

## AQUAREA HIGH PERFORMANCE ALL IN ONE J GENERATION · R32

The compact, high performance heat pump for new installations and low energy homes





**AQUAREA ALL IN ONE PROVIDES BOTH DOMESTIC HOT WATER AND HEAT FOR RADIATORS AND UNDERFLOOR HEATING FROM ONE INTEGRATED UNIT.**





### Adapts to your home

The Aquarea range is extremely flexible. Selecting from a wide range of capacities, from 3kW to 16kW, you can find lower initial investment and lower operational cost options. If you have a well insulated home, why install oversized equipment that will cost more and will have higher running costs?

The Aquarea range fully adapts the system to the needs of your home, whether it is a new build or a refurbishment. It is able to reach up to 60°C water outlet and allows a degree of flexibility in installation thanks to the large piping length of up to 50m between indoor and outdoor (see table each model limitations).



### Energy saving means money savings

Aquarea is a smart choice for saving in heating. Using Air to Water heat pump technology, Aquarea is highly efficient and environmentally friendly. The heat pump is considered a 'green' choice as the heat energy is taken from the environment, making it a sustainable option. Aquarea units produce outstanding results. They are able to reach A+++ within the range of A+++ to D in heating and A+ in the range of A+ to F in domestic hot water, all leading to large savings in electricity bills.



### More comfort

The Aquarea Heat Pump is able to precisely control the temperature thanks to reliable Panasonic Inverter Compressors. Even in adverse weather conditions (-20°C), Aquarea warms your home effectively and efficiently. Aquarea can also cool space in summer and bring hot water all year round, offering different modes to give the ultimate comfort.



### More inside, more space for you

The Aquarea All in One Compact unit is the ultimate space-saving solution. Supplying efficient heating, the unit generates domestic hot water and stores it inside a 185 litre stainless steel tank with high insulation to reduce energy losses. The fully integrated elements ensure it really is an All in One unit, with water piping at the bottom, keeping more space above the unit free for use. The Aquarea All in One Compact reduces the number of additional parts, shortens installation time, and allows for more space in the surrounding areas.



### Why Panasonic?

**Panasonic has more than 60 years of Heat Pump experience, having produced an exceptional amount of compressors. Quality is what Panasonic stands for and this is a key factor for succeeding in the European market.**  
**As a member of the European Heat Pump Association, the production of Aquarea in Europe and maintaining high security protocols in European servers for the Aquarea Smart Cloud, makes Panasonic a trusted heating partner.**





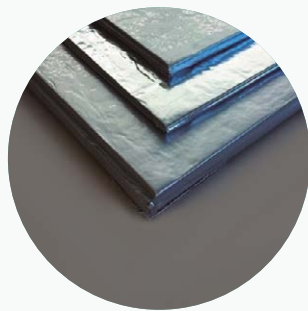


## AQUAREA ALL IN ONE: THE BEST PANASONIC TECHNOLOGY FOR YOUR HOME

**Aquarea All in One: This new range intelligently integrates the best Hydrokit technology with a premium quality stainless steel tank, which is maintenance-free.**

### **All in One with Vacuum Insulation Panel (VIP)**

Panasonic U-Vacua™ is a high performance vacuum insulation panel (VIP) with very low thermal conductivity, that performs about 19 times better than standard urethane foam.



