GENESIS™

The Next Generation Heat Pump™

- Full Inverter Air to Water Pool Heat Pump
- Whisper quiet operation
- In Built WIFI control
- ISO9001, ISO14001, ISO18001

Green Star SOLUTIONS

Sustainable Product

Sustainable Project

SPASA WESTERN AUSTRALIA
SWIMMING POOL & SPA ASSOCIATION
SUPPLIER MEMBER

Why Choose The Genesis™ Next Generation Heat Pump™

Genesis™ Next Generation Heat Pump™ operates with its unique Inverter technology exchanging heat in the surrounding air with the pool water through the continuous circulation of the R32 next generation refrigerant, that efficiently carries more heat and has a much lower environmental impact. Our inverter technology constantly measures the pools water temperature and adjusts the speed of the compressor and fan to run at the most efficient setting.
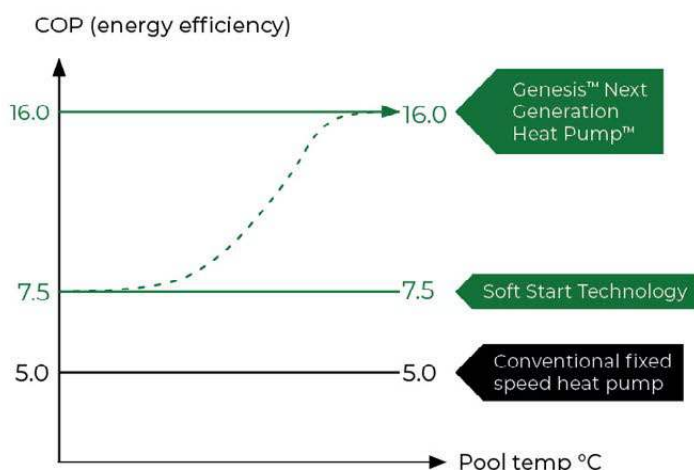
The working R32 medium is completely separated from the pool water and does not cause any secondary pollution, exchanging up to 50% more energy via the spiraled titanium exchanger. Coupled with our unique DC inverter technology, saving up to 50% on running costs, combined with our whisper quiet operation Genesis™ Next Generation Heat Pumps™ are increasingly loved and demanded by our customers.

At startup the Genesis™ Next Generation Heat Pump™ will slowly increase the compressor and fan speed as required, whilst at the same time automatically determine how much electrical energy is required to maintain the pools temperature. As the pool water temperature gets closer to the set point, the Genesis™ Next Generation Heat Pump™ will start reduce the speed of the compressor and fan, greatly reducing energy consumption.
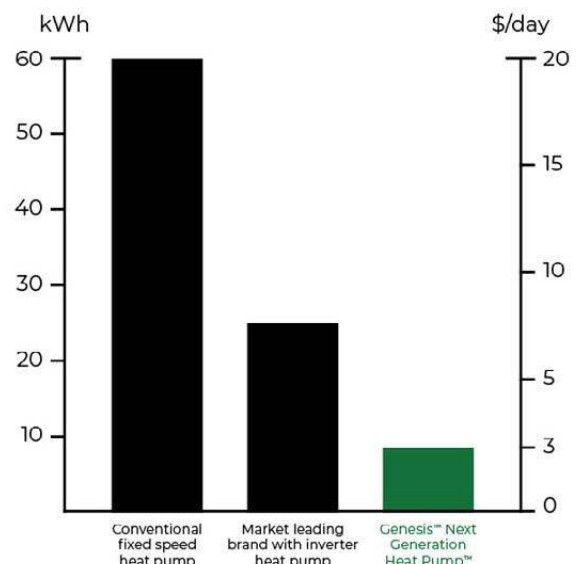
Power Savings

The Genesis™ Next Generation Heat Pump™ has a coefficient of Performance (COP) of 16 (at air 26°C, Humidity 80%, Water 26°C), this means that for every 1KW of electricity consumed The Genesis™ Next Generation Heat Pump provides up to 16kw of Heat in return. Combine our Genesis™ Next Generation Heat Pump™ with a pool blanket and your roof top solar power for the perfect sustainable solution.

