

Tankless Water Heaters

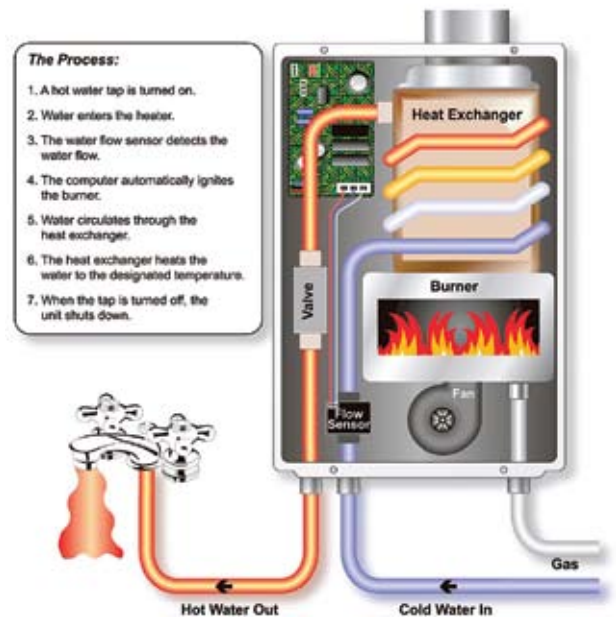
Since a tankless water heater has neither a storage tank to keep heated all day nor a pilot light, it burns gas only when you need hot water. This eliminates standby heat loss, which can be as high as 3-4% every hour for storage tank water heaters. This higher efficiency can allow you to save up to 50% off your water heating costs. Since there is no tank to fill, there is no end to your supply of hot water. Depending on the model, tankless water heaters deliver between 150 and 500 gallons of hot water every hour on demand. Tankless systems guarantee that an endless supply of water is available to residences, commercial spaces or anywhere a constant source of hot water is needed.

Infinion Tankless Water Heaters

With the Infinion tankless water heater, you'll enjoy constant comfort, conservation and peace of mind with tankless water heating, at a cost you can easily afford. The Infinion is a very simple tankless water heater that does not require electricity so it is ideal for remote cabins, park bathrooms or any locations where power is not available. There are two models which are the same except that one has a standing pilot light and one has a D-cell powered battery spark ignition. The spark ignition model comes with easily replaceable D-cell batteries that last 2 years or more. You get a range of safe, comfortable water heating with dual temperature and capacity controls. The Infinion is carefully engineered, using quality materials but without unnecessary bells and whistles. You get 90 years of tankless water heater experience in the Infinion design. Take advantage of excellent performance in a simple package. Both units have a burner-BTU adjustment knob and a 5-year parts warranty and a 10-year heat exchanger warranty.



How Does a Tankless Water Heater Work?



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Model		C13	C13E
<i>Ignition type:</i>		Pilot	Spark
Power input	BTU max	105,000	
Flue size	inches	5	
Gas pipe size	inches	1/2	
Water pipe size	inches	1/2	
Min. water flow	gpm	0.66	
120 VAC required		No	
Height	inches	28.13	
Width	inches	14.94	
Depth	inches	10.81	
Weight	lbs	37	
Flow rates			
60°F temp. rise	gpm	2.64	
70°F temp. rise	gpm	1.90	
90°F temp. rise	gpm	0.66	
Item code	LP gas	83.0991	83.0995
Item code	Natural gas	83.0992	83.0996
Price		\$720	\$895

Takagi Tankless Water Heaters

These are state-of-the-art high-output units featuring pilotless electronic ignition, computerized control, power ventilation, and freeze protection for outdoor or indoor operation down to 10°F. They are very efficient but all of them require AC power for operation. They will consume AC power from the system 24 hours per day.

