



Q V A N T U M



#### QVANTUM QG

## Water-to-water heat pump

The Quantum QG is a high-efficiency ground source heat pump delivered as a compact unit with a built-in source-side pump.

It is ideally suited for communal ground source heat pump systems, where one QG7 or QG14 unit is installed per property and all dwellings are connected to a shared borehole network. This approach reduces the overall number of boreholes required through diversity, making it a cost-effective solution for multi-property developments.

#### HEATING EFFECT:

7kw

14kw

The QG delivers heating, cooling, and domestic hot water in a single integrated unit.



**Thermal battery**  
Featuring an accumulator tank that acts as a thermal battery with storage of up to 90°C.



**FlexReady® functionality and API connectivity**  
It optimises energy use by operating during periods of low electricity prices or renewable surplus and is prepared for flexibility markets.



**Heat Exchanger**  
Domestic hot water is produced instantly via a heat exchanger, eliminating legionella risk and simplifying water quality requirements.

Like all Quantum heat pumps, the QG is designed to be as easy to service and maintain as possible.

### High degree of integration

Integrated circulation pumps, hydraulic components, control system, not just space-saving but also makes installation simple and quick.

### Refrigeration circuit

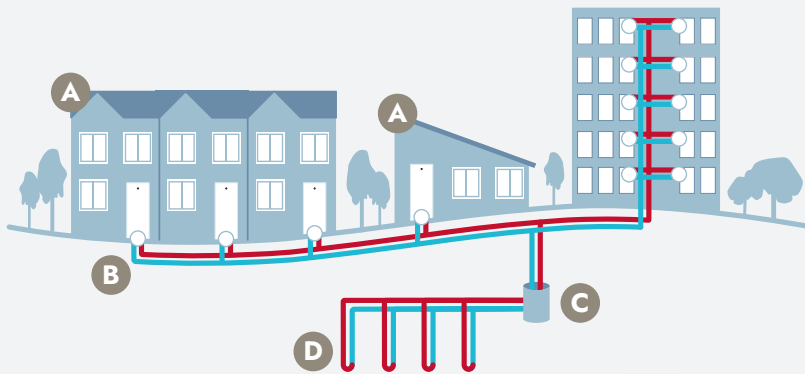
Hermetically sealed ultra low refrigerant volume – eliminating the need for leak detection or ventilation measures.

### Servicing

Removable compressor module – Replaced and refurbished at our factory, with no need for refrigeration maintenance on site.

## Typical applications

Suitable for both houses and apartments, retrofits and new build shared ground loop networks, as well as ground source projects for individual homes



- A Each dwelling has a water-source heat pump to provide heating and hot water.
- B All dwellings are connected to a shared ambient loop.
- C Boreholes are connected to dwellings via a manifold.
- D Vertical boreholes collect renewable, low grade heat from the ground.

## Features & benefits

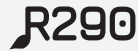
- Ideal solution for communal ground source heat pump systems and individual ground source projects
- Provides heating, cooling and domestic hot water
- Integrated thermal store
- Instantaneous domestic hot water for comfort and efficient legionella prevention
- Over-the-air updates for futureproof connectivity
- Pre-plumbed packaged system with no outdoor unit for faster installation
- Compact footprint makes it suitable for retrofit and new-build
- Easy to use Quantum app also supports remote diagnostics
- Available as 7kW and 14kW
- Active cooling available as standard, passive cooling module option can be supplied built in to the QG7



Product's efficiency class room heating, 35/55°C



Product's efficiency class and load profile for hot water



Natural refrigerant R290.

TECHNICAL DATA		QG-7	QG-14
<b>Heating efficiency and capacity</b>			
The product's efficiency class room heating, average climate 35 / 55 °C		A+++ / A+++	A+++ / A+++
Efficiency class hot water heating/declared tap profile		A+ / XL	A+ / XL
SCOP <sub>(EN14825)</sub> average climate, 35°C/55°C		4.96 / 3.97	4.96 / 3.97
Nominal heating output <sub>(Pdesignh)</sub>	kW	6	12
Operationa range source side	°C	-10 to +40	
Operational range sink side	°C	20 to 80	
<b>Electrical data</b>			
Rated voltage	V	400V 3N ~ 50Hz / 230V 1N ~ 50Hz	
Max power immersion heater	kW	5.0 kW (1+2+2)	
<b>Sound data</b>			
Sound power level <sub>(LW(A)) EN12102</sub>	dB(A)	39	41
<b>Hot water efficiency and capacity</b>			
Amount of domestic hot water 40°C <sub>EN16147*</sub>	l	255	275
Max amount of domestic hot water (40 °C)**	l	350	
<b>Refrigerant circuit</b>			
Type of refrigerant (GWP)		R290 (0.02)	
CO <sub>2</sub> equivalent	kg	0.003kg	0.006kg
Refrigerant quantity	g	152	2 × 152
<b>Weight and dimensions</b>			
Dimensions (W x D x H)	mm	600 × 620 × 1850	
Weight	kg	180 / 355	237 / 412

\*At tap flow rate 10 l/min and an incoming cold water temperature of 10°C.

\*\* When operating mode Additional hot water is active.

### QVANTUM UK

#### London Office

Unit 5, Floor 3  
25 Christopher Street  
London  
EC2A 2BS  
0330 822 6643 | Qvantum.com/uk



# QVANTUM