Graph based on a typical day of heating (15 hours of operation at following conditions: Air 26°C, Humidity 80%)

Power consumption per day

COP (energy efficiency)

16.0 — 16.0 ◀ Genesis™ Next Generation Heat Pump™

7.5 — 7.5 ◀ Soft Start Technology

5.0 — 5.0 ◀ Conventional fixed speed heat pump

Pool temp °C

kWh / $/day

Conventional fixed speed heat pump / Market leading brand with inverter heat pump / Genesis™ Next Generation Heat Pump™
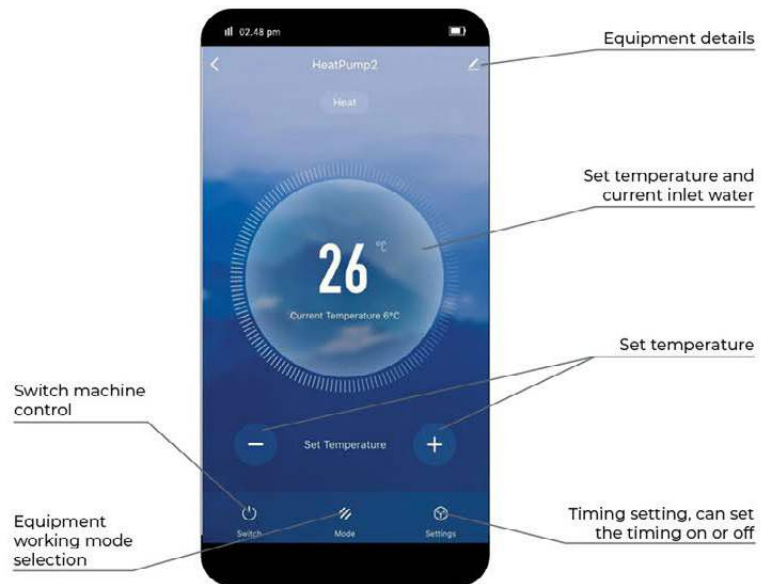
In built WIFI as Standard

The Genesis™ Next Generation Heat Pump™ has a smart design touchscreen controller and is easy to navigate, set pool temperatures and switch between heating and cooling modes as required. Download our SMARTLIFE APP for real time monitoring and full control anytime, anywhere (must have a full WIFI signal at Heat pump location).

Equipment details

Set temperature and current inlet water

Set temperature

Switch machine control

Timing setting, can set the timing on or off

Equipment working mode selection

Whisper Quiet Operation

The lower the sound decibels are the quieter the Genesis™ Next Generation Heat Pump™ will be while operating. The Genesis™ Next Generation Heat Pump™ can keep its operating level just above 40dB, so you can always enjoy a warm, comfortable swimming experience without being disturbed by a noisy pool heater.

Ticking watch | Genesis™ Next Generation Heat Pump™ | Refrigerator | Normal conversation | Lawn mower
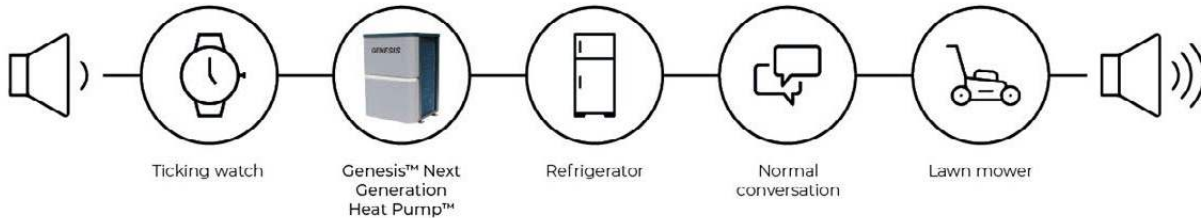
Other Benefits

The Genesis™ Next Generation Heat Pump™ has the latest technology advances:

- *Automatic defrost* built around a 4 way valve provides automatic defrosting and allows the unit to operate in temperatures as low as -15°C.

- *DC Fan Motor* housed in the Genesis™ Next Generation Heat Pump™ a brushless fan motor operates efficiently greatly reducing fan noise and failure rates compared to outdated mechanical brushed fan motors.

- *Heating and Cooling* modes are offered as a standard for the Genesis™ Next Generation Heat Pump™ giving you greater flexibility, ensuring your pool is at the perfect temperature

- *Corrosion Protection* on our condensing fins has the latest BLUEFINN hydrophilic coatings, reducing surface friction and enhance lubricity. Our Genesis™ Next Generation Heat Pump™ are made from a high quality anti corrosion powder coated aluminum casing protecting your heat pump for many years to come.

