



Rinnai®

**CONTINUOUS HOT WATER. CONTINUOUS SAVINGS.
RINNAI FOR COMMERCIAL APPLICATIONS**

RINNAI LS SERIES TANKLESS WATER HEATERS FOR COMMERCIAL APPLICATIONS

**FOR LIGHT AND
HEAVY COMMERCIAL
APPLICATIONS**



GREEN
GET REAL ENERGY EFFICIENT NOW
WITH RINNAI™

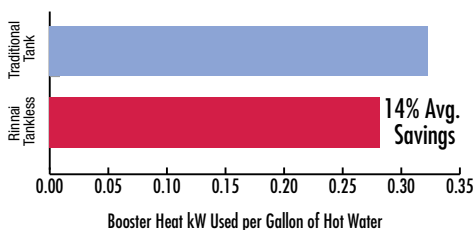
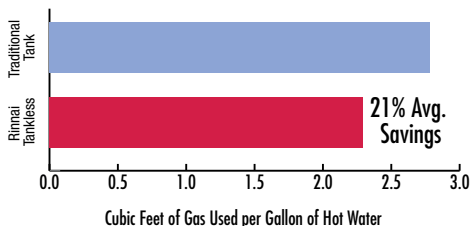
why tankless

Commercial Applications



ASME Models Available

Tank vs. Tankless

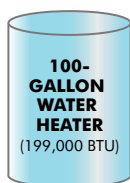


Commercial Applications

- Restaurants
- Hotels and Motels
- Schools/Universities
- Public Facilities
- Event Venues
- Nursing Homes
- Salons and Spas
- Car Washes
- Laundromats
- Industrial Facilities
- And more

Results above are based on testing done in three states covering six different restaurants. All locations are part of a national restaurant chain with data specific to that chain. Savings may vary.

THREE R94LSe UNITS



Rinnai LS units not only make better use of expensive floor space, they can also reduce upfront installation costs and monthly utility bills. Estimate of comparison sizing. Sizing varies based on temperature requirements, make and model of dishwasher and fixture requirements. For detailed sizing contact Rinnai Engineering at 1-800-621-9419.

Choosing Rinnai tankless technology not only cuts energy costs, it also contributes to cleaner air and a healthier environment. With up to 50 percent savings on energy costs, you'll be conserving precious natural resources.

Your Rinnai appliance also helps to protect our environment, with lower CO₂ and NO_x emissions.



What if you could ensure your operation never runs out of hot water – and increase your profitability at the same time? With Rinnai LS Series Tankless Water Heaters, you can do all this – and more.

The Smartest Way to Heat Water

Compared to standard tank water heaters and boilers, Rinnai's LS Series Tankless Water Heaters save energy, money and space. They heat water quickly and deliver it at a consistent, pre-set temperature. And because Rinnai units heat water when you need it – for as long as you want it – you can be sure you'll never run out of hot water during peak business hours.

Rinnai LS Series Tankless Water Heaters feature a commercial-grade heat exchanger that ensures durability and performance in high-frequency applications like restaurants, hotels, schools and universities, and more. We also back every system with the most comprehensive warranty in the industry. So, whether you're sanitizing, cleaning or just needing hot water at a set temperature, you can count on continuous hot water delivered efficiently and dependably.

The Hot Water You Need With Cost Savings You'll Appreciate

Unlike traditional tank-style water heaters, Rinnai tankless appliances heat water only when you need it. When you open the tap, the Rinnai unit senses the flow and starts the heating process. Water flows through the heat exchanger and is heated to the temperature you've selected. Thus, your access to hot water isn't limited to what's available in your tank, and you never pay to heat and reheat the same tank full of water.

The tankless design also ensures that you'll never need to worry about ruptured tanks and water damage from flooding. Plus, if multiple tankless units are banked together, you can achieve built-in redundancy and maintain one unit while the others continue to provide hot water.

Wall-mounted Rinnai LS Series water heaters also save you valuable floor space or can be installed on the exterior of your building. Units are simple to install, and exterior units require no ventilation, so you save on construction costs, too.

Rinnai Tankless vs Other Tankless	Rinnai	Other Tankless
Direct-Vent Sealed Combustion	✓	Limited
Free Air Space Requirement (cu. ft.)	3.1	Up to 9,990
Zero-Clearance Venting	✓	Limited
Concentric Vent (One Penetration)	✓	Limited
5-year Heat Exchanger Warranty*	✓	Limited
24/7/365 Technical Support	✓	Limited

Rinnai Tankless vs Traditional Tank	Rinnai	100-Gallon Tank
Hot Water Capacity	Unlimited	100 gallons
Digital Control For:	✓	No
• Set Temperature	✓	No
• Consistent Temperature	✓	No
• Self-Diagnostics	✓	No
Interior/Exterior Install Options	✓	Interior Only
Warranty	5 Years	3 Years

*5-year warranty is for heat exchanger of units installed in commercial applications

commercial

Rinnai

The LS Series



Full service restaurant gains extra mechanical room square footage for additional storage and creates redundancy by installing units on the exterior wall.

