

Rinnai
WATER HEATING SOLUTIONS

Demand Duo™

endless innovation

COMMERCIAL HYBRID WATER HEATING SYSTEM

Fast installation, endless benefits



When you need to replace a standard tank quickly, Rinnai's Demand Duo™ Hybrid Water Heating System is the smart choice. In no time at all, you'll experience the "best of both" — an upgrade that delivers an on-demand and continuous supply of hot water.

- Choose 80-gallon or 119-gallon commercial tankless water heater
- 199,000 BTU
- 119-gallon units feature 96% thermal efficiency
- 80-gallon unit offers 82% RE

WHY CHOOSE RINNAI DEMAND DUO™?

- **Longer life vs. traditional tank**
- **2X the warranty****
5-year heat exchanger on 80-gallon system; 6-year heat exchanger on 119-gallon system; 6-year tank, 5-year parts, 2-year labor on all systems
- **Saves money with less energy cost vs. standard-efficiency water heater**
- **Performs better by combining the best of tank and tankless technologies**
- **Easy and cost-effective maintenance** – readily available, field-replaceable parts
- **100% satisfaction** – We're so sure your customers will be happy with their purchase, we offer a No-Risk Satisfaction Guarantee*

* Rinnai guarantees that its Demand Duo™ will perform to specification. If within the first 30 days after installation you find it does not perform as stated and you are not 100% satisfied with the Demand Duo™, Rinnai will refund you the cost of the product, and installation labor. (100% satisfaction guarantee applies only to the following product numbers: CHS199100iN, CHS199199iP, CHS19980HEiP, CHS19980HEiN, CHS19980HEXiN). Rinnai reserves the right to verify correct installation prior to refund. For complete details, see our warranty at rinnai.us.

“With the Rinnai Demand Duo we get **reliability, savings and redundancy**, all in one package!”

- **TY CRAWFORD**, JOURNEYMAN BOILER MECHANIC, PINELLAS SCHOOL DISTRICT, TAMPA, FL

REFERENCE GUIDE

DEMAND DUO™ HYBRID WATER HEATING SYSTEM

MODEL	DEMAND DUO™ 119 GAL	DEMAND DUO™ 80 GAL
THEMAL EFFICIENCY/ RECOVERY EFFICIENCY	96%	82%
AVAILABLE IN NATURAL GAS OR PROPANE	✓	✓
WI-FI READY	✓	✓
MIN/MAX BTU	15,200/199,000	10,300/199,000
TEMPERATURE RANGE	98°-185°F/37°-85°C	98°-185°F/37°-85°C
GPM	FIRST HOUR DELIVERY: 315 GPH	FIRST HOUR DELIVERY: 259 GPH
WARRANTY**	LIMITED 6-YEAR HEAT EXCHANGER AND TANK, 5-YEAR PARTS, 2-YEAR LABOR	LIMITED 5-YEAR ON HEAT EXCHANGER, 6-YEAR ON TANK, 5 YEAR ON PARTS, UP TO 2 YEARS ON LABOR
SUITABLE FOR	REPLACEMENT OR NEW CONSTRUCTION	IDEAL FOR EMERGENCY REPLACEMENT
SYSTEM CAPACITY	MAX 8 UNITS	1 UNIT

Get the best of both

Part tank →

- Durable, energy efficient 80-gallon or 119-gallon storage tank
- Ideal for emergency replacement situations
- Offers more water-heating capacity than a traditional tank
- A direct replacement solution with connections similar to most high-efficiency tanks
- Efficient tank recovery methods deliver consistent hot water even during reheat cycles



← Part tankless

- Fueled by either natural gas or propane
- Keeps pace with demand, from brief, high-spike draws to a supply that's ready to go the distance, day in and day out
- 119-gallon units are commercial ENERGY STAR® certified with 96% thermal efficiency
- As the heat source, Rinnai's tankless water heaters eliminate thermal stress on the tank - lengthening the life of the unit and its ability to consistently output hot water
- Easy, cost-effective maintenance with readily available parts

100%
Satisfaction
Guarantee*



Application Engineering Center of Excellence

Our team of application engineers is available to create quotes, size your system and provide designs for your specific project — all at no charge and backed by our 100% sizing guarantee. Using proven sizing methodologies, Rinnai's Application Engineering Center of Excellence is there to consult with you and provide the best total solution for your next project.

Call them at 1-800-621-9419 or email at engineering@rinnai.us.

