



# Rinnai®

## THE NEW RINNAI LS SERIES TANKLESS WATER HEATERS

ENDLESS HOT WATER NEVER LOOKED SO GOOD

WHOLE-HOUSE AND COMMERCIAL TANKLESS WATER HEATING SOLUTIONS



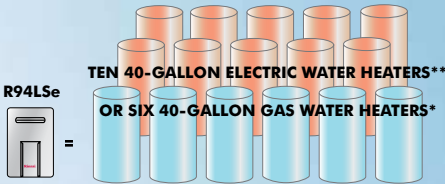
Voted #1  
Builder Magazine's  
"Most Popular Products"  
Three Years  
In A Row

# why tankless

## at a glance

Endless hot water supply maintains consistent, safe temperature.

One Rinnai delivers 240 gallons or more per hour with no recovery time.



Based on 77° Rise, \* Based on a 34,000 BTU input.  
\*\* Based on 4,500 Watt elements.

### WHOLE-HOUSE SIMULTANEOUS BATH USE – SIZING CHART

Model	Ground Water Temperature	
	Summer Season – 65° F - 75° F	Winter Season – 45° F - 55° F
R50LSi		
R63LSi		
R75LSi/e		
R94LSi/e		
R98LSi/e		

- Customer has the option of using the following appliances instead of a shower: residential grade clothes wash machines or dishwashers.
- Shower heads assumed to be 2.5 gpm mixed flow rate or less. If custom shower fixtures i.e. body sprays, large rain heads, or tubs over 60 gallons in capacity are used, please contact Rinnai.
- Bathroom sink faucets assumed to be 2 gpm mixed flow rate or less.
- Assumed mixed temperature on shower heads and bathroom sink faucets to be 104° F.
- Assumed Rinnai set point to be 120°F.
- Assumed 50psi - 80psi inlet water pressure for maximum flow.

### ESTIMATED ANNUAL ENERGY COST COMPARISON\*

Costs less to operate on an annual basis.

Rinnai R94LSi **\$265**

Natural Gas 40-Gallon Tank\*\* **\$326**

Electric 40-Gallon Tank\*\* **\$453**

\*Based on 2006 annual energy costs.

\* Based Upon DOE Average Energy Costs for 2006

\*\* Source: GAMA Consumers Directory of Certified Efficiency Ratings

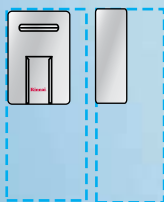
### TANKLESS VS. TANK COMPARISON

Significant space savings over conventional tank water heaters.

Dimensions:  
14" W x 26" H x 10" D vs  
approx. 20" Dia. x 47" H

Space Savings:  
Avg. 12-16 sq. ft.  
Wall mounted  
vs 40-gallon tank

Weight Savings:  
50 lbs. vs approx. 320 lbs.  
or more during use



### Heat Water Only When You Need It!

**T**ankless water heating is the wave of the future – available to you today. You'll enjoy up to 40% energy savings, endless hot water, and significant space savings – plus a typical life span of 20 years or more in residential applications. And this “green” technology produces less CO<sub>2</sub> and NO<sub>x</sub> than conventional gas or electric tank water heaters.

You see, Rinnai tankless water heaters use natural gas or propane gas to heat water only when needed. When water flow is detected, the Rinnai begins heating water as it passes through its copper heat exchanger. The design of the unit allows it to capture up to 84% of the heat energy, making it highly efficient and cost effective.

When the demand for water ceases, the tankless unit shuts down and uses no energy – a revolutionary advantage over inefficient tank-style heaters. More efficient when it's on, and off when it's off, the Rinnai tankless water heater is the ultimate choice in today's world of high energy costs and environmental preservation.

Additionally, your Rinnai is supported by the most extensive group of professionals in the business. Our nationwide network of more than 80,000 registered dealers and factory-trained installers ensures a trouble-free installation and reliable after-the-sale support.

