

Model		PD30-CRL-DC-MD	PD40-CRL-DC-MD/S	PD40-CRL-DC-MD	PD50-CRL-DC-MD	PD60-CRL-DC-MD
Heating	Heating Capacity Range(kw)	3.2-8.0	4.8-12.0	4.8-12.0	7.3-18.0	8.8-22.0
	Heating Power Input Range(kw)	0.61-1.88	0.93-2.88	0.93-2.88	1.36-4.14	1.67-5.15
	Cop Range	4.26-5.23	4.17-5.18	4.17-5.18	4.35-5.36	4.27-5.28
Cooling	Cooling Capacity Range (kW)	2.5-6.2	3.3-8.2	3.3-8.2	5.1-12.6	6.0-15.0
	Cooling Power Input Range(kW)	0.79-2.27	1.06-3.11	1.06-3.11	1.58-4.53	1.88-5.49
	EER Range	2.73-3.15	2.64-3.10	2.64-3.10	2.78-3.23	2.73-3.19
DHW	Heating Capacity Range(kw)	2.9-7.2	4.3-10.8	4.3-10.8	6.0-15.0	7.4-18.5
	Heating Power Input Range(kw)	0.64-1.97	0.97-3.03	0.97-3.03	1.29-4.00	1.63-5.05
	Cop Range	3.65-4.54	3.56-4.45	3.56-4.45	3.75-4.64	3.66-4.55
Erp Level (35°C)		A+++	A+++	A+++	A+++	A+++
Erp Level (55°C)		A++	A++	A++	A++	A++
Power Supply		230V/1Ph/50Hz/60Hz			380V/3Ph/50-60Hz	
Diameter of pipe (mm)		DN25	DN25	DN25	DN25	DN25
Water Flow(m ³ /h)		1.2	1.5	1.5	2.5	2.8
Water Pressure Drop (max) kPa		30	35	35	40	45
Water pump type		Adjustable DC inverter				
Max water head(m)		9	9	9	12	12
Auxiliary electric heater(kW)		3	3	3	3	3
Expansion vessel(L)		2	5	5	5	5
Safety valve(MPa)		0.3	0.3	0.3	0.3	0.3
Noise dB(A) at 1m		≤45	≤48	≤48	≤53	≤55
Net Weight (kg)		105	115	115	160	165
Net Dimension (L/W/H) mm		1150×460×820	1150×460×960	1150×460×960	1260×480×1060	1260×480×1060
Operation Ambient Temp. (°C)		-30-43				
Operating water temperature (°C)		20-55(DHW)				
Operating water temperature (°C)		20-50(Heating)				
Operating water temperature (°C)		7-35(Cooling)				
Compressor		Panasonic				
Circulation Pump		SHIMGE				
Remark						
Heating working condition: Inlet water temperature 30°C, Outlet water temperature 35°C, Dry bulb temperature 7°C, Wet bulb temperature 6°C.						
Cooling working condition: Inlet water temperature 12°C, Outlet water temperature 7°C, Dry bulb temperature 35°C, Wet bulb temperature 24°C.						
DHW working condition: Inlet water temperature 15°C, Outlet water temperature 55°C, Dry bulb temperature 7°C, Wet bulb temperature 6°C.						

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Panyu District Guangzhou 511430, China (Export Sales Center)

Tel : +86-20-31563161

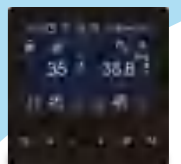
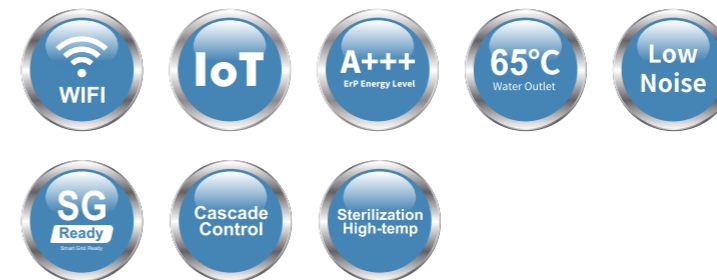
Mail : info@poolworldhp.com

