Panasonic

AQUAREA

Welcome to Aquarea air to water heat pump

Aquarea's Air to Water Heat Pump for residential and commercial applications.
Offering capacities from 3 kW all the way through to 16 kW, the Aquarea Heat Pump Range is the widest on the market, ensuring a system is available, whatever your heating and cooling needs. Suitable for new build and refurbishment projects, the solutions are cost-effective with minimised environmental impact.

Panasonic Aquarea offers you solutions, helping to make the home more efficient and the installation cheaper and easier.

Aquarea High Performance

For new installations and low consumption homes.
Outstanding efficiency and energy savings with minimised CO_2 emissions and minimum space. Improved performance with COPs up to 5,33.

Aquarea T-CAP

For extremely low temperatures, refurbishment and innovation.
Ideal to ensure that the heating capacity is maintained even at very low temperatures. This line-up is able to maintain the heat pump output capacity until -20 °C outdoor temperature without the help of an electrical booster heater.

Aquarea HT

For a house with old high-temperature radiators.
Ideal for retrofit: green energy source works with existing radiators. Aquarea HT Solution is the most appropriate, providing output water temperatures of 65 °C even at outdoor temperatures as low as -15 °C.

DHW Stand Alone

Highly efficient heat pump water heater.
Ideal to cover the hot water needs of a family house, stand alone DHW heat pumps are designed to provide maximum comfort and savings in the production of DHW. Consumption of the A+ DHW heat pump is reduced by 75 % compared with traditional electric water heaters.

Aquarea High Performance	Aquarea T-CAP	Aquarea HT
Heating - Cooling - DHW	Heating - Cooling - DHW	Heating - DHW
Single Phase from 3 to 16 kW Three Phase from 9 to 16 kW	Single Phase from 9 to 12 kW Three Phase from 9 to 16 kW	Single Phase from 9 to 12 kW Three Phase from 9 to 12 kW
Connectable to		
Radiators - Fan coil - Underfloor heating - DHW	Radiators - Fan coil - Underfloor heating - DHW	Traditional high-temperature radiators - DHW
Application		
Normal installation	For extreme cold ambient	Retrofit for old radiators
Energy efficiency		
A+++ / A++ Heating 35 °C / 55 °C	A++ / A++ Heating 35 °C / 55 °C	A++ / A++ Heating 35 °C / 55 °C
Minimum outdoor temperature		
-20 °C	-28 °C	-20 °C
Minimum outdoor temperature to provide constant capacity at 35 °C supply water temperature		
-7 °C (not for all units)	-20 °C [1]	-15 °C
Supply temperature for heating. Maximum / Heat pump only		
75 °C [2] / 55 °C [3] (or 60 °C for Aquarea J Generation)	75 °C [2] / 60 °C [3]	75 °C [2] / 65 °C
Control and connectivity		
Smart Grid Ready [4] Wireless LAN Ready	Smart Grid Ready [4] Wireless LAN Ready	Smart Grid Ready [4] Wireless LAN Ready
Range		
Bi-bloc from 3 to 16 kW Mono-bloc from 5 to 16 kW All in One from 3 to 16 kW (185L)	Bi-bloc from 9 to 16 kW Mono-bloc from 9 to 16 kW All in One from 9 to 16 kW (185L)	Bi-bloc from 9 to 12 kW Mono-bloc from 9 to 12 kW

All data in this chart is applicable in most of models in each line up, check product specs to confirm. 1) 9 and 12 kW. 2) DHW maximum temperature with heater. 3) In case of outdoor temperature over -10 °C. 4) H Generation with CZ-NS4P, F and G Generation with Heat Pump Manager. * DHW Stand Alone is produced by S.A.T.E.

Aquarea Smart Cloud for end users

The most advanced heating control for today and for the future. Aquarea can be connected to the Cloud with CZ-TAW1, enabling both end user control and remote maintenance by service partners.

WATCH DEMO

* User interface image may change without notification.

Works with IFTTT

More possibilities with IFTTT.
IF This Then That: IFTTT service enables user to automatically trigger actions for Aquarea system based on other apps, web services or devices.

Connect your Aquarea to your voice assistant, get an e-mail if your Aquarea gets an error or automatically turn on your Aquarea on Heat Mode when outdoor temperature drops below specified level.

https://ifttt.com/aquarea_smart_cloud

Easy and powerful energy management

The Aquarea Smart Cloud is much more than a simple thermostat for switching a heating device ON or OFF. It is a powerful and intuitive service for remotely controlling the full range of heating and hot water functions, including monitoring energy consumption.