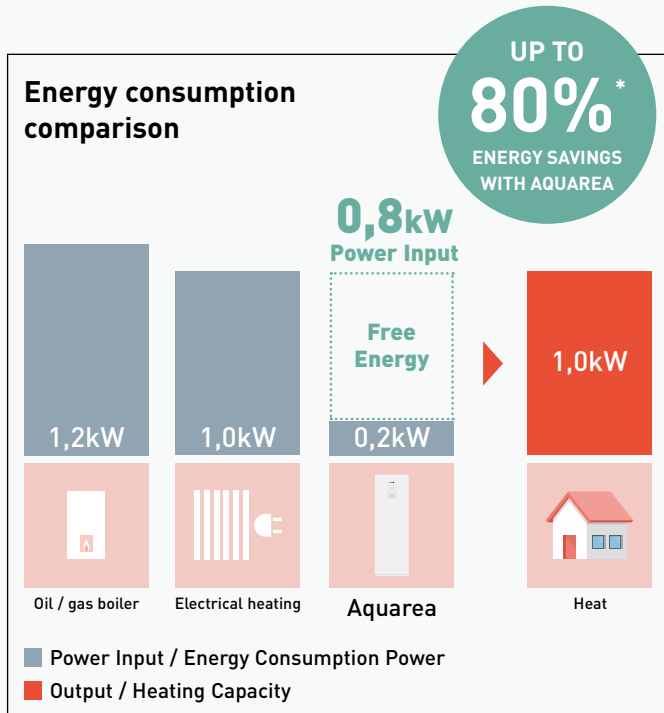
### **High quality components inside:**

- Maintenance free Inox stainless 185l tank
- Variable speed water pump (class A)
- Magnetic Filter with shut-off valves
- Expansion vessel
- Vortex flow sensor
- Back up heater
- Safety valve
- Air purge valves
- 3 way valve inside

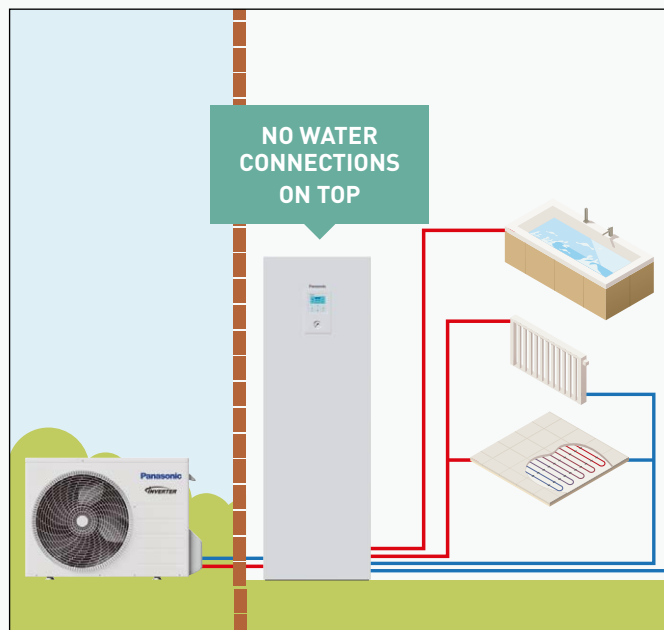


## Technology to save energy

Aquarea captures heat energy from the ambient air and transfers it to heat the water needed to warm your home for domestic hot water and even to cool the house if wished. This technology works even when outdoor temperatures are extremely low. With Aquarea up to 80% of the heat energy required is taken from the ambient air.



\* Rating conditions: Heating: Inside air temperature: 20°C Dry Bulb / Outside air temperature: 7°C Dry Bulb / 6°C Wet Bulb. Conditions : Water input temperature: 30°C Water output temperature: 35°C



## Technology to save space

Space-saving solutions, ideal for installations with restricted space.

- Hydrokit and tank in a single unit
- Water piping connections at the bottom, keeping more space above the unit free for use
- No buffer tank required
- Piping length up to 50m
- Modern remote controller can be installed up to 50m from the indoor unit



## Technology for the future

### R32 Refrigerant Gas: A 'small' change that changes everything

Panasonic recommends R32 because it is a more environmentally friendly solution. Compared to R22 and R410A, R32 has a very low potential impact on the depletion of the ozone layer and global warming.

