to the controller again.

You can save time for commissioning and change setting flexibly and easily by your PC.

- Customize data
- Data recovery
- Data can be imported again by general USB.



System configuration example.



P-AIMS core software

CZ-CSWKC2 / P-AIMS core software.

Centralised software to control up to 1024 indoor units.

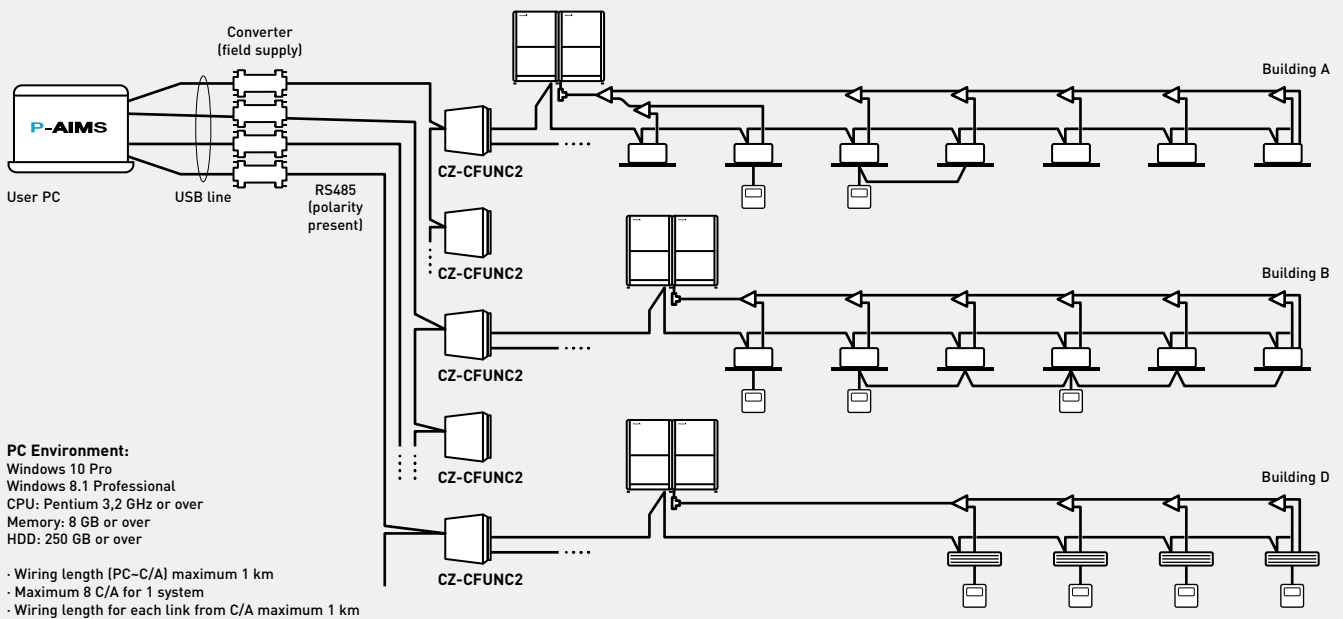


Functions of basic software.

- Standard remote controller for all indoor units.
- Many timer schedule programs can be set on the calendar.
- Detailed information display for alarms.
- CSV file output with alarm history, operating status.
- Automatic data backup to HDD.

P-AIMS is suitable for large shopping centers and universities with many areas/ buildings. 1 "P-AIMS" PC can have 4 independent systems at once.

Each system can have maximum 8 C/A units, and control maximum 512 units. In total, 1024 indoor units can be controlled by 1 "P-AIMS" PC.



P-AIMS optional software CZ-CSWAC2 / P-AIMS consumption calculation extension.

- Air-conditioner load distribution ratio is calculated for each unit (tenant) with used energy consumption data (m³, kWh)
- Calculated data is stored as a CSV type file
- Data from the last 365 days is stored

P-AIMS optional software CZ-CSWWC2 / P-AIMS web application extension.

- Accessing P-AIMS software from remote PC
- You can monitor/operate ECOi System by using web browser (Internet Explorer)

P-AIMS optional software CZ-CSWGC2 / P-AIMS layout display extension.

- Operating status monitor is available on the layout display
- Object's layout and indoor unit's location can be checked at once
- Each unit can be controlled by virtual remote controller on the display
- Maximum 4 layout screens are shown at once

P-AIMS optional software CZ-CSWBC2 / P-AIMS BACnet extension.