### Enjoy Endless Hot Water

Tankless water heating is one of the few energy-saving technologies that actually improves the quality of your life. You'll delight in endless hot water – for bathing, cooking, dishes, laundry, and all the other countless ways hot water enriches your life. Plus, our digital controllers give you precise control of the output water temperature for the ultimate in comfort and safety.

### Save Space

Traditional tank water heaters can take up to 16 square feet of valuable floor space. But your Rinnai unit – only about the size of a carry-on suitcase – can be installed on virtually any wall inside or outside of your home or building. The compact design affords you almost limitless installation options, so you can strategically locate the unit for maximum performance and energy efficiency.



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
12-year heat exchanger warranty*	✓	Limited
24/7/365 Technical Support	✓	Limited

Rinnai Tankless vs Traditional Tank	Rinnai	40-Gallon Tank
Hot Water Capacity	Endless	40 gallons
Digital Control for:	✓	No
• Set Temperature	✓	No
• Consistent Temperature	✓	No
• Self-Diagnostics	✓	No
Interior/Exterior Install Options	✓	Interior Only
Warranty/Avg. Service Life (Years)	12*/20	6/12

\*12-year warranty is for heat exchanger of units installed in residential applications; 5 years for commercial applications.

# the LS Series

Introducing Rinnai's most innovative offering



## Contemporary Design

Experience a never-ending supply of fresh hot water – and a sleek, sculpted water heater design that reflects the innovative technology within. Introducing the Rinnai LS Series, a whole new line of tankless water heaters that afford you the very best of both form and function. With their attractive silver finish, Rinnai LS Series units are available in interior and exterior models, giving you virtually unlimited flexibility to install your unit wherever you choose.

## Perfect for Any Home

The remarkable combination of design and performance makes the LS Series the perfect choice. Whether you're building a spacious new home – complete with luxurious spa bath and body spray system – or remodeling your older home, Rinnai LS units can be used individually, in pairs, or in banks of three or more to supply all your hot water needs.

LS Series interior-mount units can be placed in any room – no need to hide them in closets or utility rooms – and vent directly to the outside. Exterior units require no additional venting and can even be installed in a recessed enclosure, then painted or textured to match the exterior of your home for a clean, inconspicuous appearance.

## Improved Performance and Longevity

Whichever LS unit you choose, you get the benefit of a newly designed, commercial-grade heat exchanger for optimum durability. In fact, the same LS unit can be used for both residential and commercial applications. Homeowners get the reliability of commercial-grade construction and an industry-leading, 12-year limited warranty, and commercial customers get lower cost and wider availability of units.



## Key Features of the LS Series

- Sleek, modern design
- Commercial-grade heat exchanger for residential and commercial applications
- Increased hot water output
- EZConnect™ (connects two units together)\*
- Integrated condensate collector for interior models
- Backed by a 12-year heat exchanger limited warranty, 5 years parts, 1 year labor

\* EZConnect feature is not available for the R63LSe.





### Commercial Applications

- Restaurants
- Car Washes, Laundromats
- Schools, Colleges and Universities
- Public Facilities and Event Venues
- Hotels and Motels
- Nursing Homes
- Salons and Spas
- Industrial Facilities



### Commercial Quality at Your Fingertips

**B**oth commercial and residential customers benefit from the innovative new heat exchanger design of the LS Series. To achieve this level of performance, Rinnai engineers used finite element analysis simulation to maximize thermal transfer and minimize thermal stresses. Rigorous high-temperature reliability testing confirmed the design. And now Rinnai delivers to you the most reliable, durable tankless water heater in our history.

This dual-use heat exchanger provides commercial customers a benefit unique to Rinnai: the ability to access a commercial-grade water heater at any of our over 2,000 distribution outlets. So, when emergencies occur and replacement units are needed immediately, you'll no longer need to wait for a commercial unit.

### Additional Commercial Features and Benefits:

- Variety of digital controllers allows precise control and monitoring.
- Available wireless controller (MC-502RC-1M/S) provides control from a central location, even on retrofits.
- Multi-unit options: the EZConnect™\* cable (for 2 units) or MSA control boards (for 3 or more units\*\*) allow units to be used in combination and in rotation, to avoid wearing out the first unit in a manifolded series.
- Exterior units can be mounted on outside walls or on rooftops with no additional protection or venting.
- Rinnai's concentric venting system means zero clearance, sealed combustion, and single wall or roof penetration for maximum safety and installation simplicity.