T-K3 is the most popular Takagi water heater. Takagi's smallest, most versatile and most powerful residential model. Connect up to four units to meet the demands of even the largest homes! The compact T-K3 measures under 14 inches wide to save space. But the T-K3 is also powerful. With Takagi's new easy link technology, the T-K3 will meet the hot-water needs of most high volume residential applications. The T-K3OS is a lower cost, outdoor-only version

T-M1 is the largest Takagi water heater. A unique feature of the T-M1 is its flexibility in large-use applications such as big homes, hotels and motels, apartments and other commercial structures. Up to 20 units can be linked using a single main control system. When installed in this manner, it can replace the space-consuming, inefficient boilers used in most large buildings.

T-K Jr. is the most compact unit in the Takagi line. Designed to produce endless hot water and radiant heating for smaller homes, The T-K Jr. uses the same innovative technology as the original Takagi units – only on an even smaller scale. Takagi water heaters have a 2-year parts only and a 7-year heat exchanger warranty.

	Model:	T-M1	T-K3	T-K3OS	T-KJR
Power input	BTU x1000	235	199	199	140
Flue size	Inches	4	4	4	4
Gas pipe size	Inches	3/4	3/4	3/4	3/4
Water pipe size	Inches	3/4	3/4	3/4	3/4
Min. water flow	gpm	0.75	0.5	0.5	0.75
Max. water flow	gpm	9.6	7.0	7.0	5.8
120 VAC required		Yes	Yes	Yes	Yes
Height	inches	24	20.5	20.5	20
Width	inches	18	13.8	13.8	14
Depth	inches	9	8.5	8.5	6
Weight	lbs	70	40	40	30
Flow rate at a 77°F temperature rise	Flow rates				
	gpm	5	4	4	3
Item code	LP gas	83.1071	83.1065	83.1068	83.1077
Item code	Natural gas	83.1072	83.1066	83.1069	83.1078
Price		\$2,590	\$1895	Call	\$1104



Model	Description	Fits	Item code	Price
TK-TV01	Wall ventilation terminator	T-KJr, T-K3, T-M1	83.1092	\$108
TK-TV03	Backflow prevention kit	T-KJr, T-K3, T-M1	83.1093	\$93
TK-TV04	Outside install venting cap	T-KJr	83.1094	\$60
TK-TV05	Wall ventilation terminator	T-K3	83.1095	\$130
TK-TV06	Outside install venting cap	T-M1	83.1096	\$237
TK-TV09	Direct vent conversion	T-KJR	83.1103	\$102
TK-TV10	Direct vent conversion	T-K3	83.1104	\$102
TM-RE10	Temperature remote control	T-K3, T-M1	83.1099	\$289
TK-RE02	Temperature remote control	T-KJr	83.1101	\$170

Tankless Water Heater Vents

The Takagi Tankless water heater must be vented in accordance with the section on venting of equipment in the latest edition of the National Fuel Gas Code. This is a Category III appliance, and must be vented accordingly. The following are UL Listed or CSA certified manufacturers: ProTech Systems FasNSeal; Z-Flex Inc Z-Vent II; Heat-Fab Inc Saf-T Vent and Flex-L. They require 4" vent pipe. Connect the vent pipe to the unit so that it is sealed airtight. Follow the vent pipe manufacturer's instructions when installing the vent pipe. Do not common vent this appliance with any other vented appliance.

SunDancer 12V and 24V Refrigerators and Freezers

Save on system costs with SunDancer battery-powered solar refrigerators and freezers. These highly efficient units with exceptionally low energy consumption require a smaller photovoltaic (PV) system for your refrigeration needs. SunDancer units feature 4.33" (110 mm) of polyurethane insulation and coated steel cabinets. The brushless DC motor compressor operates on 12 or 24 VDC. A patented low-frost system reduces frost build-up for low maintenance. SunDancer chest-style refrigerators and freezers are easy to clean using the drain hole at the bottom of the unit. With thick insulation and a refrigeration system optimized for solar, SunDancer refrigerators and freezers provide outstanding, economical and reliable operation. SunDancer cabinets are commercially produced by one of the world's leading appliance manufacturers. 1-year limited warranty.



