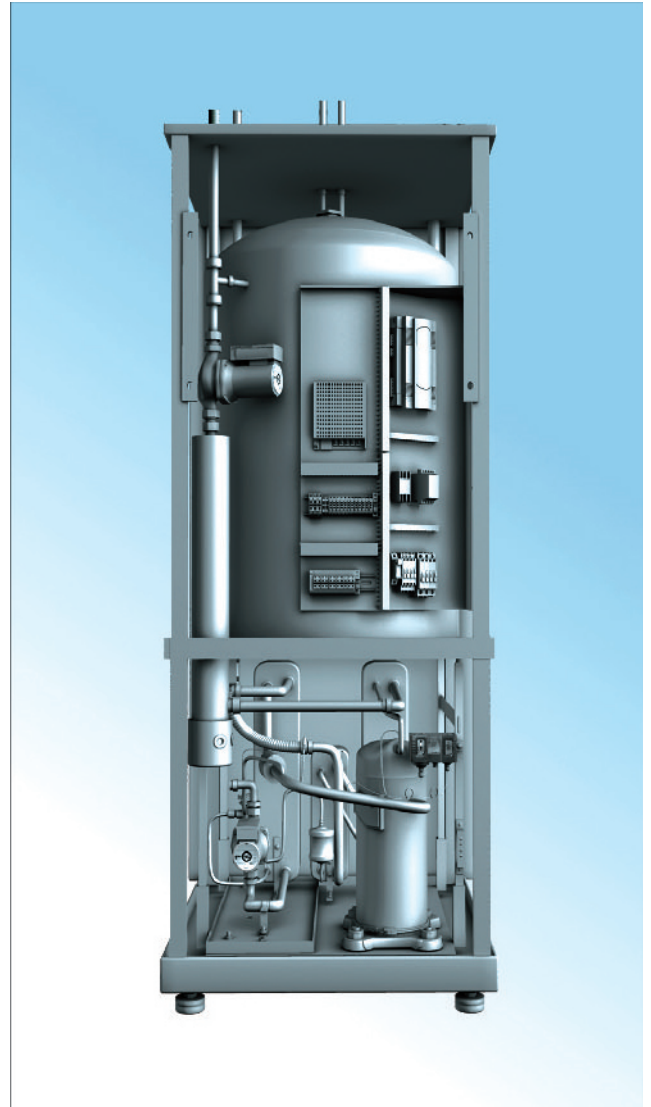


# GSHP Series

High efficient with geothermal heat source, no worries of your energy costs, saving your electricity bill up to 75%

## FEATURES:

- Large LED display control panel, easily read and operation
- Scroll compressor
- Compact in size with a built-in water tank up to 180l
- Soft starter
- Electrical additional heating up to 9kw
- Timer setting
- Heating with temperature compensation curve by outdoor sensor
- Water temperature to 65°C
- Visible alarming signal
- Low noise (compressor packed with thick insulation material)
- Free cooling function
- Heating water pump and brine pump are the standard outfits
- GSM remote control (optional)
- 220v, single phase available
- Almost zero maintenance needed after installation



## Compact in design and intelligent in control



GSHP heat pump is an extremely economical and reliable heat pump which is available in the output 4-16kW (up to 25kW incl. electric element). By absorbing the energy from the ground, rocks or lakes, its coefficient of performance (COP) can reach to 4.6 at 0°C incoming cooling medium temperature and 35°C outgoing medium temperature. The high efficient heat pump makes your saving on electricity as high as 75%.

The large LED display panel controller makes your operation easy and convenient. The optional remote function will help you to monitor and supervise your heat pump at anytime, you can send instruction of setting to your heat pump wherever you are via internet or GSM.

The most advanced technology of heating temperature curve, makes the heat pump more comfortable and energy saving. The heat pump supply the heating to your house depends on the outdoor

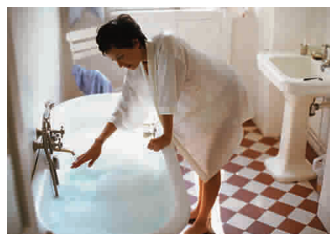
temperature.