\* EZConnect feature is not available for the R63LSi.

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

R98LSi



# endless options

flexibility + control



MC-91-1-S Standard Digital Controller



MC-502RC Wireless Controller



MC-100V-1-S Deluxe Digital Controller



BC-100V-1US-S Bath-Fill Digital Controller

## Accessories

Rinnai's line of digital controllers allows you to set water temperature precisely for multiple locations in your home, analyze and troubleshoot the water heater, and even automatically fill your bath to a pre-set temperature and volume. An available wireless controller is perfect for retrofits where pulling a wire through the wall is impractical. (Note: the MC-91 controller comes standard with all LS units.)

## Flexible Installation

Choosing a mounting location depends on your taste, your home or building, and your location. Install your Rinnai tankless water heater inside, outside, in a garage or laundry room or virtually anywhere else.

For interior installation, 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.

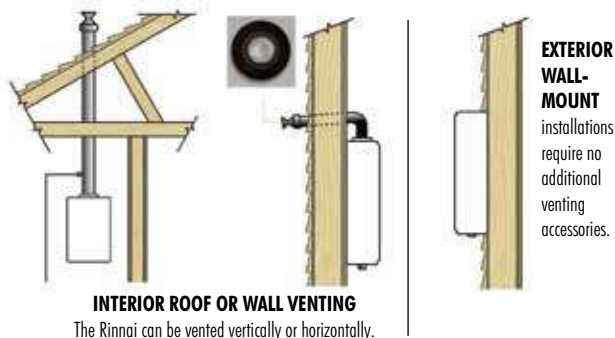
Exterior units can be installed in a recessed enclosure, flush with the outer wall, then painted or textured to match your home's panel or brick siding.

And if you need more than one unit for your larger home, spa or body spray shower, Rinnai's EZConnect™ feature allows you to link two units with a simple cord. For even larger applications, your installer can place multiple units in parallel.



## Other benefits include:

- Integrated Condensate Collector: ensures condensation doesn't drain back into unit, and reduces cost of venting.
- High-Altitude Operation: all LS units can be adjusted for use up to 10,000 ft.



**CUSTOM INSTALLATIONS** to match the outside appearance of the home or to blend in with the interior (shown with optional pipe cover).

## More Than 30 Million Installations Worldwide Make Rinnai #1!

At Rinnai, we've sold more tankless water heaters worldwide than anyone else. Our complete commitment to safety, quality and the environment has also made us #1 in the U.S. market.

## Tomorrow's Innovation Today

As the leading manufacturer of gas heating products worldwide, Rinnai continues innovating to ensure a greener environment. Rinnai's superior heating and hot water technologies deliver greater efficiency and reliability, so everyone benefits – with environmental preservation and energy conservation that results in a better planet for us all.



Industry and Building Associations





### Interior Residential/Commercial Models

Models available in Natural Gas or Propane Units	R50LSi	R75LSi	R94LSi	R98LSi/ R98LSi ASME**
Dimensions	14" W x 26" H x 10" D	14" W x 26" H x 10" D	14" W x 26" H x 10" D	19" W x 25" H x 9" D
Weight	50 lbs	50 lbs	50 lbs	55 lbs
Maximum/Minimum Gas Rate (Input BTU's)	150,000 /15,000	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 5.0 GPM	0.6 to 7.5 GPM	0.6 to 9.4 GPM	0.6 to 9.8 GPM
Energy Factor (NG and LP)	.82	.82	.82	NA
Temperature Range (Min - Max)				
Residential	98° F - 140° F	98° F - 140° F	98° F - 140° F	98° F - 140° F
Commercial*	98° F - 160° F	98° F - 160° F	98° F - 185° F	98° F - 185° F
Standard Digital Controller	MC-91-1	MC-91-1	MC-91-1	MC-91-1