#### 1. Installation innovation

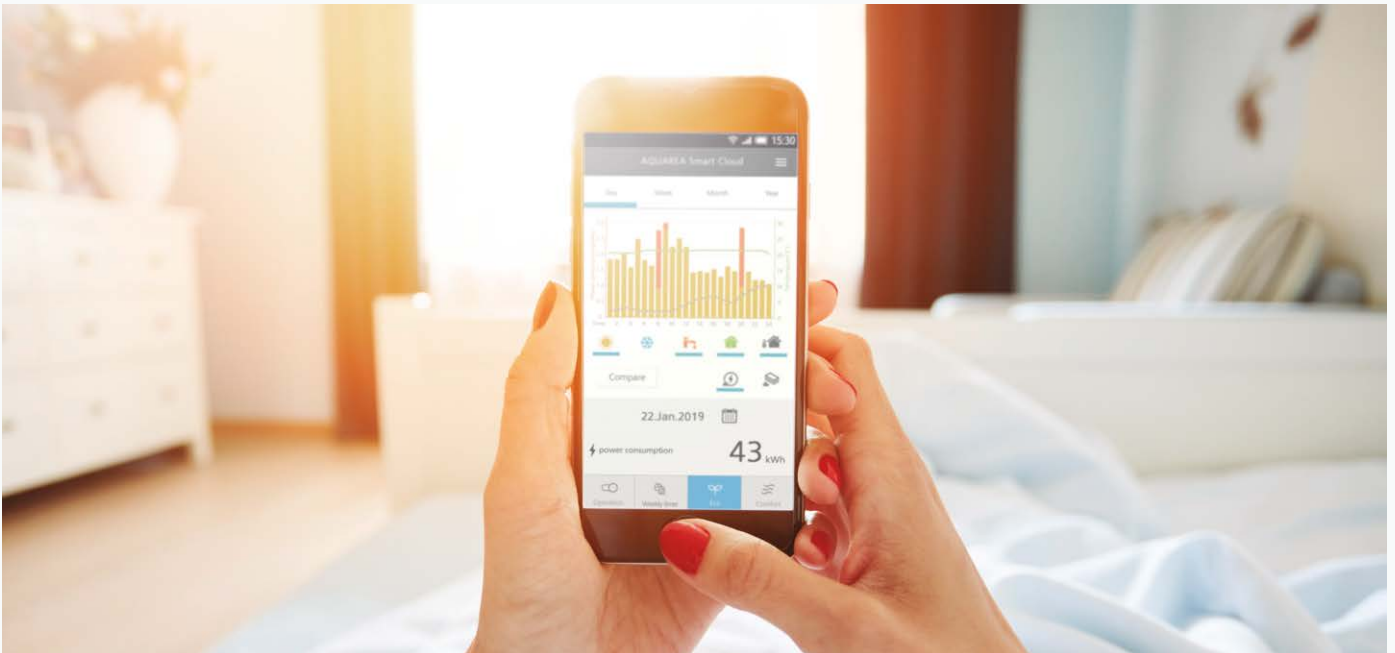
- This refrigerant is 100% pure, which makes it easier to recycle and reuse

#### 2. Environmental innovation

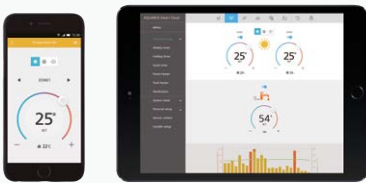
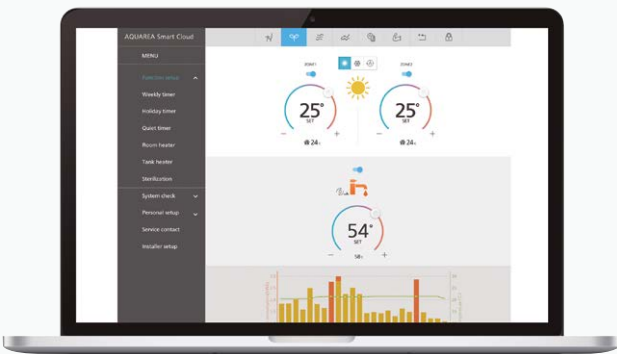
- Zero impact on the ozone layer
- 75% Less impact on global warming vs R410A

#### 3. Economic and energy consumption innovation

- Lower cost and greater savings
- Higher energy efficiency than R410A



## AQUAREA SMART CLOUD: THE MOST ADVANCED HEATING CONTROL FOR TODAY AND FOR THE FUTURE.



WATCH DEMO


### Aquarea Smart Cloud for end users

#### 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?

Connect Aquarea J and H Generation system to the cloud using wireless LAN or a wired LAN Network. The user connects to the Cloud portal to remotely operate all unit functions and can also permit partners to access customised functions for remote maintenance and monitoring.