Model	12/24 VDC models	Ah/day @ 12V			Outside dimensions H" x W" x D"	Weight lbs	Item code	Price
		at 70 F	at 90 F	110 F				
DCR165	165L (5.8 cu ft.) refrigerator	6.5	14	29	34.5 x 36.8 x 26.2	120	80.2119	\$949
DCR225	225L (8 cu ft.) refrigerator	7.5	17	33	34.5 x 46.9 x 26.2	140	80.2123	\$1,049
DCF165	165L (5.8 cu ft.) freezer	23	37	64	34.5 x 36.8 x 26.2	120	80.2117	\$949
DCF225	225L (8 cu ft.) freezer	30	44	68	34.5 x 46.9 x 26.2	140	80.2121	\$1,049

Sun Frost Vaccine Refrigerator



World Health Organization tested & approved. For the past 12 years Sun Frost refrigerators/freezers have been used in more than 50 countries and have an excellent track record. Sun Frost units are very ruggedly constructed and will provide many years of reliable operation, even in the harshest environments. The Sun Frost RFVB provides a means of storing vaccines and medical supplies without the use of fossil fuels. Not only is the need for a fuel supply eliminated, but the unit operates more reliably than kerosene powered refrigerators. The RFVB can freeze 2.2 kg of ice per day, but will use approximately 50% more power than the figures in the chart below. The evaporator in the RFVB is protected by a fiberglass liner and cannot be punctured while defrosting, a common problem in many manual defrost refrigerators. Also contributing to the longevity of the cooling system is the compressor's low percentage of run time, only 19% in a 32° C (90° F) room. The RFVB is the most efficient vaccine refrigerator available. The cost of a solar power system is typically more than the cost of the refrigerator, so efficiency is of prime importance in reducing system costs. 2-year limited warranty. Call for system design help.

Sunfrost model	12/24 VDC models	Ah/day @ 12V		Inside volume cu ft.		Dimensions H" x W" x D"	Weight lbs	Item code	Price
		at 70 F	at 90 F	Refrigerator	Freezer				
RFVB	4 cu ft. vaccine refrig/freezer	13	18	1.8	1.2	31.5 x 34.5 x 27.5	160	80.2503	\$1,870

Servel Americana 400 LP Gas Refrigerator-Freezer

This time proven, 2-door 8 cubic foot refrigerator freezer combination can maintain 6 degree F in the freezer and 39 degrees F in the refrigerator when the outside temperature is 110 degrees F. The refrigerator section is 6.4 cubic feet, and the top freezer section is 1.6 cubic feet. Overall dimensions are 63.5" high, 23" wide, 26.5" deep. The door openings are reversible. The average gas usage is 1/4 gallon of propane in 24 hours. Piezo lighter and temperature adjustment are accessible on the front without opening door. This refrigerator is *not* AGA approved. Servel offers a 1-year warranty.

Model	Description	Weight	Item code	Price
400W	Servel Americana LP gas refrigerator - white	195	80.1105	\$1,410
400A	Servel Americana LP gas refrigerator - almond	195	80.1107	\$1,410



Prices and availability subject to change without notice.

Sun Frost Refrigerators and Freezers

Sun Frost refrigerators are the most energy-efficient upright refrigerators available. They keep food fresher longer by maintaining high humidity, which prevents freezer burn and wilting caused by water loss in food. Defrosting is seldom needed: frost buildup is extremely slow because water vapor in the refrigerator section from moist room air or food is not transformed into ice. When defrosting is needed, usually once or twice a year, just transfer frozen food to the refrigerator section and turn it off for 30 minutes. Ice quickly falls off the smooth flat surfaces in large pieces.

The Sun Frost refrigerator comes finished on the outside with white laminate, but it can be ordered in natural wood or any of over 100 colors or shades of Formica or Nevamar to match kitchen decor. The spacious, well-lit interior, made from sturdy fiberglass reinforced plastic, is easy to clean. There are no exposed ducts, tubing or hard to reach corners. All of the shelves are adjustable.

