

Frequently Asked Questions About the 264-SS & 327-SS

ITEM	QUESTION	ANSWER
1	Will the systems work during bad weather?	Yes they will work all year round without boosting. rain, wind, or shine, these systems will produce hot water as long as the ambient air temperature remains above minus 5 degrees C. – (we know this is not the case with some other heat pump systems).
2	How much money will I save? (also see question 31 & 32)	These systems will save up to 80% of the electrical energy used, when compared with an insertion element water heater. In other words the running cost can be less than a quarter that of an insertion element water heater. (depending on tariffs etc.)
3	Do the panels have to go on north-facing roof?	These systems do not use panels at all. They are installed at ground level, and can be placed at any convenient location.
4	Does the system require a booster?	No! These systems have the ability to deliver hot water every day without boosting.
5	What is the tank made of?	The tank is made from 316 marine grade Stainless Steel unlike most hot water tanks on the market.
6	How long does the tank last?	The life of the tank will depend on the quality of the water, with good quality water it should last indefinitely. There is no sacrificial anode, to be changed every five years, as with most other hot water tanks. With stainless steel there is no electrolytic action, as occurs in mild steel tanks. With our Heat Pump, the method of heating the water also avoids creating any hot spots associated with boosted units.
7	What is the warranty on the system?	There is a 10-year warranty over the tank, and a 4yr warranty over the heat-pump unit. <i>(most other heat pump systems offer a one or two year warranty on their heat pump).</i>
8	Will I run out of hot water?	The rapid recovery rate provided by our large single-pass evaporator heat pump allows our systems to deliver voluminous amounts of hot water. They are both continuous flow AND storage systems, however, if drained of hot water in a short period, they will need approximately 3 to 4 hours to fully recover.
9	Does my roof need strengthening for the panels?	No!! There are no roof panels!
10	Does the refrigerant need topping up occasionally?	No!! When installed correctly following the simple manufacturers Instructions, there will be no leakage of refrigerant
11	Does it freeze in winter?	No!! the freezing problems that plague conventional solar systems has been completely eliminated with these heat pump systems. There are no water panels to freeze.

12	Will the system overheat the water in summer?	No!! Our units are thermostatically controlled to 60°C and cannot overheat. Some traditional solar systems either “dump” water because they overheat in summer, and can’t provide enough solar gain in winter.
13	How long does it take to heat the water from cold to hot?	At an ambient air temperature of 25°C the recovery rate is approx. 100Lt/hour. A 327-SS system will run for approx. 2.5hrs to raise the water to 60°C. (approx. 3 hrs for a 327-SS) From this it can be seen that the unit will use about 1.2kWh of energy per 100Lt of hot water.
14	How does this compare with electric water heaters?	Conventional electric water heaters will use 4.8kWh x 4.7 hours for 315 litres, which works out to 7.11kWh of energy per 100Lt of hot water. (typically, our system will use 80% less)
15	Are the Solar Panels affected by hail?	No!! There are no solar roof panels!
16	What is the payback period for this system?	It depends on what the comparison is being made with, i.e. the type of heater, type of tariff, and the amount of hot water used. An average payback period for our systems range from 2 – 5 years.
17	Can the hot water tank go outside?	Yes! The unit has been designed to operate outside. The outer casing of the tank is polycarbonate and completely weatherproof.
18	How far can the heat-pump be away from the tank?	The heat-pump is supplied with tubing fitted for side-by-side operation. It can be extended to up to 9m.
19	How long will the system last?	The heat pump should have a similar lifespan to a refrigerator. There is no reason why the 264-SS and 327-SS systems would not last a lifetime. The tanks are made of marine grade 316 stainless steel, on rainwater or good quality town water, they could last indefinitely. There are water quality issues which affect warranty – a copy of these conditions is available for download via website, or on request
20	What sizes of tank are there?	There is a 264Lt and a 327Lt
21	I live near the sea, what effect does salt spray have on the panels?	There are no roof panels!
22	What effect does the unit have on the environment?	By efficient use of electricity, the these systems assist greatly in combating the “greenhouse effect”, by using less than one quarter of the energy required to heat water when compared to insertion element electric water heaters. With increased “green” electricity coming online, approaching lower emissions than gas, electricity is becoming the fuel of choice.
23	How are the panels attached to the roof?	There are no roof panels!
24	Can they be used for other than domestic water hot water?	Multiple units can be connected to produce more hot water, however, for applications requiring higher capacity we have a range of larger systems. We also have models specifically designed for hydronic heating, and others for pool heating etc.

- 25 We use most of our hot water in the evening; will the unit recover by the morning? Yes! Even on the coldest winter night, as long as the ambient air temperature is above -5°C the system will recover for early morning use.
- 26 Can the system be installed by anyone? Although installation is quite simple, and comprehensive installation instructions are provided, our systems should be installed by appropriately qualified tradespersons.
- 27 I have a flat roof; can the panels be installed without framework? There are no roof panels!
- 28 Where is the unit made? This system is an original Australian invention and has been further developed in Australia for over 25 years. Our stainless steel tanks represent 75% of the cost of the system, and are manufactured in Victoria Australia. The heat-pumps are mass produced in China to Australian design and standard.
- 29 Are replacement parts readily available? Yes! All parts are available in Australia.
- 30 What if the tank goes, does it mean the whole unit needs to be replaced? The compressor unit is totally separate to the tank unit, and either could be replaced independently of the other should the need ever occur.
- 31 Why is this system more efficient than electric or gas water heating? Normal heating methods use energy such as electricity or gas to directly heat the water. This can never be greater than 100% (but more likely 60% - 90%) efficient. This system only uses electrical energy to run the compressor and fan, not to heat the water. The heat energy actually comes from the atmosphere.
- 32 How does taking its heat energy from the atmosphere make more efficient? By using a relatively small amount of electrical energy to run the "heat pump" it can transfer between 2 and 6 times this value, in heat energy from the atmosphere, into the water, giving an efficiency rating from 200% to over 600% e.g. 1.2kW of electrical energy into the heat pump can transmit up to 8kw into the water.
- 33 Can the domestic models be installed inside? The heat-pump extracts its energy from the atmosphere, and requires a fresh air flow during the heating cycle. It is normally installed externally to provide adequate air flow. It can however be installed in a large internal area if other means such as ducting, is used to expel the cold air being produced out of the area.
- 34 Can it be operated on Off Peak power. Yes. However; In colder climates we recommend some daytime running during the colder months. (off-peak [low-cost] power may not be available for much longer)