Global after-sales : technical@poolworldhp.com

Web : www.poolworldheatpump.com

Hybrid Series

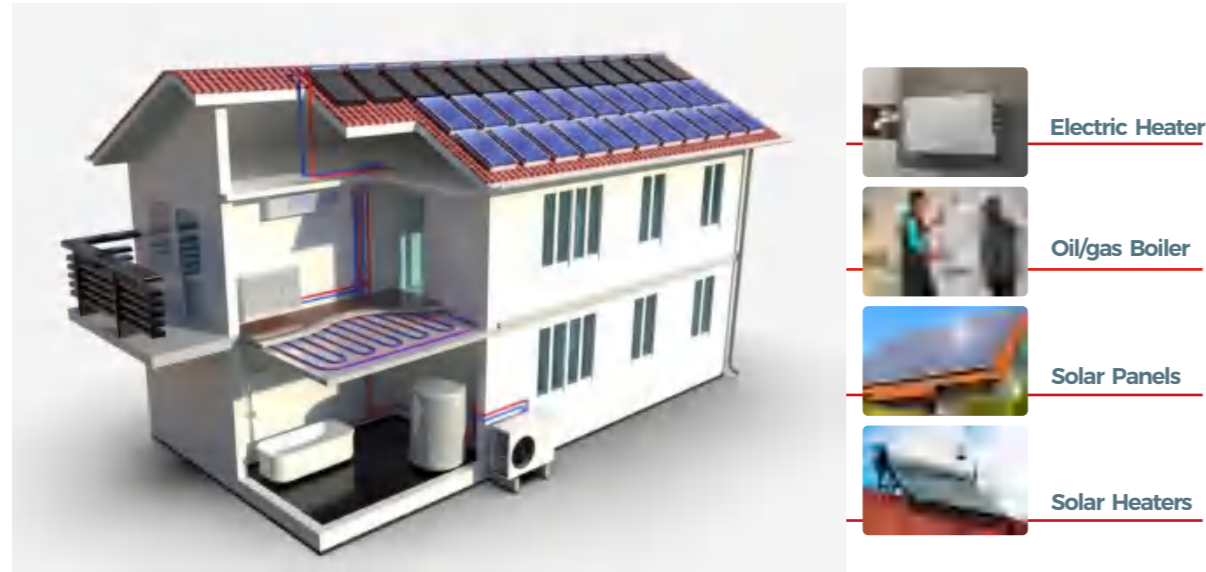
R32 inverter heat pump can be compatible with E-boilers and solar systems!