Aquarea Smart Cloud works with 

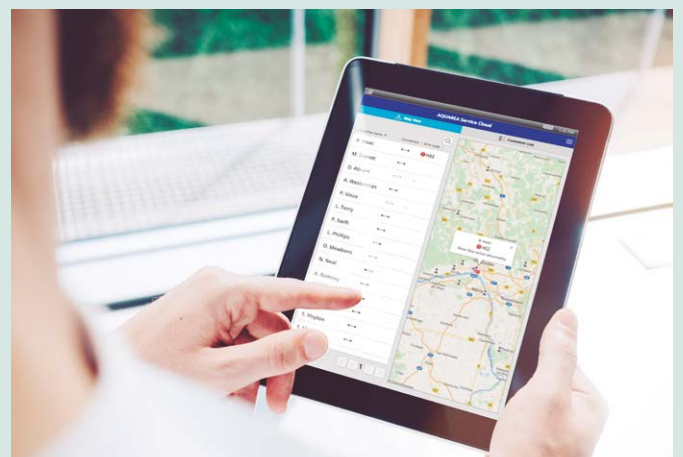
Aquarea Comfort Cloud connected to IFTTT is planned to be available in Autumn 2019

### Aquarea Service Cloud for installers and maintenance

The real remote maintenance made simple: The Aquarea Service Cloud allows installers to remotely take care of their customer's heating system, saving time and money. It also shortens the response time, increasing customer 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



\* User interface image may change without notification.

# Aquarea High Performance All in One J Generation. Single Phase. Heating and Cooling 1 or 2 zones · R32 Gas

- Top level COP 5,33
- Reduced installation costs
- Water piping connections at the bottom (easy to install)
- Reduced installation time and minimised installation errors
- Easy remote controller to set up
- Reduced installation spaces
- Electrical connections at the front
- Easier installation and maintenance
- Remote controller functions (cooling mode activation possible by software. This activation can only be done by service partner)