- Can communicate with other equipment by BACnet protocol
- ECOi System can be controlled by both BMS and P-AIMS
- Maximum 255 indoor units can be connected to 1 PC (that has P-AIMS basic and BACnet software).

No.	Address	Name	Term	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit
1	Tenant1		1	1000.01	100.0001	1000.01	1000.02	100.0001	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01
2	Tenant2		2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Tenant3		3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Tenant4		4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Disbld_group1		5	1000.02	100.0001	1000.01	1000.02	100.0001	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01
6	Disbld_group2		6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Disbld_group3		7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Disbld_group4		8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Disbld_group5		9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Disbld_group6		10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Disbld_group7		11	1000.0001	100.0001	1000.01	1000.02	100.0001	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01	1000.01
12	Disbld_group8		12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Disbld_group9		13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Disbld_group10		14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

With 4 upgrade packages the basic software can be upgraded to suit individual requirements.

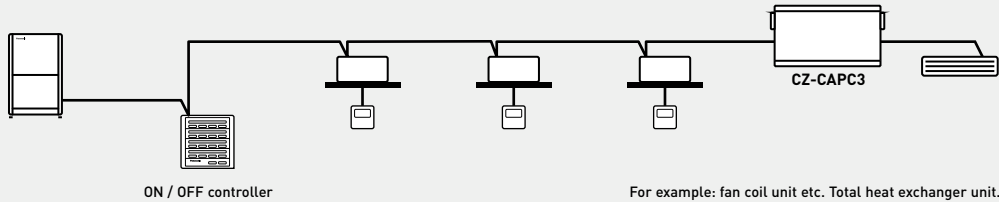
Centralised controllers

Local adaptor for ON / OFF control

CZ-CAPC3

Connection with general equipment.

- Control and status monitoring is possible for individual indoor unit (or any external electrical device up to 250 V AC, 10 A) by contact signal



Demand control for Mini ECOi and PACi outdoor units

CZ-CAPDC3

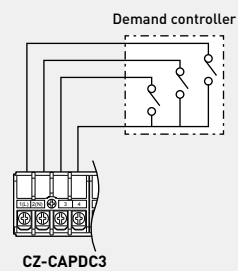
Connection with general equipment.

- Control of both Mini ECOi and PACi units
- From the central control device, demand control and forced stop are possible

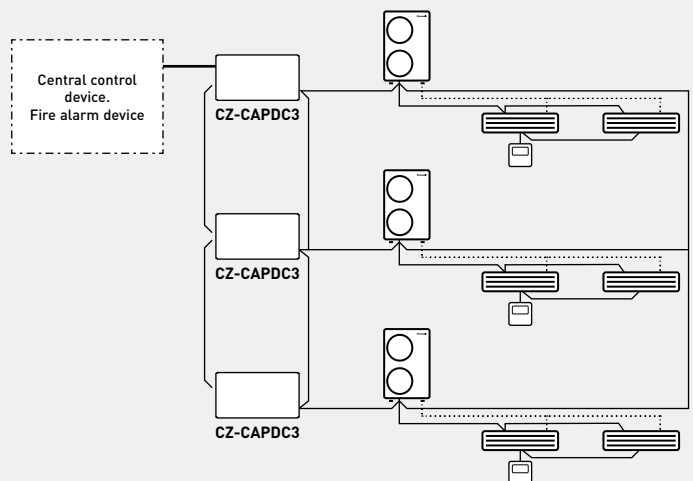
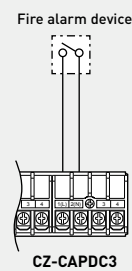


- Input: Demand (non-voltage contact / 24 V DC / 2 mA, static signal).
- Input: Forced stop operation (non-voltage contact / 24 V DC / 10 mA, static signal).
- Forced stop input for fire alarm input control.
- 3 step demand control for staged control of outdoor unit capacity.

Demand control.



Forced stop.