SOLUTIONS | Heating
Cooling
DHW

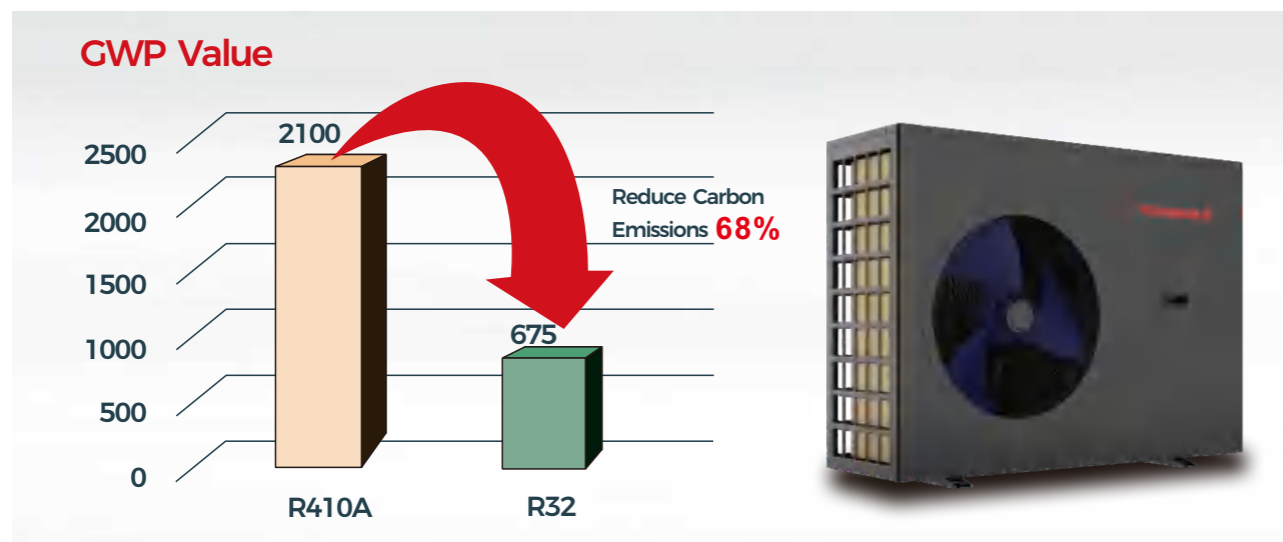
HYBRID SERIES

Hybrid Series full DC inverter heat pump is a widely used and powerful unit that can be connected to a solar system and boiler system. Combined with the vapor injection technology, the unit can operate normally at -30°C ambient temps and output 65°C(Max.) hot water stably, providing users with a stable and reliable heating/cooling guarantee throughout the year.



◆ R32 ECO-FRIENDLY REFRIGERANT

Compared to the R410A with a GWP of 2100, the R32 has a GWP of only 675 and zero ODP. Moreover, it has higher heat exchange efficiency and less refrigerant charge, which not only reduces carbon emissions but also saves costs for users. It is one of the best choices to replace R410A products.



◆ SUPER SILENT

The space where the compressor is located adopts a fully enclosed design, and the entire whole is treated with suction and sound insulation; The compressor is wrapped with sound-absorbing material, and the triple noise reduction measures of sound absorption, sound insulation, and buffering ensure low noise operation.



◆ ENERGY EFFICIENCY CLASS A+++ AT 35°C, A++ AT 55°C

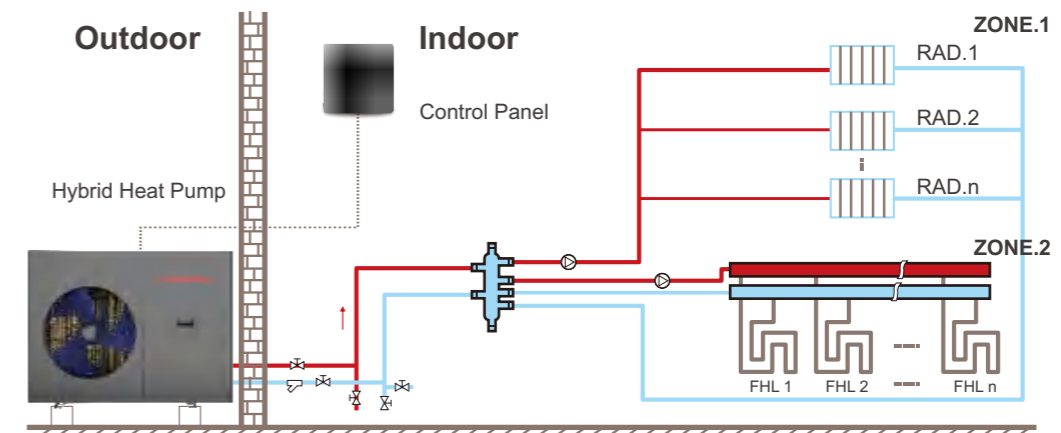
The higher the energy efficiency level, the more energy saving. Hybrid series heat pump has passed the TUV test, and the ERP report shows that its energy level can reach A+++ at 35°C, and the COP is as high as 5.36.



