

Efficient heating down to -25°C ambient air





HIGH COP IN LOW AIR TEMPS



INTERFACED TO SV SPA CONTROLER

Our innovative Cold Climate Technology provides exceptional performance in cold climates allowing efficient operation in sub-zero temperatures down to -25°C.

Featuring



DUAL

ELECTRONIC

EXPANSION

VALVES

pumps across all ambient temperature ranges and deliver a stunning COP value of over 2.0 at -15°C (5°F) ambient temp / 38°C (100°F) water temp.

CORROSION

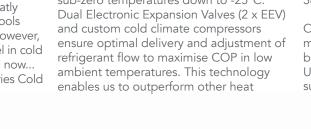
RESISTANT

ENCLOSURE

Our Cold Climate heat pumps feature a modern enclosure design, built of custom blended plastic engineered for increased UV resistance and to withstand extreme sub-zero temperatures.

Cold climate heat pumps

With rising electricity prices, increasing renewable energy regulations and the wish to heat spas faster and at a greatly reduced cost, heat pumps for spa pools have never been more important. However, heat pumps for spas pools that excel in cold climates have been unavailable until now... Introducing the new SpaNET SV Series Cold Climate heat pump.





The world's most energy efficient spa heater.

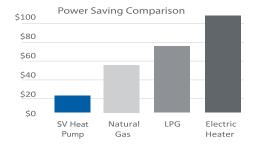
Providing affordable year round spa use.

The Undeniable Fact! The most energy efficient heater

Air sourced heat pumps are the most energy efficient and cost-effective method of heating your spa or pool water. When compared to gas or electric heaters, a heat pump uses a tiny portion of energy to generate the same amount of heat output.

By using refrigeration technology a heat pump only requires a small amount of energy to run a fan motor and compressor, and can output over five times more energy in heat compared to what it consumes in electricity.

This means a SV Series Powersmart heat pump will use around 75% less energy



than a standard electric spa heater and 55% less energy than natural gas. The massive saving in electricity allows you to cost effectively keep your spa or swim spa at temperature and ready to use all year round.

Why pay your energy provider for a heat pump you'll never receive

Without a heat pump installed you will be paying your energy provider up to 75% more than you should to heat your spa or pool. Having a heat pump installed offers such a massive reduction in electricity cost, these savings will quickly recover your investment cost. This means the heat pump is actually FREE!

Put simply, if you don't have a heat pump installed your increased outgoing electricity costs will have paid for the cost of a heat pump that you will never receive.

Eco-friendly refrigerant

Unlike other refrigerants R410A does not cause ozone depletion and achieves higher performance with reduced power usage.

Benefits of low power consumption

Traditionally spas connected to low amperage power supplies have been restricted to a 3kW electric element and had insufficient power available for heating when the spa is in use and a jet pump is running.

However SV Series Powersmart heat pumps consume such little power you have the added benefits of reduced heating times due to the larger 13.0kW heating output, and you can spa for longer because there is sufficient power available to run the heat pump whilst a jet pump is operating.

Ideal for installation with

Spas, swim spas and plunge pools.

Dualcore heat or cool

Dualcore construction allows you to heat or cool your spa depending on season. The SV Series heat pumps have three operation modes - automatic, heat only or cool only.





SV series integration

SV Series Powersmart heat pumps are the first heat pumps to offer true integration to a spa pool. There is no separate keypad on the heat pump for adjusting settings, rather they feature a dedicated interface for seamless integration to a SV Series spa controller allowing all temperature settings and mode adjustments to be conveniently controlled via the spa side keypad. The heat pump and spa control have been designed to work in synergy. With solid state diagnostics and real time heat pump monitoring the SV series control system correctly looks after every need of the heat pump ensuring long term reliability whilst delivering absolute minimum operating costs.

DUALCORE HEAT AND COOL

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Cool your spa in summer

Traditionally spa controls have only been able to heat spa water. With no cooling ability, the higher ambient temperatures during warmer months often result in spas being too hot to use. However the SV heat pump interface revolutionises spa temperature control. SV heat pumps not only provide automatic heating of the spa water, but automatic cooling of the spa water as well. Simply set your desired water temperature on the spa side keypad and the SV heat pump will automatically heat or cool the water (when required) to maintain your desired water temperature level (from 10°C to 41°C). Heat or cool your spa pool depending on season.