Don't just swap out, swap up

A quick and easy upgrade to a Rinnai Demand Duo system can deliver an endless supply of hot water for commercial operations that depend on continuous hot water. These direct-replacement solutions feature connections similar to most tanks. So, you never miss a beat, with hot water that meets peak demands, while delivering consistent performance, day after day. What's more, sustainable design means the Demand Duo System reduces life-cycle costs and landfill waste.

DEMAND DUO 119-GALLON SYSTEM

This system features a Rinnai C199 Commercial-Grade Tankless Water Heater, combined with a durable, energy-efficient 119-gallon storage tank.

- Commercial ENERGY STAR® certified
- Ultra low NOx compliant
- 96% thermal efficiency
- Multiple venting options (PVC/CPVC, Room Air, Concentric, Common Vent)
- System weight up to 250 lbs. lighter than competitive units

Big performance for smaller demand

AVAILABLE JANUARY 2018

DEMAND DUO 80-GALLON SYSTEM

Paired with a durable energy-efficient 80-gallon storage tank, the Rinnai RL94 High-Efficiency Plus Tankless Water Heater offers a quick, energy efficient replacement for commercial applications that depend on endless hot water but have smaller demands.

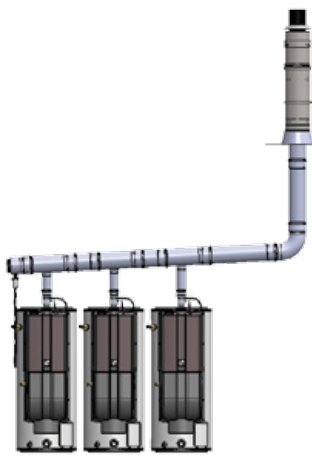

- 82% RE
- Ideal for smaller commercial operations such as food service, stand-alone healthcare, salons, convenience stores and more
- Delivers 259 gallons of hot water in first hour of operation
- Route and terminate concentric venting vertically or horizontally
- NEW - Sleeve concentric venting through existing B vent and terminate using flared adapter

CONNECTION LOCATIONS:

- 1 Electrical
- 2 Gas
- 3 Cold Supply
- 4 Hot Supply
- 5 Concentric Vent Intake/Exhaust
- 6 Two Pipe Combustion Air Intake
- 7 Tank T&P
- 8 Tank Drain Valve
- 9 Condensate Drain (behind cover)
- 10 Temperature Controller
- 11 Tankless Pressure Relief Valve



Venting solutions

119-GAL VENTING OPTIONS		80-GAL VENTING OPTIONS	
			
<p>Demand Duo 119 gal Options</p> <p>Available in: Single Vent: Two Pipe PVC/CPVC, Concentric Polypropylene (PP) Common Vent: PP and PVC/CPVC</p> <p>Common venting means significantly fewer wall or roof cuts, less labor, and longer vent lengths with single-unit venting.*</p>		<p>NEW! Termination with Flared Adapter for 6" B Vent Chase</p> <p>Concentric Venting: Vertical Vent Option</p> <p>Concentric Venting: Horizontal Vent Option</p>	

*You must reference the Demand Duo and Common Vent Installation Manual before making the final selection of vent components applicable to your installation.
 **PVC/CPVC not approved for use in Canada

COMMERCIAL HYBRID WATER HEATING SYSTEM SPECIFICATIONS

Model	DEMAND DUO™ 119 GAL	DEMAND DUO™ 80 GAL
Part Number	CHS199100iN/CHS199100iP	CHS19980HEiP/CHS19980HEiN/CHS19980HEXiN
Dimensions - w x h x d Inches (mm)	28.2 x 67.3 x 39.1 (358 x 1709 x 993)	24.25 x 62.69 x 34.05 (615.9 x 1592.3 x 864.9)
Product Weight (lbs/kg)	428/194	290/132
Installation Type	Indoor	Indoor
Storage Tank	119 Gallons	80 Gallons
Min/Max BTU	15,200/199,000	10,300/199,000
Thermal Efficiency/Recovery Efficiency (RE)	96%	82%
Temperature Range	98°-185°F/37°-85°C	98°-185°F/37°-85°C
Hot Water Capacity***	First Hour Delivery: 315 gph	First Hour Delivery - 259 Gallons
Controller (standard)	MCC-91-2US	MCC-91-2US
Ultra Low NOx	Yes	Yes
Warranty (Commercial)*	Limited 6-year on heat exchanger/tank, 5-year on parts, up to 2 years labor	Limited 5-year on heat exchanger, 6-year on tank, 5 year on parts, up to 2 years on labor
High Altitude Approved	10,200 ft	Yes
Certification	C199 - AHRI and CSA	RL94 - AHRI and CSA
Venting Material	Available in Concentric, Dual Pipe or Common Vent Polypropylene (US and Canada) PVC/CPVC (US only)	Concentric components available
Venting Options	Direct vent with side wall intake/vertical exhaust for U.S. and Canada (exhaust must terminate vertically), room air common vent for the U.S. (must terminate vertically)	Concentric
ENERGY STAR® Certified	Yes	
1/2" Gas Line Compatible**	Yes	Yes
Wi-Fi Ready	Yes	Yes