◆ 2 ZONES TEMPERATURE CONTROL

There are 2-zone temperature control options, users can set the temperature of different zones according to the actual application scenario, making the zone temperature control more flexible and accurate.

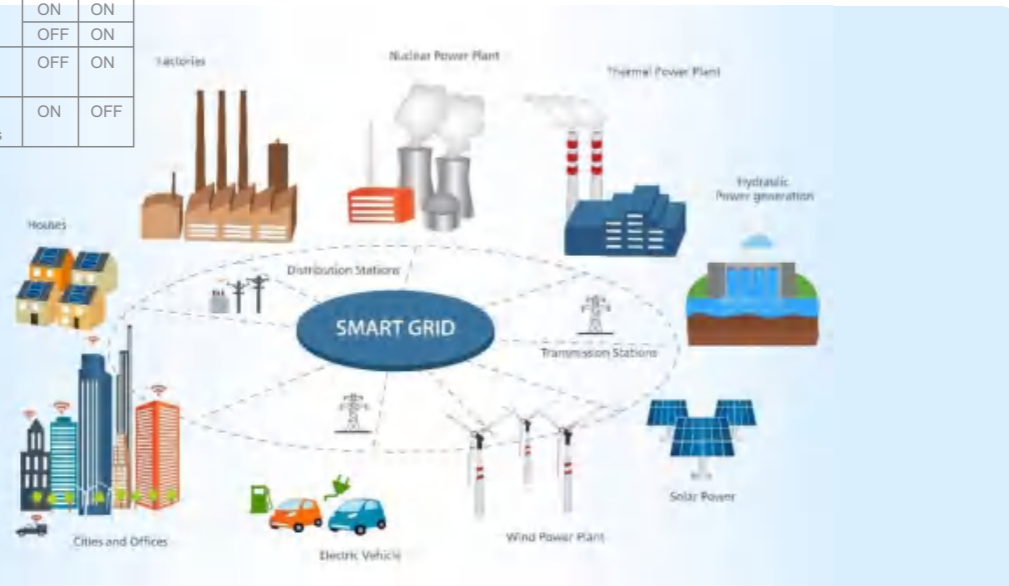
- Single-zone water temperature
- Single-zone room temperature
- Dual-zone water temperature
- Dual-zone water temperature + room temperature



◆ SMART GRID READY(SG-READY)

The SMART GRID is connected to the heat pump through the SG and EVU switch interfaces. The heat pump judges the power status of the grid through the status of the SG and EVU interfaces. According to different grid conditions, the heat pump automatically adjusts the operation mode to achieve energy saving.

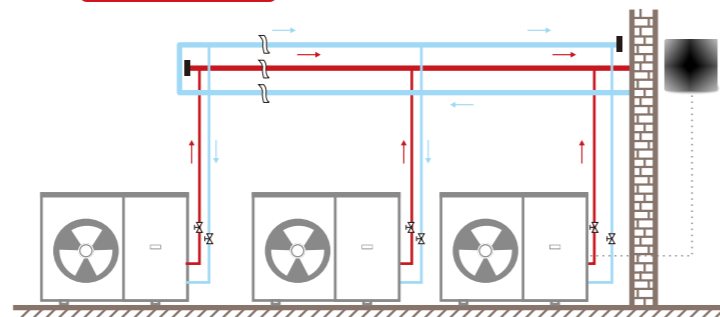
J5--SMART GRID		
Operating State	SG	EVU
Increased operation	ON	ON
Free Electricity Status (PV)	OFF	ON
Normal operation	OFF	ON
Low Power Consumption Status	ON	ON
Decreased operation	ON	OFF
Peak Power Consumption Status	ON	OFF



◆ CASCADE CONTROL FUNCTION(RS485)

Integrated terminal load control signal terminals, such as external circulation pump, heating auxiliary electric heating, water tank auxiliary electric heating, electromagnetic three-way valve, electric boiler and other external heat sources that can be switched on and off, anti-freezing electric heating, lower return water pump, solar water pump, mixed water pump, defrost indication, fault indication.

