



Ruud® S/SR Series 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)

Key Features

- Stainless steel Primary and Secondary heat exchangers provide increased efficiency and durability
- Hot-start programming™ ensures the unit is in a ready state between back-to-back usage, avoiding any cold water bursts – **Ruud® Exclusive!**
- Built-in Recirculation pump for instant hot water at the tap (SR models)
- Built-in EcoNet® wifi capability for direct control from your device (optional for S models)



Specifications

Ruud Model Number		CRUTGH-S11i CRUTGH-SR11i
Gas Input Rate	MAX	199,900 BTU/h
	MIN	11,000 BTU/h
Uniform Energy Factor (UEF)		0.96
Gallons Per Minute (GPM)	MAX (35°F)	11.2
	45°F Rise	8.8
	67°F Rise	5.9
Number of Bathrooms ¹		🚿🚿🚿
Temp. Range		85°F - 140°F
Temp. Setting from Factory		120°F
Installation Type		Indoor
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		Yes (SCAQMD compliant)
Warranty		15 Year Heat Exchanger - (w/ registration) 12 Year Heat Exchanger - (w/o registration) 5-Year Parts 1-Year Labor

Model Number	CRUTGH-S	CRUTGH-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	ULC-S636 PVC, CPVC, PP	
Common Venting (max. units)	2 units ³	
Flex Venting	Allowed: 2" up to 50'	
Manifold Controls (max. units)	Up to 20 units without external control required ⁴	
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 ⁵	100W (Normal use), 0.83Amps 200W (Anti freeze), 1.67Amps 3.5W (Standby), 0.03Amps ⁵
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)	

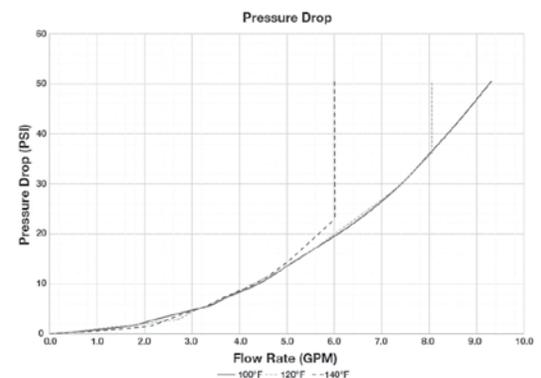
CRUTGH-S/SR Models (Non-recirculation S Models **COMING SOON!**)

Indoor Models
11,000-199,900 BTU/h
Natural Gas/LP Convertible



Clearances	
Top / Bottom	12"
Front	1/2" ⁶
Sides	1/2"
Back / From Vent Pipe	0"

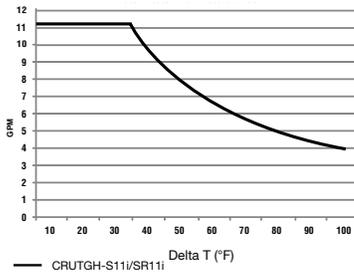
Recirculation Length (SR Models)	
Pipe Diameter	Max. Recirculation Loop
3/4"	400 ft.
1/2"	100 ft.



¹Based on simultaneous showers using 2.5 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 flow rate curves for accurate sizing. ²For indoor application, this is the temperature of outdoor intake air. ³External check valve required for installation. ⁴Manifolds with standard RJ25 communication cables. ⁵If anti freeze is on and combustion is on, total W will be 217W (85+132). ⁶Recommended 24" clearance for service.



Water Heater Flow Rate Curves



Model Number	Temperature Rise (°F)									
	35°	45°	50°	60°	67°	70°	80°	90°	100°	
CRUTGH-S11i/SR11i Water Flow (GPM)	11.2	8.8	7.9	6.6	5.9	5.6	4.9	4.4	3.9	

Above estimates are for sizing purposes only.

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)

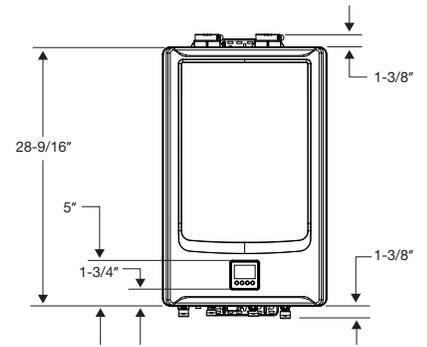
Venting Materials Allowed: ULC-S636 PVC, CPVC, PP

Min. Vent Length Straight Pipe	
Number of 90° Elbows	Min. Length 2" 3" pipe
1	1.0 ft (0.3 m)

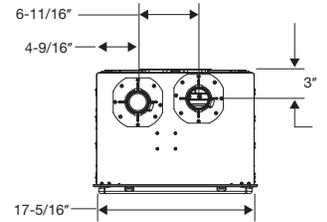
COMMON VENTING	
# of Water Heaters	3" Common Vent
2	60 ft.

SINGLE UNIT: Max. Flex Venting	
Max Length 2" flex vent	
50 ft.	

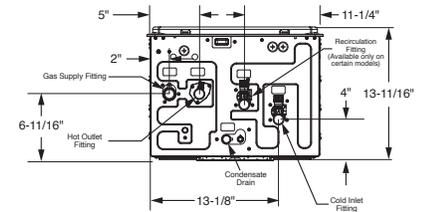
Dimensions



TOP VIEW



BOTTOM VIEW



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

Parts and Accessories

For more information on Tankless parts and accessories, see the Parts and Accessories Catalog or call 866-720-2076.