- Warranty and Protection
  - · 30 Years on titanium Heat Exchanger
  - · 10 Years on Compressor
  - · 3 Years on all other components
  - · CE Independent Certification on units

Genesis™ Next Generation Heat Pump™ Specifications

Model No.	BYC-007TH1	BYC-010TH1	BYC-013TH1	BYC-017TH1	BYC-021TH1	BYC-030TH1	BYC-045TH1
Heating Capacity at Air 26°C, Humidity 80%, Water 26°C in, 28°C out							
Heating Capacity (kW)	7.52 ~ 1.71	10.24 ~ 2.35	13.35 ~ 3.06	17.02 ~ 3.89	21.14 ~ 4.72	30.02 ~ 6.83	45.71 ~ 10.48
Power Input (kW)	1.08 ~ 0.11	1.47 ~ 0.15	1.91 ~ 0.19	2.45 ~ 0.24	3.04 ~ 0.29	4.30 ~ 0.42	6.41 ~ 0.65
COP	16.05 ~ 6.94	16.07 ~ 6.95	16.15 ~ 6.98	16.14 ~ 6.98	16.12 ~ 6.96	16.15 ~ 6.98	16.12 ~ 6.98
Heating Capacity at Air 15°C, Humidity 70%, Water 26°C in, 28°C out							
Heating Capacity (kW)	5.81 ~ 1.32	7.88 ~ 1.81	9.89 ~ 2.26	12.85 ~ 2.95	15.94 ~ 3.63	21.22 ~ 4.82	32.62 ~ 7.51
Power Input (kW)	1.17 ~ 0.17	1.59 ~ 0.24	1.99 ~ 0.30	2.59 ~ 0.39	3.21 ~ 0.48	4.25 ~ 0.63	6.59 ~ 0.99
COP	7.59 ~ 4.95	7.62 ~ 4.96	7.64 ~ 4.98	7.63 ~ 4.97	7.61 ~ 4.97	7.65 ~ 4.99	7.58 ~ 4.95
Cooling Capacity at Air 35°C, Water 29°C in, 27°C out							
Cooling Capacity (kW)	4.38 ~ 1.19	5.56 ~ 1.55	7.11 ~ 1.99	9.14 ~ 2.52	11.25 ~ 2.95	15.45 ~ 4.06	23.06 ~ 5.81
Power Input (kW)	1.20 ~ 0.18	1.52 ~ 0.23	1.93 ~ 0.30	2.48 ~ 0.38	3.08 ~ 0.44	4.20 ~ 0.61	6.32 ~ 0.87
EER	6.63 ~ 3.64	6.64 ~ 3.66	6.67 ~ 3.69	6.66 ~ 3.68	6.63 ~ 3.65	6.69 ~ 3.68	6.67 ~ 3.65
Power supply	220 ~ 240V/ 1/ 50 Hz						380 ~ 415V/ 3/ 50 Hz
Rated Power Input (kW)	1.17	1.59	1.99	2.59	3.21	4.3	6.6
Rated Current (A)	5.1	6.9	8.7	11.3	13.9	18.7	11.7
Compressor	Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi
Refrigerant	R32	R32	R32	R32	R32	R32	R32
Heat Exchanger	Titanium	Titanium	Titanium	Titanium	Titanium	Titanium	Titanium
Air Flow Direction	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Water Flow Volume (m³/h)	2.5	3.5	4.5	5.5	6.5	9	14
Kind of defrost	by 4 way valve	by 4 way valve	by 4 way valve	by 4 way valve	by 4 way valve	by 4 way valve	by 4 way valve
Working temperature range (°C)	-15 ~ 43	-15 ~ 43	-15 ~ 43	-15 ~ 43	-15 ~ 43	-15 ~ 43	-15 ~ 43
Noise at 1m	≤ 40	≤ 40	≤ 42	≤ 43	≤ 43	≤ 43	≤ 49
Net Dimensions (mm) (L x W x H)	420x420x580	550x530x640		650x630x750		740x720x940	740x720x940
Package Dimensions (mm) (L x W x H)	570x570x690	620x580x760		710x710x870		810x770x1060	810x770x1060
Net Weight (kg)	36	51	52	61	66	81	81
Gross Weight (kg)	46	61	62	71	76	93	93
Water Proof Level	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4

*Values indicated are under ideal conditions; pool is covered with a blanket, heat pump system running minimum of 8 hours per day.

Discount Pool Heating

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