Max.8units



◆ BUILDING MANAGEMENT SYSTEM (BMS)

The central control in this system is a highlight. The customer provides the host computer communication port to connect the heat pump to the customer's BMS control center, and controls the heat pump through the RS485 communication protocol. The format, baud rate and communication address of the communication protocol can be set in the parameters of the system.



▶ PANASONIC EVI INVERTER COMPRESSOR

Compared with ordinary compressors, under ultra-low temperature conditions, the capacity of EVI compressors is increased by **10-30%**, and the energy efficiency is increased by **10%-20%**.

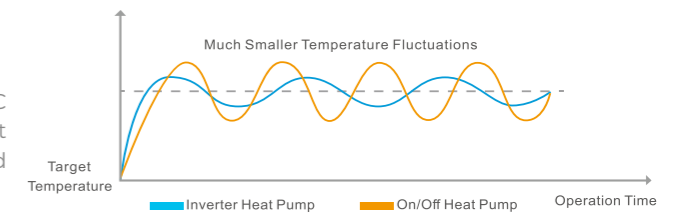


- Durable
- Silent
- Energy-saving
- Powerful Heating

One of the key features that provide Hybrid Series heat pumps with their powerful performance is our highly efficient compressor. Combined with the vapor injection technology, it can ensure that the unit operates efficiently and stably in extremely cold regions of -30°C and outputs 65°C(Max.) hot water.