How does it work?

After connecting an Aquarea J or H generation to the cloud by wireless LAN or by wired LAN, the user accesses the Cloud portal to remotely operate all functions of his units. He can also permit service partners to access customised functions for remote maintenance and monitoring.

Requirements

1. Aquarea J or H Generation
2. In-house internet connection with router wireless LAN or wired LAN
3. Get a Panasonic ID in https://aquarea-smart.panasonic.com/

Functions:

· Visualisation and Control
· Scheduling
· Energy Statistics
· Malfunction notification

Advantages

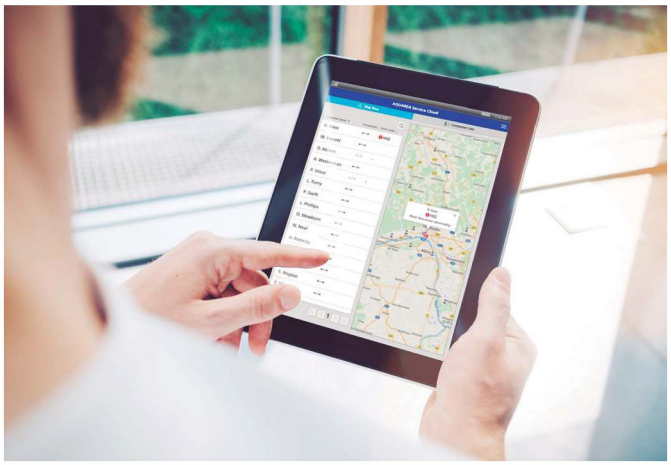
Energy savings, comfort and control from anywhere.
Increased efficiency and resources management, operating costs savings and owner satisfaction.
The Aquarea Smart Cloud services are focused on enabling full remote maintenance of the Aquarea system. This allows maintenance specialists to engage in predictive maintenance and system fine-tuning, as well as fixing malfunctions when they occur.

Aquarea compatibility	J and H Generation
Connection point	CN-CNT Aquarea port
Home router connection	Wireless or Wired LAN
Temperature sensor	Can use remote controller sensor
Tablet or PC browser compatibility*	Yes
Operation from remote — ON/OFF — Temperature setting Mode selection — DHW setting — Error codes — Scheduling	Yes
Heating areas	Up to 2 zones
Power consumption estimation — Operation log history	Yes — Yes

* Check browsers and version compatibility.

Aquarea Service Cloud for Installers / Maintenance

WATCH DEMO



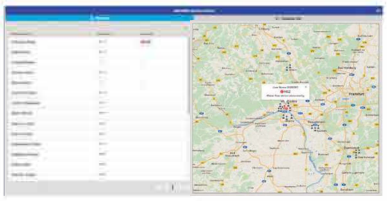
The real remote maintenance made simple

The Aquarea Service Cloud allows installers to take care of their customers' heating systems remotely. It saves time and money and shortens the response time, thus increasing the customers' satisfaction.

Advanced functions for remote maintenance with professional screens:

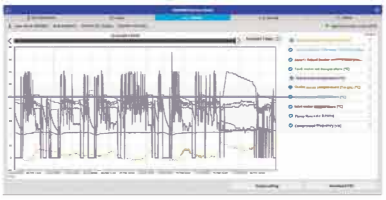
- Global view at a glance
- Error log history
- Full unit information
- Statistics always available
- Most settings available

Home page.
Status of connected users at a glance. 2 view options: map view or list view.



Status tab.
Current status of unit with a maximum 28 parameters.

Statistics tab.
Customisable statistics of a maximum of 73 parameters.
Available anytime with the information of the last 7 days.



Settings tab.
Most of the user and installer settings can be done remotely.