The Sun Frost refrigerator should provide well over 15 years of trouble-free operation. The only moving part is a hermetically sealed compressor. The brushless motor used in the DC models eliminates periodic servicing.

Low-voltage DC models: Energy use listed in the table below is for 12 VDC. On 24 VDC systems the same amount of energy is used (half as many amp-hours per day).

When ordering, please specify whether you want the hinge on the left or right. If a color is not specified, the Sun Frost comes in white Formica. (For a different color or a natural wood veneer, add \$150.) Sun Frost refrigerators are also available without a finish, with unfinished birch plywood, ready for custom covering by your cabinetmaker. Prices include crating charge. Sun Frost refrigerators are shipped by truck freight. All Sun Frost refrigerators are custom made so delivery times will vary. Call for exact lead time. 2-year warranty.



Model	12/24 VDC models	Ah/day @ 12V		Inside volume cu ft.		Dimensions H" x W" x D"	Weight lbs	Item code	Price
		at 70 F	at 90 F	Refrig	Freezer				
RF19	19 cu ft. 1/2 refrig - 1/2 freezer	62	82	8.07	8.07	66 x 34.5 x 27.5	320	80.2330	\$3,160
R19	19 cu ft. refrigerator only	28	46	16.1	-	66 x 34.5 x 27.5	310	80.2322	\$2,719
F19	19 cu ft. freezer only	100	130	-	16.1	66 x 34.5 x 27.5	320	80.2314	\$3,040
RF16	16 cu ft. refrig / freezer	42	58	10.4	3.91	62 x 34.5 x 27.5	300	80.2328	\$2,915
RF12	12 cu ft. refrig / freezer	24	43	8.07	2.05	49 x 34.5 x 27.5	230	80.2326	\$2,129
R10	10 cu ft. refrig / freezer	15	25	9.13	-	43.5 x 34.5 x 27.5	215	80.2320	\$1,640
F10	10 cu ft. freezer only	55	70	-	9.13	43.5 x 34.5 x 27.5	215	80.2312	\$1,745
RF4	4 cu ft. refrig / freezer	13	19	3.16	0.68	31.5 x 34.5 x 27.5	160	80.2332	\$1,530
R4	4 cu ft. refrigerator only	9	13	9.91	-	31.5 x 34.5 x 27.5	160	80.2324	\$1,430
F4	4 cu ft. freezer only	28	36	-	3.91	31.5 x 34.5 x 27.5	160	80.2316	\$1,430
Model	120 VAC models	kilowatt hours per day @ 120 VAC		Refrig	Freezer	Dimensions H" x W" x D"	Weight lbs	Item code	Price
RF19A	19 cu ft. 1/2 refrig, 1/2 freezer	0.77	1.0	8.07	8.07	66 x 34.5 x 27.5	310	80.2427	\$3,015
R19A	19 cu ft. refrigerator only	0.35	0.58	16.1	-	66 x 34.5 x 27.5	310	80.2419	\$2,775
F19A	19 cu ft. freezer only	1.25	1.63	-	16.1	66 x 34.5 x 27.5	310	80.2413	\$3,068
RF16A	16 cu ft. refrig / freezer	0.49	0.79	10.4	3.91	62 x 34.5 x 27.5	300	80.2425	\$2,867
RF12A	12 cu ft. refrig / freezer	0.3	0.53	8.07	2.05	49 x 34.5 x 27.5	230	80.2423	\$2,129

Options

Color finish instead of white - add:								80.2560	\$150
Wood veneer finish - add:								80.2562	\$150
Storage cabinet 24" high w/2 drawers goes under RF12 - white					24 X 34 x 27.5	110		80.2550	\$390
Storage cabinet 13" high w/2 drawers goes under RF16 - white					13 X 34 x 27.5	60		80.2544	\$427
Stand 4" high goes under RF19 - white					4 X 34 x 27.5	25		80.2556	\$99