Commercial Features at a Glance

- Tankless technology ensures you never run out of hot water
- Commercial-grade heat exchanger delivers dependable performance
- Available in natural gas or propane models
- EZConnect™ connects 2 units together, MSA connects 3 or more units in groups of 5
- Saves as much as 16 square feet of floor space per unit
- Easy to install on interior or exterior walls or rooftops
- Exceptional 5-year limited warranty on heat exchanger and all other parts

Installing exterior, recessed units at this senior facility not only freed up mechanical room requirements, but could eliminate tempering valves due to precise control of temperature.



At this 40-room hotel, exterior units are mounted on the rooftop with no additional venting. Hotel owners have experienced 50 percent reduction in therms per occupied room.

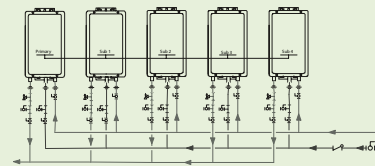


High school expands available space in mechanical room with increased efficiency and less capital expense.

Connect with Greater Capacity

When business heats up, you can count on continuous hot water – and continuous profits – with multiple Rinnai LS Series water heaters. Simply bank two or more Rinnai tankless units together, and ensure you'll have all the hot water capacity you'll ever need.

The EZConnect™ cable makes connecting two units as easy as plugging them in. Three or more units can be combined with the MSA control system, so they operate seamlessly as a single water source. Either way, the hot water duty cycle is evenly rotated across units, to prevent wearing out the first unit in the manifolded series.



Support Every Step of the Way

In your business, a reliable supply of clean hot water is an absolute necessity. When emergencies occur and replacement units are needed immediately, you'll no longer need to wait for a commercial unit.

Rinnai support also provides you:

- 24/7/365 technical support
- 2,000 distributors
- 20,000 trained and registered installers
- On-staff application engineers
- Sizing assistance from our in-house staff
- Local assistance from Manufacturer Representatives

So, specify the tankless water heaters that deliver continuous hot water, continuous savings and continuous support – the Rinnai LS Series.

Accessories and Options

You're in control

The MCC-91 Controller lets you control your Rinnai LS appliance from a central location, even on retrofits. Adjust temperatures up to 185°F*, and have peace of mind knowing that dishes and silverware are properly cleaned and sanitized.

* Up to 185°F on R94LS and R98LS; up to 160°F on other LS models.

Connect multiple units with ease

The EZConnect™** feature lets you link two units with a simple cord, while MSA control boards* allow banking of three or more units in combination and in rotation, to avoid wearing out the first unit in a manifolded series.

* For each group of five units one MSA-M and three MSA-S control boards are required.

**Not available for R63LSe models.



Innovative venting

Rinnai units use a concentric venting system – a single vent assembly featuring an inner, metal vent for exhaust gases and an outer PVC or metal tube for bringing combustion air from outdoors. The result: a direct-vent, sealed-combustion system that offers optimum safety, performance and ease of installation (The R98LS series utilizes dual venting due to the higher BTU inputs).

RINNAI LS SERIES TANKLESS WATER HEATERS FOR COMMERCIAL APPLICATIONS



Interior Models

	R75LSi	R94LSi	R98LSi/ R98LSi ASME**
Dimensions	14" W x 23" H x 10" D	14" W x 23" H x 10" D	19" W x 25" H x 9" D
Weight	50 lbs	50 lbs	55 lbs
Maximum/Minimum Gas Rate (Input BTU's)	180,000 /15,000	199,000 /15,000 (NG) 190,000 /15,000 (LP)	237,000 /19,000
Hot Water Capacity Range	0.6 to 7.5 GPM	0.6 to 9.4 GPM	0.6 to 9.8 GPM
Gas Type	Models available in Natural Gas (NG) or Propane (LP) Units		
Energy Factor (NG and LP)	.82	.82	NA
Thermal Efficiency	84%	84%	84%
Temperature Range (Min - Max)	98° F - 140° F	98° F - 140° F	98° F - 140° F
Residential	98° F - 160° F*	98° F - 185° F*	98° F - 185° F*
Commercial*			
Standard Digital Controller	MC-91-1	MC-91-1	MC-91-1
Optional Digital Controller		MC-100V-1, MC-502RC, MCC-91-1*	