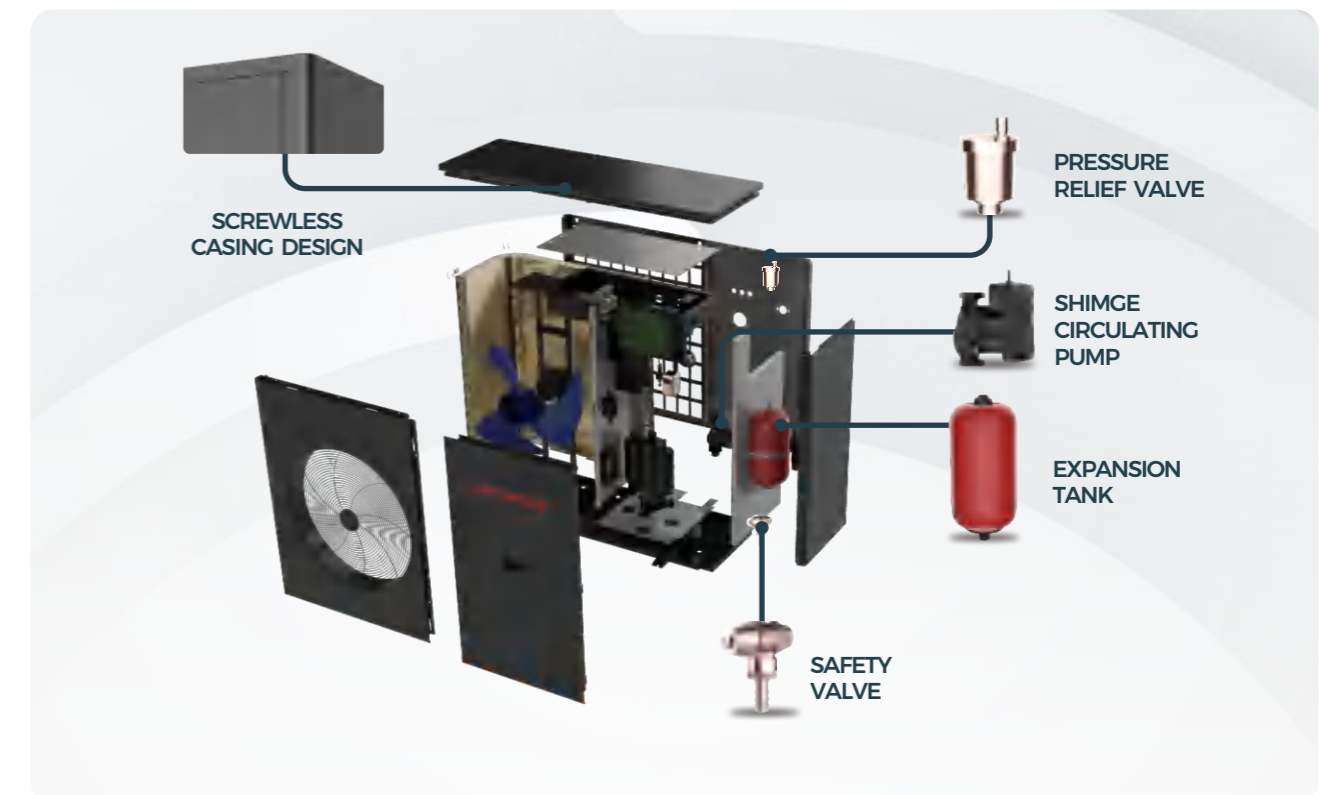
◆ DC INVERTER TECHNOLOGY

All the units are equipped with DC compressor, DC fan motor, DC pump, which allows precise control of motor speed, ensuring that only the power necessary to perfectly match the real load is used and energy saving.



▶ MAIN COMPONENTS

All the main parts of the Hybrid Series heat pump, including wires, controllers, etc. are made by well-known manufacturers, with first-class configuration, more stable and reliable products, and lower failure rate.



SMART HOME CONTROL SOLUTIONS

The new controller has a large 4-inches and bright color display, 6keys smart touch control, and 13 language options. It can be installed anywhere in your house and allows you to set the different temps and different modes in a different zone.



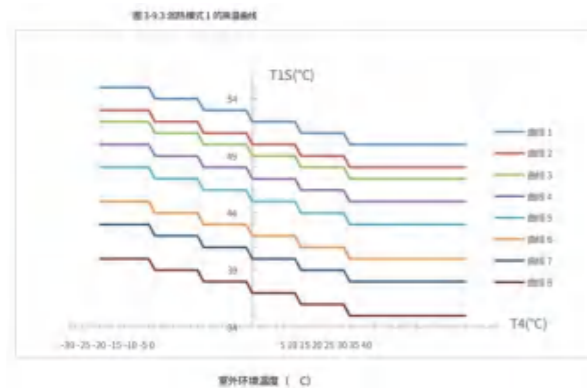
4 Inches Touch Display

13 Language Options

S Smart Temp Adjustment

P Precise Temp Control

♦ AUTOMATICALLY ADJUST TARGET TEMP SETTING



There are 16 temperature curves(8 high temps curves+8 low temp curves) and 1 custom curve inside the display, users can select a suitable temps curve or custom curve according to the local weather. After the curve is set, the unit can automatically set different target temperatures according to different ambient temperatures, the user experience will be better, and users do not need to operate frequently.

♦ FLOOR PROTECTION FUNCTION



- ♦ Preheating temperature
- ♦ Preheating interval
- ♦ Preheating duration

"Preheating" function can prevent the floor from being deformed and damaged due to excessive heating temperature differences during the heating period. "Timed Drying" function can heat the floor regularly to prevent the floor from regaining moisture.

