



Water

Residential Gas
RTGH-S/SR Tankless
Water Heaters

The new degree of comfort.®

Rheem® IKONIC® Super High Efficiency Condensing Tankless Gas Water Heater

Easy Installation

- PVC Vent runs up to 70' (2"), 150' (3")
- Easy set up with full text digital display and no dip-switches
- Field gas convertible from natural gas to LP - conversion kit included

Ready for Retrofits

- Allows flex venting through existing B-vent up to 50'
- 1/2" Gas line compatibility (subject to local code)
- Approved for installations in Manufactured Home (Mobile Home) environments

Specifications

Rheem Model Number	RTGH-S84i RTGH-SR84i	RTGH-S10i RTGH-SR10i	RTGH-S11i RTGH-SR11i
Gas Input Rate	MAX 157,000 BTU/h	180,000 BTU/h	199,900 BTU/h
	MIN 11,000 BTU/h	11,000 BTU/h	11,000 BTU/h
Uniform Energy Factor (UEF)		0.96	
Hot Water Flow Rate Capacity - Gallons Per Minute (GPM)	MAX (35°F) 8.4	10.1	11.2
	45°F Rise 6.9	7.9	8.8
	67°F Rise 4.6	5.3	5.9
Number of Bathrooms ¹			
Temp. Range	85°F - 140°F		
Temp. Setting from Factory	120°F		
Installation Type	Indoor (Outdoor Conversion Kit sold separately: RTGH-SX)		
Fuel Type	Compatible with Natural Gas and LP (ships NG with LP conversion kit included)		
Heat Exchanger Material	Primary: Stainless Steel - Secondary: Stainless Steel		
Minimum Activation Flow	0.4 GPM		
Minimum Continuous Flow	0.26 GPM		
Maximum Altitude	10,200 ft.		
Ultra Low NOx	Meets 14 ng/J NOx requirements - SCAQMD Rule 1146.2 compliant		
Warranty	15 Year Heat Exchanger 5-Year Parts 1-Year Labor		

Model Number	RTGH-S	RTGH-SR
Height	28-9/16"	
Width	17-5/16"	
Depth	13-11/16"	
Weight	77.6lbs	86lbs
Venting Diam. Allowed	2" / 3"	
Max. Single Vent Run (straight pipe)	70 ft (2")/ 150 ft (3")	
Venting Materials	Sched. 40 PVC, CPVC, Polypropylene	
Common Venting (max. units)	12 units	
Flex Venting	Allowed: 2" up to 50'	
Manifold Controls (max. units)	Up to 20 units without external control required ³	
Controls	Built-in digital display with full-text menus	
Power Supply	120V 60Hz	
Max. Power Consumption	85W (Normal use), 0.7Amps 132W (Anti freeze only), 1.1Amps 3.5W (Standby), 0.03Amps ⁴	100W (Normal use), 0.83Amps 200W (Anti freeze), 1.67Amps 3.5W (Standby), 0.03Amps ⁴
Gas Connection	3/4" NPT	
Hot Water Connection	3/4" NPT	
Cold Water Connection	3/4" NPT	
Condensate Connection	1/2" NPT	
Vent Connections Diameter	2" Band Connections (Adapter required to vent with 3" PVC from unit)	



INTEGRATED HOME COMFORT



RTGH-S/SR Models

Indoor Models
(Outdoor Conversion Kit

Available: **RTGH-SX**)

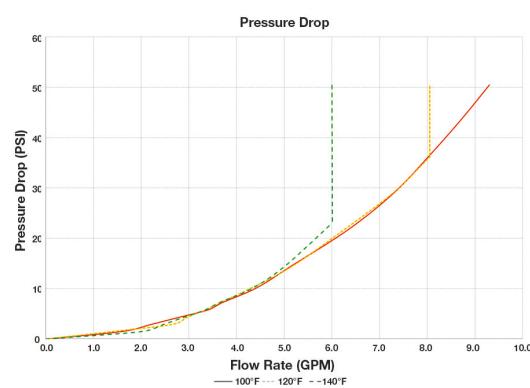
11,000-199,900 BTU/h

Natural Gas/LP Convertible



CLEARANCES	
Top / Bottom	12"
Front	1/2" ⁵
Sides	1/2"
Back / From Vent Pipe	0"

RECIRCULATION LENGTH (SRI MODELS)	
Pipe Diameter	Max. Recirculation Loop
3/4"	400 ft.
1/2"	100 ft.