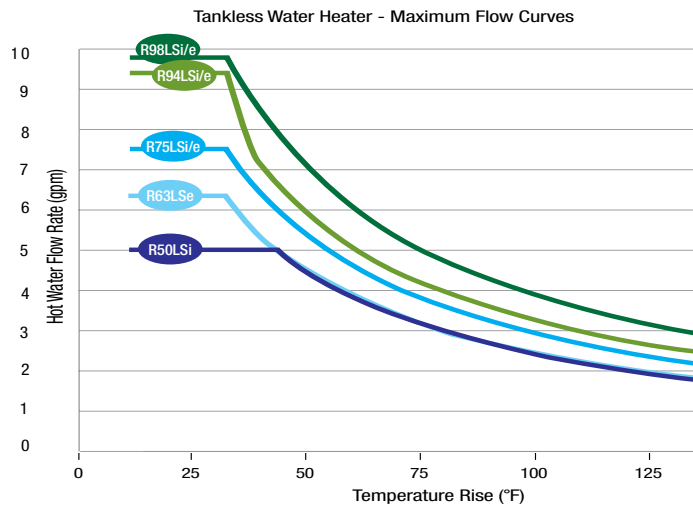
### Exterior Residential/Commercial Models

Models available in Natural Gas or Propane Units	R63LSe†	R75LSe	R94LSe	R98LSe/ R98LSe ASME**
Dimensions	14" W x 23" H x 8" D	14" W x 25" H x 10" D	14" W x 25" H x 10" D	19" W x 25" H x 9" D
Weight	36 lbs	46 lbs	46 lbs	55 lbs
Maximum/Minimum Gas Rate (Input BTU's)	150,000 /19,000	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 6.3 GPM	0.6 to 7.5 GPM	0.6 to 9.4 GPM	0.6 to 9.8 GPM
Energy Factor (NG and LP)	.81	.82	.82	NA
Temperature Range (Min - Max)				
Residential	98° F - 140° F	98° F - 140° F	98° F - 140° F	98° F - 140° F
Commercial*	98° F - 160° F	98° F - 160° F	98° F - 185° F	98° F - 185° F
Standard Digital Controller	MC-91-1	MC-91-1	MC-91-1	MC-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. R98LS models will be available in April 2008.

†EZConnect not available with the R63LSe.



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.

MODEL NO.	HOT WATER FLOW CHART				
	R98LSi/e TEMPERATURE RISE (°F)	R94LSi/e GALLONS PER MINUTE	R75LSi/e GALLONS PER MINUTE	R63LSe GALLONS PER MINUTE	R50LSi GALLONS PER MINUTE
140	2.8	2.4	2.1	1.8	1.8
135	2.9	2.5	2.2	1.8	1.9
130	3.0	2.6	2.3	1.9	1.9
125	3.2	2.7	2.4	2.0	2.0
120	3.3	2.8	2.5	2.1	2.1
115	3.4	2.9	2.6	2.2	2.2
110	3.6	3.0	2.7	2.3	2.3
105	3.8	3.2	2.9	2.4	2.4
100	4.0	3.3	3.0	2.5	2.5
95	4.2	3.5	3.2	2.6	2.7
90	4.4	3.7	3.3	2.8	2.8
85	4.7	3.9	3.5	2.9	3.0
80	4.9	4.2	3.8	3.1	3.2
75	5.3	4.4	4.0	3.3	3.4
70	5.7	4.7	4.3	3.6	3.6
65	6.1	5.1	4.6	3.8	3.9
60	6.6	5.5	5.0	4.2	4.2
55	7.2	6.0	5.5	4.5	4.6
50	7.9	6.6	6.0	5.0	5.0
45	8.8	7.4	6.7	5.5	5.0
40	9.8	8.3	7.5	6.2	5.0
35	9.8	9.4	7.5	6.3	5.0
30	9.8	9.4	7.5	6.3	5.0
25	9.8	9.4	7.5	6.3	5.0
20	9.8	9.4	7.5	6.3	5.0

## FOR MORE INFORMATION ON RINNAI PRODUCTS

## OTHER RINNAI LITERATURE AVAILABLE



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# Rinnai®