Activation of the Aquarea Service Cloud

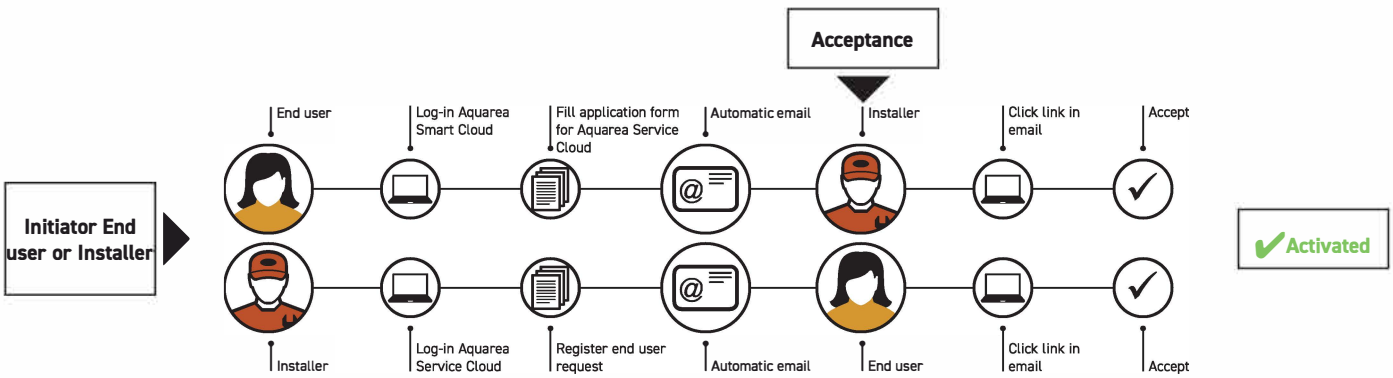
Requirements.

Hardware and connection	End user registration	Installer / maintenance registration
J or H Generation Aquarea connected to CZ-TAW1	Get Panasonic ID	Get Service ID
In-house internet connection with Wireless LAN or Wired LAN	Aquarea Smart Cloud	Aquarea Service Cloud

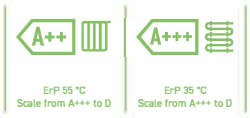
Connecting the unit to the Aquarea Service Cloud.
The process can be initiated by the end user or by the installer.
The end user can select and change the installer's level of control anytime (4 levels).

Installer registration: https://aquarea-service.panasonic.com/

End user registration: https://aquarea-smart.panasonic.com/



GOOD DESIGN



CZ-TAW1
Cloud connection.
For user control and installer remote maintenance.

Aquarea T-CAP Bi-bloc H Generation Single Phase / Three Phase. Heating and Cooling - SXC • R410A refrigerant