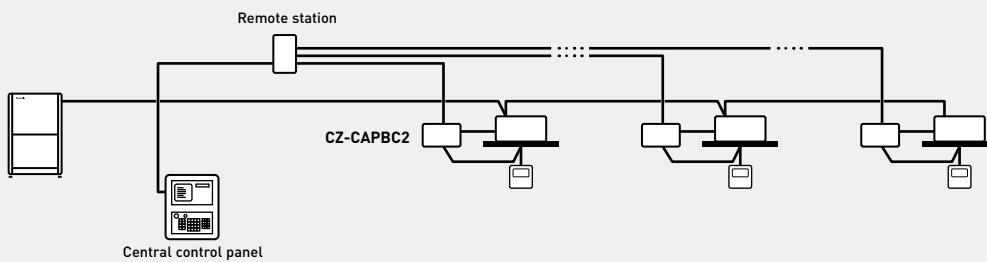
Mini Seri-Para I/O Unit 0 -10 V

CZ-CAPBC2

Connection with general equipment.

- Control and status monitoring is possible for individual indoor unit (1 group)
- In addition to operation and stop, there is a digital input function for air speed and operation mode
- Temperature setting and measuring of the indoor suction temperature can be performed from central monitoring
- Power is supplied from the T10 terminal of the indoor units
- The analog input for demand of the outdoor capacity by 20 steps (from 40% to 120%) by 0-10 V
- The analog input for temperature setting is 0 to 10 V, or 0 to 140 Ohm
- Separate power supply also is possible (in case of suction temperature measuring)

* Ask to your distributor.



Communication adaptor for VRF connectivity

CZ-CFUNC2

This communication interface is required to connect a ECOi and GHP systems to a BMS. CZ-CFUNC2 is very easy to operate and to connect to the Panasonic S-Link, which is the ECOi bus. From the CZ-CFUNC2, all the indoor and outdoor units of the installation can be easily control. Two linked wiring systems can be connected to one CZ-CFUNC2.

Dimensions (HxWxD): 260 x 200 x 68 mm

* As this is not a splash-proof design, it must be installed indoors or in the control panel, etc.



PACi and VRF connectivity

Controls and connectivities are the key to offer better comfort and price. Panasonic offers its customers cutting-edge technology, specially designed to ensure our air conditioning systems deliver optimal performance.



PACi, ECOi and ECO G connectivity.

The interface has been designed specifically for Panasonic and provides complete monitoring, control and full functionality of the line-up from IntesisHome, KNX, Modbus, BACnet and LonWorks installations. This connectivity solution with "PAW" model names is made by a third party company, please contact Panasonic for more information.

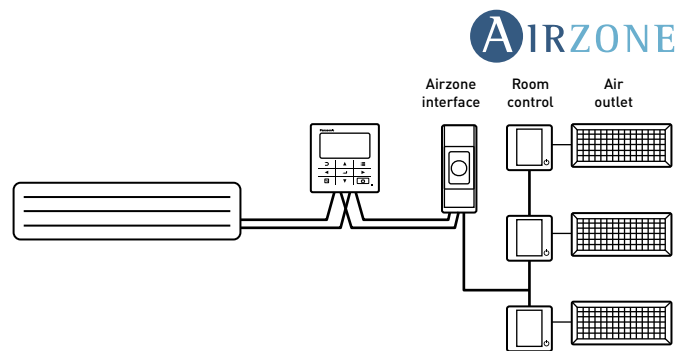
	Room controller	Interface	BMS Type	Maximum number of indoor units connected	
ECOi / PACi indoor units	SER8150R0B1194 / SER8150R5B1194		Modbus / BACnet	1 unit/group	
	PAW-RE2C4-MOD-WH / PAW-RE2C4-MOD-BK		Modbus	1 unit/group	
		PAW-RC2-KNX-1i	KNX	1 (1 group of indoor units)	
		PAW-RC2-MBS-1	Modbus RTU ¹⁾	1 (1 group of indoor units)	
		PAW-RC2-MBS-4	Modbus	4 Indoor/groups	
		PAW-RC2-BAC-1	BACnet	1	
		NEW PAW-AZRC-KNX-1	KNX	1 (1 group of indoor units)	
		NEW PAW-AZRC-MBS-1	Modbus RTU ¹⁾	1 (1 group of indoor units)	
		NEW PAW-AZRC-BAC-1	BACnet	1	
	PACi / ECOi / ECO G S-Link	PAW-AC2-KNX-16P		KNX	16
PAW-AC2-KNX-64P			KNX	64	
PAW-AC2-MBS-16P			Modbus	16	
PAW-AC2-MBS-64P			Modbus	64	
PAW-AC2-MBS-128P			Modbus	128	
PAW-AC2-BAC-16P			BACnet	16	
PAW-AC2-BAC-64P			BACnet	64	
PAW-AC2-BAC-128P			BACnet	128	
		CZ-CLNC2		LonWorks	16 groups of maximum 8 indoor units, in total maximum 64 indoor units

1) Interface Modbus RTU/TCP is needed in case if Modbus TCP connection. PAW-MBS-TCP2RTU (ModBus RTU Slave devices). 2) Interface CZ-CFUNC2 needed.