| Tentative Data   |                       |                 | Single Phase (Power to indoor) |                          |                          |                          |
|--|-----------------------|-----------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| Kit* 1 zone (for 2 zone add B at the end)                            |                       |                 | KIT-ADC03JE5                   | KIT-ADC05JE5             | KIT-ADC07JE5             | KIT-ADC09JE5             |
| Heating capacity / COP (A +7°C, W 35°C)                              | kW / COP              |                 | 3,20/5,33                      | 5,00/5,00                | 7,00/4,76                | 9,00/4,48                |
| Heating capacity / COP (A +7°C, W 55°C)                              | kW / COP              |                 | 3,20/2,81                      | 5,00/2,72                | 7,00/2,82                | 8,95/2,78                |
| Heating capacity / COP (A +2°C, W 35°C)                              | kW / COP              |                 | 3,20/3,64                      | 4,20/3,18                | 6,85/3,41                | 7,00/3,40                |
| Heating capacity / COP (A +2°C, W 55°C)                              | kW / COP              |                 | 3,20/2,19                      | 4,10/1,99                | 6,20/2,21                | 6,30/2,16                |
| Heating capacity / COP (A -7°C, W 35°C)                              | kW / COP              |                 | 3,30/2,80                      | 4,20/2,59                | 5,60/2,87                | 6,12/2,78                |
| Heating capacity / COP (A -7°C, W 55°C)                              | kW / COP              |                 | 3,20/1,79                      | 3,55/1,71                | 5,25/1,94                | 5,90/1,93                |
| Cooling capacity / EER (A 35°C, W 7°C)                               | kW / EER              |                 | 3,20/3,52                      | 4,50/3,02                | 6,70/3,03                | 7,60/2,90                |
| Cooling capacity / EER (A 35°C, W 18°C)                              | kW / EER              |                 | 3,20/4,85                      | 4,80/4,29                | 6,70/4,72                | 7,60/4,37                |
| Seasonal energy efficiency - Heating Average Climate (W35°C / W55°C) | ETA %                 |                 | 200/132                        | 200/132                  | 193/130                  | 193/130                  |
|  | SCOP                  |                 | 5,07/3,47                      | 5,07/3,47                | 4,90/3,32                | 4,90/3,32                |
| Energy Class Heating Average Climate (W35°C / W55°C) <sup>1)</sup>   | A++ to G              |                 | A++/A++                        | A++/A++                  | A++/A++                  | A++/A++                  |
| Energy Class Heating Average Climate (W35°C / W55°C) <sup>1)</sup>   | A+++ to D             |                 | A+++/A++                       | A+++/A++                 | A+++/A++                 | A+++/A++                 |
| Seasonal energy efficiency - Heating Warm Climate (W35°C / W55°C)    | ETA %                 |                 | 245/155                        | 245/155                  | 227/160                  | 227/160                  |
|  | SCOP                  |                 | 6,20/4,20                      | 6,20/4,20                | 5,75/4,07                | 5,75/4,07                |
| Energy Class Heating Warm Climate (W35°C / W55°C)                    | A++ to G              |                 | A++/A++                        | A++/A++                  | A++/A++                  | A++/A++                  |
| Energy Class Heating Warm Climate (W35°C / W55°C)                    | A+++ to D             |                 | A+++/A+++                      | A+++/A+++                | A+++/A+++                | A+++/A+++                |
| Seasonal energy efficiency - Heating Cold Climate (W35°C / W55°C)    | ETA %                 |                 | 157/99                         | 157/99                   | 164/116                  | 164/116                  |
|  | SCOP                  |                 | 4,00/2,83                      | 4,00/2,83                | 4,18/2,98                | 4,18/2,98                |
| Energy Class Heating Cold Climate (W35°C / W55°C)                    | A++ to G              |                 | A++/A+                         | A++/A+                   | A++/A+                   | A++/A+                   |
| Energy Class Heating Cold Climate (W35°C / W55°C)                    | A+++ to D             |                 | A+++/A+                        | A+++/A+                  | A+++/A+                  | A+++/A+                  |
| <b>Indoor unit 1 zone hydrokit</b>                                   |                       |                 | <b>WH-ADC0309J3E5</b>          | <b>WH-ADC0309J3E5</b>    | <b>WH-ADC0309J3E5</b>    | <b>WH-ADC0309J3E5</b>    |
| <b>Indoor unit 2 zones built-in hydrokit</b>                         |                       |                 | <b>WH-ADC0309J3E5B</b>         | <b>WH-ADC0309J3E5B</b>   | <b>WH-ADC0309J3E5B</b>   | <b>WH-ADC0309J3E5B</b>   |
| Sound pressure   | Heat / Cool           | dB(A)           | 28/28                          | 28/28                    | 28/28                    | 28/28                    |
| Dimension  | HxWxD                 | mm              | 1800x598x717                   | 1800x598x717             | 1800x598x717             | 1800x598x717             |