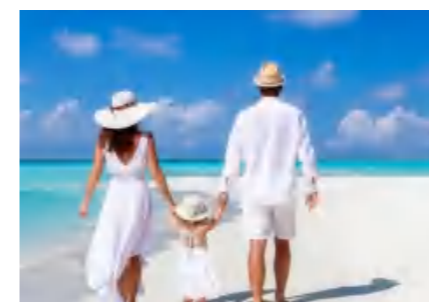
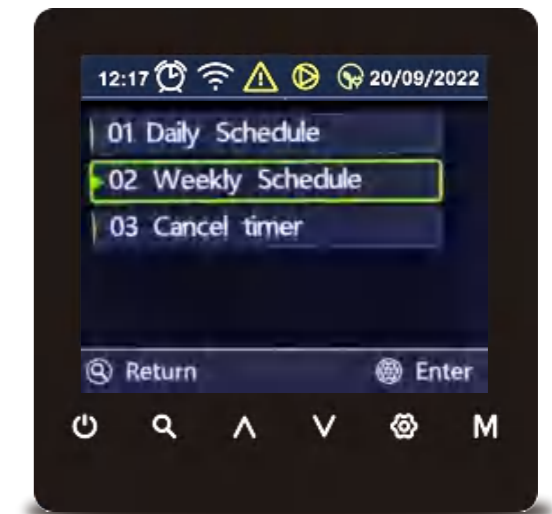
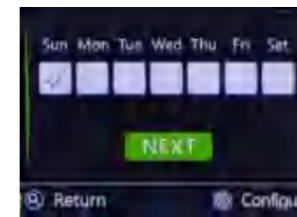
♦ TIMER SETTING

The user can set the Daily Schedule and Weekly Schedule for the unit according to the actual needs and can choose the specific start-end time, operation mode, and temperature setting. When the timing is not required, the timing function can be canceled anytime and anywhere.

Daily Schedule



Weekly Schedule

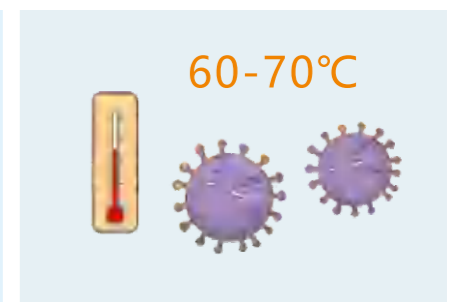


HOLIDAY MODES

"Holiday Away" Mode and "Holiday Home" Mode make life convenient and help users save more energy consumption.

INTELLIGENT TEMPERATURE RECORDS

The controller has a built-in temperature sensor, which can detect and record the room temperature without using any sensor, adjust the temperature intelligently, reduce energy consumption, and achieve very good temperature uniformity.



DISINFECT FUNCTION

The disinfect function is used to kill legionella by 60-70°C water to ensure the health and safety.