Airzone. Control of the hide-aways

Airzone has developed interfaces to easily connect to Panasonic Commercial hide-away units. Ensuring optimum performance, comfort and energy savings, the system is efficient and easy to install.

Airzone full range of accessories for any duct project.



ECOi, ECO G and PACi connectivity indoor units

PCB's and cables for ECOi, ECO G and PACi indoor units.

Name of the cables	Function	Comment
CZ-T10	All T10 functions	Requires field supplied accessory
PAW-FDC	Operate external fan	Requires field supplied accessory
PAW-OCT	All option monitoring signals	Requires field supplied accessory
CZ-CAPE2	3-Pipe control PCB	Requires additional wires from spare part supply
PAW-EXCT	Forced Thermo OFF/Leakage D.	Requires field supplied accessory

Name of the PBC	Function	Comment
PAW-T10	All T10 functions	Allows easy connection "Plug & Play"
PAW-PACR4	PCB for server room application. Available for PACi, ECOi or ECO G.	Interface for redundant operation up to 4 indoor unit groups

T10 connector (CN061)

CZ-T10

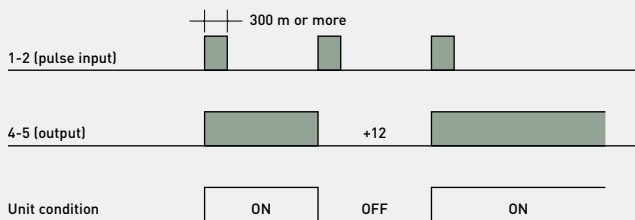
Panasonic has developed an optional accessory (consisting of plug + wires) called CZ-T10 to enable an easy connection to this T10 connector.



Connecting an ECOi indoor unit to an external device is easy. The T10 terminal featured in the electronic circuit board of all indoor units enables digital connection to external devices.

T10 terminal specification (T10: CN015 at indoor unit PCB).

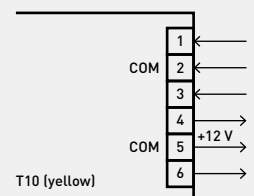
- Control items: 1. Start / stop input
- 2. Remote controller prohibit input
- 3. Start signal output
- 4. Alarm signal output



NOTE: The wire length from indoor unit to the relay must be within 2,0 m. Pulse signal changeable to static by cutting jumper JP001.

- Condition:
 - 1-2 (pulse input): Unit ON / OFF condition switching with a pulse signal. (1 pulse signal: shortage status more than 300 msec. or more)
 - 2-3 (static input): open / operation with remote is permitted (normal condition) close / remote controller is prohibited
 - 3-4 (static output): 12 V output during the unit ON / no output at OFF
 - 4-5 (static output): 12 V output when some errors occur / no output at normal

Example of wiring:



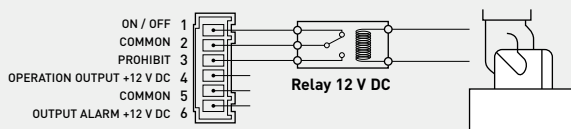
Usage example.

Forced OFF control.

Term 1 and 2: Free contact for ON / OFF signal (cut *JP1* for static signal) when the hotel card is it connected the contact must be close (the unit can be used).

Term 2 and 3: Free contact to prohibit all function in the remote controller install in the room when the hotel card is it removed the contact must be closed (the unit can not work).

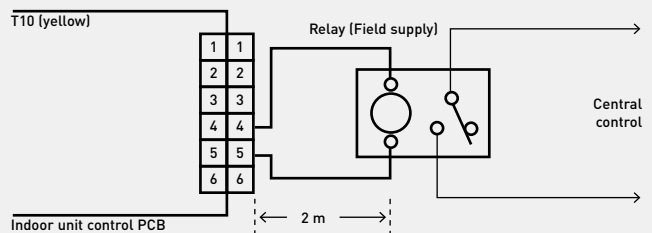
Terminal = T10



Operation ON / OFF signal output.