Exterior Models

	R75LSe	R94LSe	R98LSe/ R98LSe ASME**
Dimensions	14" W x 23" H x 10" D	14" W x 23" H x 10" D	19" W x 25" H x 10" D
Weight	46 lbs	46 lbs	55 lbs
Maximum/Minimum Gas Rate (Input BTU's)	180,000 /15,000	199,000 /15,000 (NG) 199,000 /15,000 (LP)	237,000 /19,000
Hot Water Capacity Range	0.6 to 7.5 GPM	0.6 to 9.4 GPM	0.6 to 9.8 GPM
Gas Type	Models available in Natural Gas (NG) or Propane (LP) Units		
Energy Factor (NG and LP)	.82	.82	NA
Thermal Efficiency	83%	83%	83%
Temperature Range (Min - Max)	98° F - 140° F	98° F - 140° F	98° F - 140° F
Residential	98° F - 160° F*	98° F - 185° F*	98° F - 185° F*
Commercial*			
Standard Digital Controller	MC-91-1	MC-91-1	MC-91-1
Optional Digital Controller		MC-100V-1, MC-502RC, MCC-91-1*	

*To achieve temperatures over 140°F, an MCC-91 commercial controller must be purchased separately.

**R98LS models have a BTU input of 200,000 or more and are therefore not subject to the EF test.

Rinnai is continually updating and improving products; therefore, specifications are subject to change without prior notice. Local, state, provincial and federal codes must be adhered to prior to and upon installation.

TEMPERATURE RISE (°F)	R75LS HOT WATER FLOW CHART				
	MANIFOLD INSTALLATION				
	1 Unit	2 Units	3 Units	4 Units	5 Units
140	2.2	4.3	6.5	8.6	10.8
135	2.2	4.5	6.7	9.0	11.2
130	2.3	4.7	7.0	9.3	11.6
125	2.4	4.8	7.3	9.7	12.1
120	2.5	5.0	7.6	10.1	12.6
115	2.6	5.3	7.9	10.5	13.1
110	2.7	5.5	8.2	11.0	13.7
105	2.9	5.8	8.6	11.5	14.4
100	3.0	6.0	9.1	12.1	15.1
95	3.2	6.4	9.5	12.7	15.9
90	3.4	6.7	10.1	13.4	16.8
85	3.6	7.1	10.7	14.2	17.8
80	3.8	7.6	11.3	15.1	18.9
75	4.0	8.1	12.1	16.1	20.2
70	4.3	8.6	13.0	17.3	21.6
65	4.7	9.3	14.0	18.6	23.3
60	5.0	10.1	15.1	20.2	25.2

TEMPERATURE RISE (°F)	R94LS HOT WATER FLOW CHART				
	MANIFOLD INSTALLATION				
	1 Unit	2 Units	3 Units	4 Units	5 Units
140	2.4	4.8	7.2	9.6	11.9
135	2.5	5.0	7.4	9.9	12.4
130	2.6	5.1	7.7	10.3	12.9
125	2.7	5.3	8.0	10.7	13.4
120	2.8	5.6	8.4	11.1	13.9
115	2.9	5.8	8.7	11.6	14.5
110	3.0	6.1	9.1	12.2	15.2
105	3.2	6.4	9.6	12.7	15.9
100	3.3	6.7	10.0	13.4	16.7
95	3.5	7.0	10.6	14.1	17.6
90	3.7	7.4	11.1	14.9	18.6
85	3.9	7.9	11.8	15.7	19.7
80	4.2	8.4	12.5	16.7	20.9
75	4.5	8.9	13.4	17.8	22.3
70	4.8	9.6	14.3	19.1	23.9
65	5.1	10.3	15.4	20.6	25.7
60	5.6	11.1	16.7	22.3	27.9

TEMPERATURE RISE (°F)	R98LS HOT WATER FLOW CHART				
	MANIFOLD INSTALLATION				
	1 Unit	2 Units	3 Units	4 Units	5 Units
140	2.8	5.7	8.5	11.4	14.2
135	2.9	5.9	8.8	11.8	14.7
130	3.1	6.1	9.2	12.3	15.3
125	3.2	6.4	9.6	12.7	15.9
120	3.3	6.6	10.0	13.3	16.6
115	3.5	6.9	10.4	13.8	17.3
110	3.6	7.2	10.9	14.5	18.1
105	3.8	7.6	11.4	15.2	19.0
100	4.0	8.0	11.9	15.9	19.9
95	4.2	8.4	12.6	16.8	21.0
90	4.4	8.8	13.3	17.7	22.1
85	4.7	9.4	14.1	18.7	23.4
80	5.0	10.0	14.9	19.9	24.9
75	5.3	10.6	15.9	21.2	26.5
70	5.7	11.4	17.1	22.8	28.4
65	6.1	12.3	18.4	24.5	30.6
60	6.6	13.3	19.9	26.5	33.2

FOR MORE INFORMATION ON RINNAI PRODUCTS

OTHER RINNAI LITERATURE AVAILABLE



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