| Net weight 1 zone / 2 zones  |                       | kg              | 122/130                        | 122/130                  | 122/130                  | 122/130                  |
| Water pipe connector   |                       | Inch            | R 1 1/4                        | R 1 1/4                  | R 1 1/4                  | R 1 1/4                  |
| A class pump   | Number of speeds      |                 | Variable Speed                 | Variable Speed           | Variable Speed           | Variable Speed           |
|  | Input power (Min/Max) | W               | 30/120                         | 30/120                   | 30/120                   | 30/120                   |
| Heating water flow (ΔT=5 K, 35°C)                                    |                       | L/min           | 9,20                           | 14,30                    | 20,10                    | 25,80                    |
| Capacity of integrated electric heater                               |                       | kW              | 3,00                           | 3,00                     | 3,00                     | 3,00                     |
| Recommended fuse   |                       | A               | 16/16                          | 16/16                    | 25/16                    | 25/16                    |
| Recommended cable size, supply 1 / 2                                 |                       | mm <sup>2</sup> | 3x1,5/3x1,5                    | 3x1,5/3x1,5              | 3x2,5/3x1,5              | 3x2,5/3x1,5              |
| Water volume   |                       | L               | 185                            | 185                      | 185                      | 185                      |
| Maximum water temperature  |                       | °C              | 65                             | 65                       | 65                       | 65                       |
| Material inside tank   |                       |                 | Stainless steel                | Stainless steel          | Stainless steel          | Stainless steel          |
| Tapping profile according EN16147                                    |                       |                 | L                              | L                        | L                        | L                        |
| DHW Tank ERP Average climate efficiency rating <sup>2)</sup>         | A to G / A+ to F      |                 | A/A+                           | A/A+                     | A/A+                     | A/A+                     |
| DHW Tank ERP Warm climate efficiency rating <sup>2)</sup>            | A to G / A+ to F      |                 | A/A+                           | A/A+                     | A/A+                     | A/A+                     |
| DHW Tank ERP Cold climate efficiency rating <sup>2)</sup>            | A to G / A+ to F      |                 | A/A                            | A/A                      | A/A                      | A/A                      |
| DHW Tank ERP Average climate ETA / SCOP                              | ETA % / SCOP          |                 | 132/3,30                       | 132/3,30                 | 120/3,00                 | 120/3,00                 |
| DHW Tank ERP Warm climate ETA / SCOP                                 | ETA % / SCOP          |                 | 155/3,88                       | 155/3,88                 | 140/3,50                 | 140/3,50                 |
| DHW Tank ERP Cold climate ETA / SCOP                                 | ETA % / SCOP          |                 | 99/2,48                        | 99/2,48                  | 99/2,47                  | 99/2,47                  |
| <b>Outdoor unit</b>  |                       |                 | <b>WH-UD03JE5</b>              | <b>WH-UD05JE5</b>        | <b>WH-UD07JE5</b>        | <b>WH-UD09JE5</b>        |
| Sound power part load  | Heat                  | dB              | 55                             | 55                       | 59                       | 59                       |
| Sound power full load  | Heat / Cool           | dB              | 60/61                          | 64/64                    | 68/67                    | 69/68                    |
| Dimension / Net weight   | HxWxD                 | mm / kg         | 622x824x298/37                 | 622x824x298/37           | 795x875x320/61           | 795x875x320/61           |
| Refrigerant (R32) / CO <sub>2</sub> Eq.                              |                       | kg / T          | 0,9/0,608                      | 0,9/0,608                | 1,27/0,857               | 1,27/0,857               |
| Pipe diameter  | Liquid / Gas          | Inch (mm)       | 1/4 (6,35) / 1/2 (12,70)       | 1/4 (6,35) / 1/2 (12,70) | 1/4 (6,35) / 5/8 (15,88) | 1/4 (6,35) / 5/8 (15,88) |
| Pipe length range / Elevation difference (in/out)                    |                       | m / m           | 3 - 25/20                      | 3 - 25/20                | 3 - 50/30                | 3 - 50/30                |
| Pipe length for additional gas / Additional gas amount               |                       | m / g/m         | 10/20                          | 10/20                    | 10/25                    | 10/25                    |
| Operation range  | Outdoor ambient       | °C              | -20 ~ +35                      | -20 ~ +35                | -20 ~ +35                | -20 ~ +35                |
| Water outlet   | Heat / Cool           | °C              | 20 ~ 60/5 ~ 20                 | 20 ~ 60/5 ~ 20           | 20 ~ 60/5 ~ 20           | 20 ~ 60/5 ~ 20           |