FEATURE	SV SERIES INTERFACED HEAT PUMP	GENERIC NON-INTERFACED HEAT PUMP
Automatic heating and cooling of spa water	YES - water temperature will be automatically regulated to any desired temperature (Range: 10°C - 40°C)	NO - standard spa controllers only support heating and have no ability to cool
Correctly sequenced start-up and shutdown of heat pump components	YES - the SV completely controls all heat pump functions and components. Its real time monitoring ensures the fan, valves, defrost elements and compressor are all switched on and off in the correct sequence required for reliable heat pump operation and long term life expectancy. Low ambient temperatures and defrost needs are taken into account and dealt with appropriately	NO - often the heat pump will be operating and the spa controller will simply cut power to it. The result is that the heat pump components are not switched in the correct sequence resulting in dramatic degradation of the components through temperature and pressure spikes, leading to short expected life. Defrost cycles are cut short or missed completely and any accumulated run data that the heat pump has recorded is lost when the power is cut off unexpectedly
Easy temperature adjustment from spa- side keypad	YES - the set temperature is easily adjusted, up or down, via the SV spa-side keypad. The control system automatically responds and will heat or cool where required to regulate the water to the new set temperature point	NO - there is no communication between the spa controller and the heat pump and no ability to cool. Settings can only be altered from a keypad on the heat pump itself, which is often located in difficult to access locations away from the spa
SV element boost (heat pump + SV heater) for rapid heat recovery	YES - a user adjustable menu option to activate the SV electric element to run in conjunction with the heat pump to boost heating and dramatically reduce heat recovery times. Ideal for when spas are emptied / refilled or when the water temperature needs to be increased significantly in a short amount of time	NO - the internal heaters of standard spa controllers are disconnected if installed with a heat pump. The heat pumps are then usually wired in a questionable (perhaps illegal / unapproved) way to the spa controller's heater connections
Integrated PowerSMART energy saving features	YES - the integrated heat pump benefits from the powerful energy saving features of the SV spa control such as programmable off-peak heating / filtration, dynamic thermal tuning, away & weekend operating modes	NO - there is no communication between the spa controller and the heat pump





High COP output in low and sub-zero air temperatures Interfaced to spa control for a true integrated solution Stylish plastic cabinet with superior UV resistance Insulated heat exchanger and cabinet Corrosion resistant gold fin evaporator Eco-friendly R410A refrigerant Titanium / PVC heat exchanger

ALL SEASONS OPERATION

The SV Series Cold Climate heat pump has sophisticated low ambient technology with automatic defrost protection allowing operation throughout all seasons even in sub-zero temperatures down to -25°C. Automatic defrost control will be activated when necessary to maintain optimal heat pump performance



0

-20

-15

-10

-5

COLD CLIMATE TECHNOLOGY

Dual (x2) Electronic Expansion Valve technology coupled with specifically engineered cold climate compressors, control and adjust refrigerant flow relative to ambient temperature variations with pin-point accuracy. This results in up to 25% higher energy efficiency and maximises COP output in low ambient temperatures.

COP Performance Curve

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Ambient Air Temperature (°C)

5

10

15

20

25

30



Spa Net Pty Ltd 4/103 Railway Rd North, Mulgrave NSW 2756 Australia P: +61 2 4587 7766 E: sales@spanet.com.au W: spanet.com.au

SPECIFICATIONS

POWER	SN-HP-130CCP
Input Voltage	220-240V AC
Hertz / Phase	50Hz / 1
Power Input	2.5kW
Current	11.8A

HEATING OUTPUT

Heating Capacity - A24°C / W27°C*	13.0kW
COP - A24°C / W27°C	5.85
Cooling Capacity - A32°C / W27°C	9.2kW
EER - A32°C / W27°CC	3.5

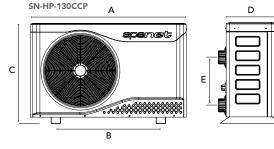
COMPONENTS

Compressor Style	Rotary
Compressor Brand	Hitachi
Heat Exchanger	Titanium / PVC
Defrost Element	Electric
Refrigerant	R410A

MECHANICAL

40mm PVC
-30°C to 40°C
Horizontal
800
55
8
1040x350x730
1080x440x770
82 / 90

* A = ambient air temperature W = water Temperature



	SN-HP-55P
А	1040mm
В	705mm
С	730mm
D	350mm
E	350mm