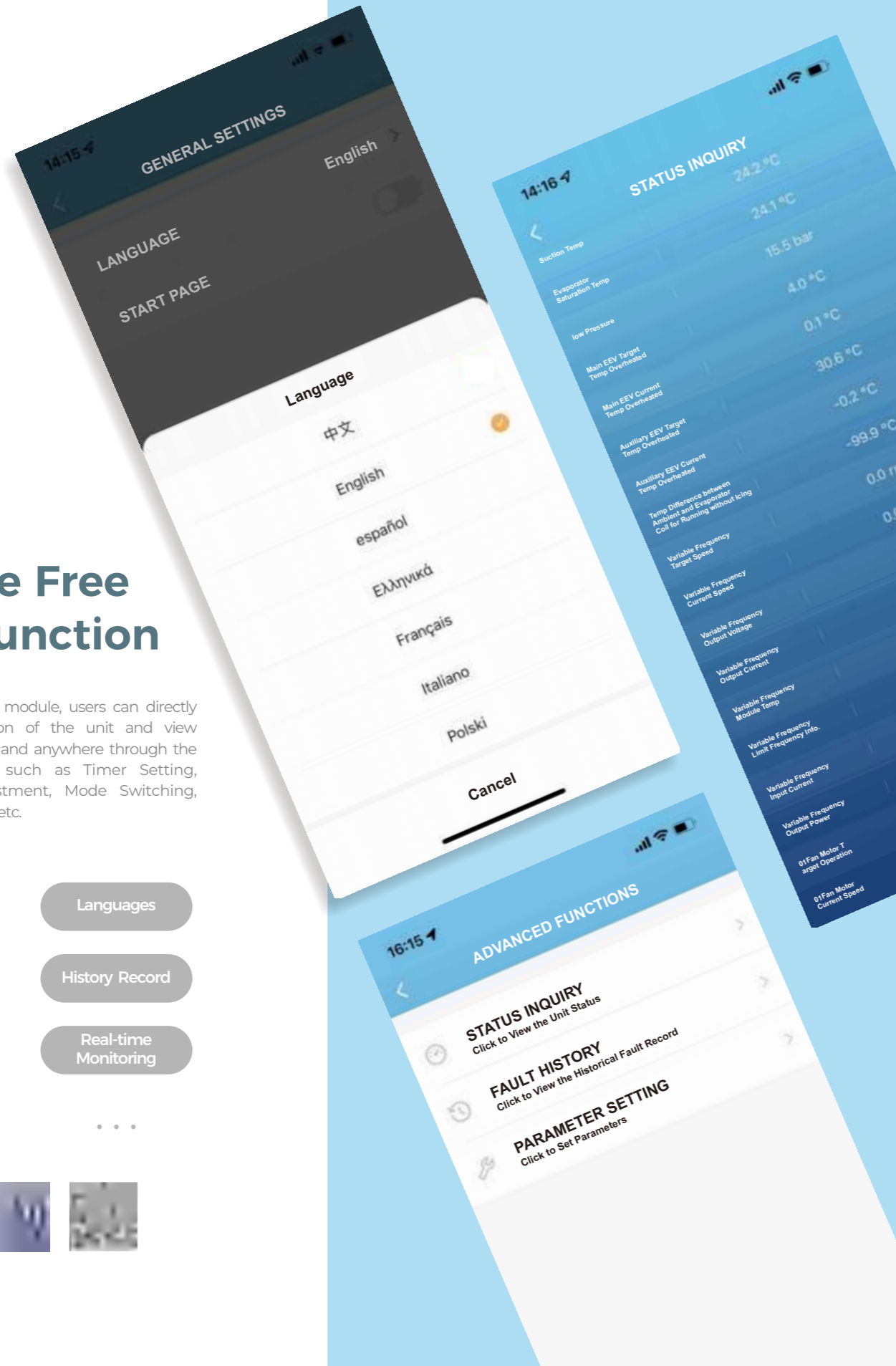
▶ REMOTE CONTROL SOLUTIONS



Remote Free Wi-fi Function

With a built-in WIFI module, users can directly control the operation of the unit and view parameters anytime and anywhere through the "Smart Life" App, such as Timer Setting, Temperature Adjustment, Mode Switching, Language Selection, etc.

- Modes
- Languages
- Parameters
- History Record
- Timer
- Real-time Monitoring
- Operating Status



IOT CUSTOMER MANAGEMENT PLATFORM

POOL WORLD's IoT customer management platform can effectively save labor costs for dealers. It can be connected with WIFI or DUT to realize remote monitoring of data and record all the operating parameters of the units and synchronize it to the management background of dealers and manufacturers. If the heat pump has an error report, the dealer can quickly provide users with the best solutions according to this report.

Business Management

- Project Management
- Device Management
- Fault Management
- User Management
- Authority Management
- Product Management
- Institution Management
- Distributor Management

Data Statistics and Analysis

- Project Statistics
- Device Statistics
- Fault Statistics
- Project Monitoring View
- Data Statistics

Real-time Monitoring

- Project Monitoring View
- Device List
- Monitoring Page

After-sales Management

- Customer Complaint
- Customer Maintenance
- Order Management