* For complete information and details regarding Rinnai's warranty, visit rinnai.us.
 ** For complete information on gas sizing for Rinnai Tankless Water Heaters, consult the Operation and Installation Manual.
 *** Per test results from Rinnai testing lab based on storage volume and 70 percent usable hot water.

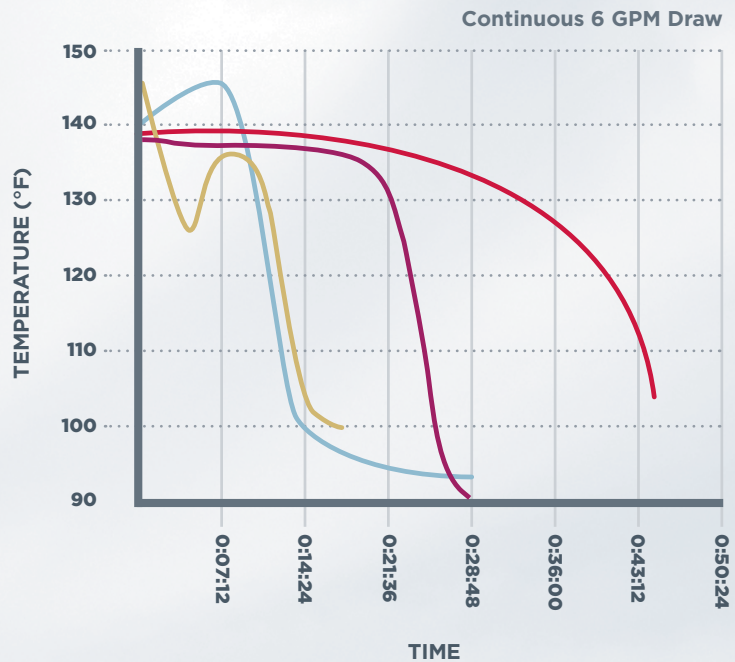
Performance vs. traditional tanks

Internal tests were conducted to show temperature ranges and volume of hot water at a specific Gallons Per Minute (GPM) draw.

Based on a continuous draw at **6 GPM**, the **Rinnai Demand Duo™** provides more stable temperatures as well as more hot water than both standard- and high-efficiency tanks.

- High-Efficiency Tank (100 Gallon)
- Standard-Efficiency Tank (80 Gallon)
- Rinnai Demand Duo™ (119 Gallon)
- Rinnai Demand Duo™ (80 Gallon)

Note: All tests were conducted with a fully charged tank set at 140°F. This was a draw only test with recovery, and supply water temperature at 40°F.



100 years of smart comfort

For nearly 100 years, Rinnai has been fiercely committed to giving you a smarter kind of comfort. With headquarters in Japan and a network of 20 subsidiaries and 86 sales offices in 13 countries, this commitment has made us one of the world's largest gas appliance manufacturers. Our value-added products continue to stay in step with the demands of our changing world.

Rinnai advantages for National Accounts

Rinnai National Accounts is committed to keeping businesses up and running with innovative water heating products, prompt service and the best warranty available.

- Factory Trained Commercial Service Providers
- Nationwide support and coverage
- Just one call for immediate replacement, installation and preventive maintenance
- Turnkey guaranteed pricing programs available
- Water heating solutions that save money, last longer and save space

Endless support behind you

Beyond manufacturing the highest-quality products, our people stand behind all that we make — before, during and long after installation. From the **24/7/365 technical support** for professionals, to our **national network of independent dealers**, to our **on-staff engineers** who can assist with choosing the right products and sizes — we're inspiring confidence as well as comfort.

For more information on commercial water heating solutions, maintenance services and a free sizing consultation by Rinnai Applications Engineers, call **866-383-0707** or visit rinnai.us/commercial.



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