GSHP can produce the water temperature to 65°C, it is the ideal heating appliance replacing the old oil or gas burned equipments with low emission and low cost of energy.

GSHP also provides cooling function by sending the cooling water from the under ground loops to your indoor air ventilation or floor pipe system, the compressor doesn't work in this function, only the brine pump works for brine circulation with very low electricity consumption.

The unit can be connected to a low temperature distribution system such as radiator, convectors, and floor heating. The double shelled stainless steel water tank will ensure it can be used for at least 30 years.

The updated GSHP heat pump has been the third generation product of Smart. Whatever from the appearance and inside technology, it has become a leading product in the market.



# Key Components

Most Updated Control — Latest Innovative Technology



The large LED display panel controller makes your operation easy and convenient. The running states and main parameters can be read clearly on the display. Remote control via GSM or internet will help you to monitor or change the setting of your heat pumps wherever you are.

## FUNCTIONS



**Maintenance**  
The menu is designed for maintenance.



**Digital input & output**  
The menu shows digital input and output state.



**Setpoint**  
The menu shows the setpoint of the temperature and time, etc.



**Program**  
The menu is supplied to the professional technician to adjust setpoint parameters.



**Manufacturer**  
The menu is only supplied to the manufacturer to adjust setpoint parameters.



**Information**  
The menu shows information about the controller.



**Alarm History**  
The menu shows the historical record of unit fault.



**Clock**  
This is clock & timer menu, the date, clock and weekly timer can be set or adjusted here.



**Remote Management & monitoring(Optional)**

# Technical Data



Model GSHP	GSHP06N3	GSHP08N3	GSHP10N3	GSHP14N3	GSHP16N3	
Heating capacity 0/35°C / 0/50°C	kW	5.8 / 5.3	8.5 / 7.5	9.8 / 8.6	13.8 / 13.5	16.7 / 16.5
Rated input(compressor)	kW	1.24	1.85	2.23	3.06	3.8
Coefficient Of Performance(COP) at 0/35°C		4.7	4.6	4.4	4.5	4.4
Coefficient Of Performance(COP) at 0/50°C		3.15	3.18	3.16	3.18	3.2
Volume of hot water tank	l	180	180	180	180	180
Auxiliary electric heater	kW	3/6/9				
Power		3N 50Hz 400V				
Refrigerant/Quantity		R407C/1.1kg	R407C/1.25kg	R407C/1.6kg	R407C/1.7kg	R407C/1.8kg
Max temp. heating medium	°C	55				
Noise	dBA	42~47				
Enclosure class		IPX1				
Net weight	kg	300			320	
Size(L*D*H)	mm	640*740*1705				

Model GSHP	GSHP06N1	GSHP08N1	GSHP10N1	GSHP14N1	GSHP16N1	
Heating capacity 0/35°C / 0/50°C	kW	5.8 / 5.3	8.5 / 7.5	9.8 / 8.6	13.8 / 13.5	16.7 / 16.5
Rated input(compressor)	kW	1.24	1.85	2.23	3.06	3.8
Coefficient Of Performance(COP) at 0/35°C		4.7	4.6	4.4	4.5	4.4
Coefficient Of Performance(COP) at 0/50°C		3.15	3.18	3.16	3.18	3.2
Volume of hot water tank	l	180	180	180	180	180
Auxiliary electric heater	kW	3				
Power		1N~50Hz 220V				
Refrigerant/Quantity		R407C/1.1kg	R407C/1.25kg	R407C/1.6kg	R407C/1.7kg	R407C/1.8kg
Max temp. heating medium	°C	55				
Noise	dBA	42~47				
Enclosure class		IPX1				
Net weight	kg	300			320	
Size(L*D*H)	mm	640*740*1705				

- In accordance with EN14511 for cooling medium in/heating medium out 0/35°C and 0/50°C
- Max water temp. can reach 70°C by auxiliary heater