			Single Phase (Power to indoor)		Three Phase (Power to indoor)		
Kit			**KIT-WXC09H3E5**	**KIT-WXC12H6E5**	**KIT-WXC09H3E8**	**KIT-WXC12H9E8**	**KIT-WXC16H9E8**
Heating capacity / COP (A +7 °C. W 35 °C)		kW / COP	9.00 / 4.84	12.00 / 4.74	9.00 / 4.84	12.00 / 4.74	16.00 / 4.28
Heating capacity / COP (A +7 °C. W 55 °C)		kW / COP	9.00 / 2.94	12.00 / 2.88	9.00 / 2.94	12.00 / 2.88	16.00 / 2.71
Heating capacity / COP (A +2 °C. W 35 °C)		kW / COP	9.00 / 3.59	12.00 / 3.44	9.00 / 3.59	12.00 / 3.44	16.00 / 3.10
Heating capacity / COP (A +2 °C. W 55 °C)		kW / COP	9.00 / 2.21	12.00 / 2.19	9.00 / 2.21	12.00 / 2.19	16.00 / 2.13
Heating capacity / COP (A -7 °C. W 35 °C)		kW / COP	9.00 / 2.85	12.00 / 2.72	9.00 / 2.85	12.00 / 2.72	16.00 / 2.49
Heating capacity / COP (A -7 °C. W 55 °C)		kW / COP	9.00 / 2.02	12.00 / 1.92	9.00 / 2.02	12.00 / 1.92	16.00 / 1.86
Cooling capacity / EER (A 35 °C. W 7 °C)		kW / EER	7.00 / 3.17	10.00 / 2.81	7.00 / 3.17	10.00 / 2.81	12.20 / 2.57
Cooling capacity / EER (A 35 °C. W 18 °C)		kW / EER	7.00 / 5.19	10.00 / 5.13	7.00 / 5.19	10.00 / 5.13	12.20 / 3.49
Seasonal energy efficiency - Heating Average Climate (W35 °C / W55 °C)		ETA %	181 / 130	170 / 130	181 / 130	170 / 130	160 / 125
		SCOP	4.60 / 3.33	4.33 / 3.33	4.60 / 3.33	4.33 / 3.33	4.08 / 3.20
Energy Class Heating Average Climate (W35 °C / W55 °C)		A+++ to D	A+++ / A++	A++ / A++	A+++ / A++	A++ / A++	A++ / A++
Seasonal energy efficiency - Heating Warm Climate (W35 °C / W55 °C)		ETA %	235 / 158	231 / 158	235 / 158	231 / 158	231 / 159
		SCOP	5.95 / 4.03	5.85 / 4.03	5.95 / 4.03	5.85 / 4.03	5.85 / 4.05
Energy Class Heating Warm Climate (W35 °C / W55 °C)		A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Seasonal energy efficiency - Heating Cold Climate (W35 °C / W55 °C)		ETA %	160 / 125	160 / 125	160 / 125	160 / 125	150 / 125
		SCOP	4.08 / 3.20	4.08 / 3.20	4.08 / 3.20	4.08 / 3.20	3.83 / 3.20
Energy Class Heating Cold Climate (W35 °C / W55 °C)		A+++ to D	A++ / A++	A++ / A++	A++ / A++	A++ / A++	A++ / A++
Indoor unit			**WH-SXC09H3E5**	**WH-SXC12H6E5**	**WH-SXC09H3E8**	**WH-SXC12H9E8**	**WH-SXC16H9E8**
Sound pressure	Heat / Cool	dB(A)	33 / 33	33 / 33	33 / 33	33 / 33	33 / 33
Dimension	H x W x D	mm	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340
Net weight		kg	43	43	43	44	45
Water pipe connector		Inch	R1¼	R1¼	R1¼	R1¼	R1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	32 / 102	34 / 110	32 / 102	34 / 110	30 / 105
Heating water flow (ΔT=5 K. 35 °C)		L/min	25.8	34.4	25.8	34.4	45.9
Capacity of integrated electric heater		kW	3	6	3	9	9
Recommended fuse		A	30 / 30	30 / 30	16 / 16	16 / 16	16 / 16
Recommended cable size. supply 1 / 2		mm	3 x 4.0 or 6.0 / 3 x 4.0	3 x 4.0 or 6.0 / 3 x 4.0	5 x 1.5 / 3 x 1.5	5 x 1.5 / 5 x 1.5	5 x 1.5 / 5 x 1.5
Outdoor unit			**WH-UX09HE5**	**WH-UX12HE5**	**WH-UX09HE8**	**WH-UX12HE8**	**WH-UX16HE8**
Sound power part load	Heat	dB	66	66	65	65	67
Sound power full load	Heat / Cool	dB	68 / 67	69 / 68	68 / 67	69 / 68	72 / 71
Dimension	H x W x D	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Net weight		kg	101	101	108	108	118
Refrigerant (R410A) / CO_2 Eq.		kg / T	2.85 / 5.951	2.85 / 5.951	2.85 / 5.951	2.85 / 5.951	2.90 / 6.055
Pipe diameter	Liquid / Gas	Inch (mm)	3/8(9.52) / 5/8(15.88)	3/8(9.52) / 5/8(15.88)	3/8(9.52) / 5/8(15.88)	3/8(9.52) / 5/8(15.88)	3/8(9.52) / 5/8(15.88)
Pipe length range		m	3~30	3~30	3~30	3~30	3~30
Elevation difference (in / out)		m	30	30	30	30	30
Pipe length for additional gas		m	10	10	10	10	10
Additional gas amount		g/m	50	50	50	50	50
Operation range	Outdoor ambient	°C	-28~+35	-28~+35	-28~+35	-28~+35	-28~+35
Water outlet	Heat / Cool	°C	20-60 / 5-20	20-60 / 5-20	20-60 / 5-20	20-60 / 5-20	20-60 / 5-20
MCS Accredited Product			**YES**	**YES**	**NO**	**NO**	**YES**

Accessories	
PAW-TD20C1E5-UK	Tank 200L - Stainless steel, with tank sensor
PAW-TD30C1E5-UK	Tank 300L - Stainless steel, with tank sensor
PAW-G3KIT	G3 compliant kit (Must be ordered with above tanks)
PAW-3WYVLV-HW	3 way valve for DHW Tanks
CZ-NV1	3 way valve kit for inside of hydrokit
PAW-BTANK50L-2	Buffer tank 50L

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-NS4P	Additional functions PCB
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

EER and COP calculation is based in accordance to EN14511. Sound pressure measured at 1 m from the outdoor unit and at 1,5 m height. Heating sound pressure measured at +7 °C (heating water at 55 °C).

INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc H Generation awarded with the prestigious Good Design Award 2017.