- Condition:
 - 4-5 (static output): 12 V output during the unit ON / no output at OFF

Example of wiring:



Note: The wire length from indoor unit to the Relay must be within 2,0 m. Pulse signal changeable to static by cutting jumper JP001.
* PACi-NX series is not compatible.

Fan drive connector (CN032)

PAW-FDC

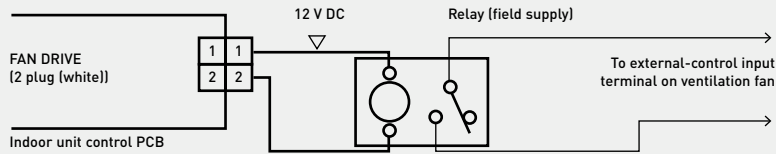
Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-FDC to enable an easy connection to this fan drive connector (CN032).

Operating the ventilation fan from the remote controller

- Start / stop of external ventilation and total heat exchanger fans
- Works even if indoor unit is stopped
- In case of group control > all fans will operate; no individual control



External fan ON / OFF



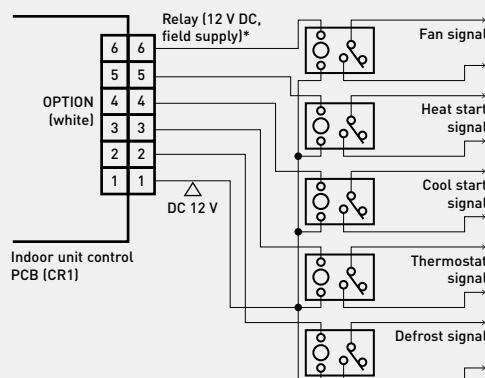
Option connector (CN060) output external signals

PAW-OCT

Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-OCT to enable an easy connection to this Option Connector (CN060).

With the combination of the T10 and the option CN060 an external control of the indoor units is possible!

6P (white): Outputs external signals as shown in the figure below.



* The relay must be installed at a distance of 2 m or less from the PCB.



EXCT connector (CN009)

PAW-EXCT

Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-EXCT to enable an easy connection to this EXCT Connector (CN009).

A) With static input.

> STATIC INPUT > THERMO OFF > ENERGY SAVING

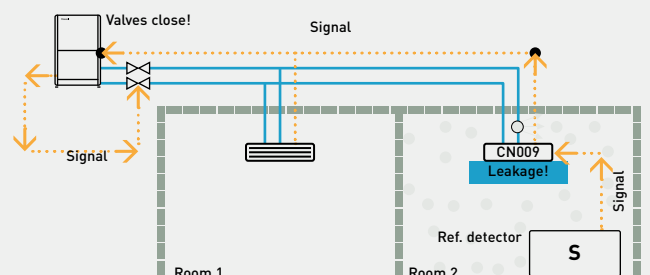
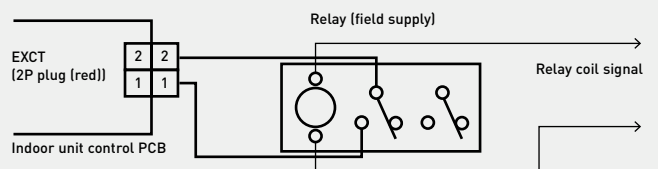
2P plug (red): Can be used for demand control. When input is present, forces the unit to operate with the thermostat OFF.

Note: The length of the wiring from the indoor unit control PCB to the relay must be 2 m or less.

B) Example: In connection with a refrigerant sensor.

- Signal from leakage detector: non voltage, static.
- Indoor unit setting: Code 0b > 1
- Connector for leak detector: EXCT
- Outdoor unit setting: Code C1 > 1 power output if alarm from O2 connector 230 V Code C1 > 2 power output if alarm from O2 connector 0 V
- Displayed alarm message P14

· Examples of wiring:



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Company Registration: 02371708



Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for the damage and deterioration in safety due to usage of the other refrigerant.
The outdoor units in this catalogue contains fluorinated greenhouse gases with a GWP higher than 150.