¹ Based on simultaneous showers using 2 GPM flow rate pre-mixed with cold water line. Flow rates vary depending on temperature of incoming cold water and water heater set temperature. Refer to capacity table by zone for accurate sizing. ² For indoor application, this is the temperature of outdoor intake air.

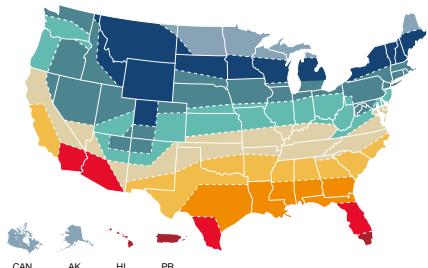
³ Manifolds with standard RJ25 communication cables. ⁴ If anti freeze is on and combustion is on, total W will be 217W (85+132). ⁵ Recommended 24" clearance for service.



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US Ground Water Temperature Zone Map



Average Flow Rates (GPM) by Application

Low Flow Faucet	0.5
Bathroom Faucet	1
Kitchen Faucet	1.5
Shower	2
Dishwasher	2
Washing Machine	3

Flow rates may vary.

Flow Rate Capacity Table by Zone (Gallons Per Minute - GPM)

Use the U.S. Ground Water Temperature Map to locate your zone. Then use the Flow Rate Capacity Table to determine model flow rate by zone. Flow rates calculated for tankless set temperature of 120°F with a mixed shower temperature of 105°F. Ground water temperature varies seasonally.

MODEL #	Zone 1 37°F	Zone 2 42°F	Zone 3 47°F	Zone 4 52°F	Zone 5 57°F	Zone 6 62°F	Zone 7 67°F	Zone 8 72°F	Zone 9 77°F
RTGH-S(R)11i	4.7	5.1	5.4	5.9	6.3	6.8	7.4	8.2	9.2
RTGH-S(R)10i	4.3	4.6	4.9	5.3	5.6	6.1	6.7	7.4	8.3
RTGH-S(R)84i	3.7	4.0	4.2	4.6	4.9	5.3	5.8	6.4	7.2

Venting

SINGLE UNIT: MAX. EQUIVALENT VENT LENGTHS - STRAIGHT PIPE		
Number of 90° Elbows	Max Length 2" straight pipe	Max. length 3" straight pipe
0	70 ft. (21.3 m)	150 ft. (45.7 m)
1	64 ft. (19.5 m)	145 ft. (44.2 m)
2	58 ft. (17.7 m)	140 ft. (42.7 m)
3	52 ft. (15.8 m)	135 ft. (41.1 m)
4	46 ft. (14.0 m)	130 ft. (39.6 m)
5	40 ft. (12.2 m)	125 ft. (38.1 m)
6	34 ft. (10.4 m)	120 ft. (36.6 m)

EQUIVALENT FT. OF ELBOWS		
	2" Pipe	3" Pipe
90° Elbow	6 ft (1.83 m)	5 ft (1.52 m)
45° Elbow	3 ft. (0.9 m)	2.5 ft. (0.75 m)

Venting Materials Allowed: Schedule 40 PVC, CPVC, Polypropylene

MIN. VENT LENGTH STRAIGHT PIPE	
Number of 90° Elbows	Min. Length 2" 3" pipe
1	1.0 ft (0.3 m)

COMMON VENTING	
# of Water Heaters	3" Common Vent
2	60 ft.

SINGLE UNIT: MAX. FLEX VENTING	
Max Length 2" flex vent	
50 ft.	

Hanging bracket, bird screens, LP gas conversion kit are included with water heater.

Parts & Accessories

Condensate Neutralizer	Non-Return Valve	Flex Vent Kit	Pipe Cover	Horizontal Vent Termination	Concentric Vent Termination	AllClear® Water Treatment System	Isolation Valve Kit	Manifold Cables	Outdoor Conversion Kit	Crossover Valve
RTG20329AR (optional)	SP21088	SP21091	RTG20322	2" US: SP21069G 3" US: SP21069E	2" - SP20897 3" - SP20245	RTG20251	RTG20326	RCPN-AMP03-0013111101-0003 (48")	RTGH-SX	RTG20285

In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

Rheem Water Heating • 1115 Northmeadow Parkway, Suite 100
Roswell, Georgia 30076 • www.rheem.com

Rheem Canada Ltd./Ltée • 125 Edgeware Road, Unit 1
Brampton, Ontario L6Y 0P5 • www.rheem.com