### Accessories

|                         |                                 |
|-------------------------|---------------------------------|
| <b>PAW-ADC-PREKIT-1</b> | Pre installation kit for piping |
| <b>PAW-ADC-CV150</b>    | Decorative magnetic side cover  |
| <b>CZ-NS4P</b>          | Additional functions PCB        |

### Accessories

|                        |  |
|------------------------|--|
| <b>CZ-TAW1</b>         | Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN |
| <b>PAW-A2W-RTWIRED</b> | Room thermostat  |

EER and COP calculation is based in accordance to EN14511. Sound pressure measured at 1m from the outdoor unit and at 1,5m height. Heating sound pressure measured at +7°C (heating water at 55°C). Insulated tested under EN12897.

1) Scale from A++ to G and from A+++ to D from 26th September 2019. 2) Scale from A to G and from A+ to F from 26th September 2019.

This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility. \* Available in Spring 2019.



# AQUAREA

## Aquarea High Performance: Energy saving

Aquarea High Performance delivers outstanding efficiency in heating and domestic hot water. It is easy to maintain thanks to the built-in devices such as the water filter, water flow sensor and connectivity to the Smart Cloud remote service. It is also able to operate as low as -23°C.

**5,33**  
COP

**-23°C**

OPERATES DOWN TO EXTREME  
OUTDOOR TEMPERATURE

**60°C**

HOT WATER SUPPLY

**A CLASS**  
WATER PUMP

AUTO SPEED

**A++**

ErP 55°C  
Scale from A+++ to D

**A+++**

ErP 35°C  
Scale from A+++ to D

**A+**

DHW  
Scale from A+ to F

**EASY  
MAINTENANCE**

EASY MAINTENANCE

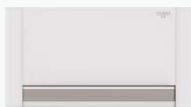
**R32**



Refrigerant gas R32. The systems using R32 refrigerant are more environmentally friendly than other refrigerants like R22 and R410A. — Inverter compressor provides more precise temperature control and keeps the ambient temperature constant with lower energy consumption and quieter operation. — DHW. With Aquarea you can also heat your domestic hot water at a very low cost with the optional hot water cylinder. — Water filter with magnet. Easy access & fast clip technology for J Generation. — Reaches water outlet temperature up to 60°C — Water stop valve. — Water flow sensor Renovation.

Our Aquarea Heat Pumps can be connected to an existing or new boiler for optimum comfort even at very low outdoor temperatures. — Advanced control. Remote controller with full dotted 3,5" wide back light screen. Menu with 17 available languages easy to use for installer and user. Included on J Generation. — Internet control (Optional). A next generation system providing a user-friendly remote controller of air conditioning or Heat Pump units from everywhere, using a simple Android or iOS smartphone, tablet or PC via internet. — Connectivity. The communication port can be integrated into the indoor unit and provides easy connection to, and control of, your Panasonic Heat Pump to your home or building management system. — GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc awarded with the prestigious Good Design Award 2017.

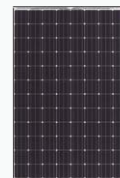
## Other accessories for Aquarea All in One:



High efficient radiators for heating and cooling



Versatile and efficient fan coil for heating and cooling



Heat Pump + HIT Photovoltaic solar panel

SG Ready: Thanks to Aquarea HPM, Aquarea range (Bi-bloc and Mono-bloc) is holding the SG Ready Label (Smart Grid Ready Label), given by Bundesverband Wärmepumpe (German Heat Pump Association). This Label shows the real capacity of Aquarea to be connected in an intelligent grid control. MCS Certificate number: MCS HP0086.\*



# Panasonic

To find out how Panasonic cares for you, log on to: [www.aircon.panasonic.eu](http://www.aircon.panasonic.eu)

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heating & cooling solutions