

#### COMMERCIAL



# **EASE OF INSTALLATION AND SERVICEABILITY**

- Compact Design to Save Space
- · Wi-Fi Technology for Remote Monitoring and Management
- Simple Gas Conversion
- Electronically Connect up to 24 Water Heaters to Operate as One Hot Water Source

## **OPTIONAL ACCESSORIES**

Condensate Neutralizer, ScaleCutter, Drain Down Kit, Additional Controllers, Recess Box, Pipe Cover, Recirculation Pump, DPS/MIS Switch, EZ Connect Cables, Control-R™ WI-FI Module, Wireless Accessories, and many more.

Visit rinnai.us for a complete list of accessories.

### COMMERCIAL APPLICATIONS

#### **Commercial Tankless Rack Systems**



- Fully-assembled, comprehensive water heating solutions
- Numerous configurations: Free Standing, Inline Free Standing, Inline Wall Mount, Wall Hanging, and Corner
- Made to Order Customized Solutions

#### SUPER-HIGH-EFFICIENCY (CONDENSING) **TANKLESS WATER HEATER**

Installation Type	External (Outdoor) Commercial Applications	
Model Numbers	CU199e (REU-N3237WC-US) CU160e (REU-N2530WC-US)	
Approved Gas Types	Natural and Propane	
Thermal Efficiency	Up to 97%	
High Altitude Approved	Up to 10,200 Ft (3,109 M)	
Water Flow Control	Water Flow Sensor, Electronic Water Control and Bypass Control	
Controller	Standard: Integrated Controller Optional: MC-91-2US	
Certifications	AHRI, ANSI Z21.10.3, CSA 4.3, and Energy Star®	

#### Warranty

- Heat Exchanger: 8 years or 12,000 operation hours, whichever occurs first
- All Other Parts and Components: 5 Years
- Reasonable Labor: 1 Year

#### **Safety Devices**

Flame Failure - Flame Rod, Boiling Protection, Combustion Fan RPM Check, Over Current - Glass Fuse, Remaining Flame (OHS) and **Automatic Frost Protection** 

### **Included with Purchase**

- Tankless Water Heater
- Pressure Relief Valve and Adapter
- Isolation Valve Kit
- Integrated Controller
- Recirculation Pump Cable

### **Additional Features**

- Complies with South Coast
   Ultra Low NOx Air Quality Management District 14 ng/J or 20 ppm **NOx Emission Levels** 

  - Tankless Rack System<sup>™</sup> Compatible
  - 1/2 in. (13 mm) Gas Line Compatible











CERTIFIED TO ANSI Z21.10.3 — CSA 4.3

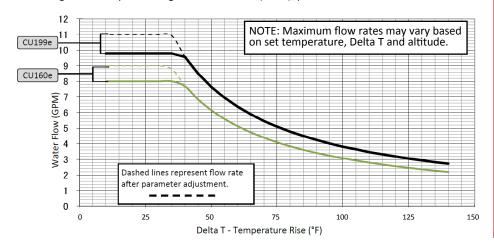
# SENSEI<sup>TM</sup> TECHNICAL SPECIFICATIONS

SPECIFICATION		CU199e	CU160e	
Dimensions - w, h, d		18.5 in. x 26.4 in. x 11.4 in. (470 mm x 670 mm x 290 mm)		
Minimum Gas Consumption Btu/h		15,000		
Maximum Gas Consumption Btu/h		199,000	160,000	
Flow Rate <sup>1</sup> (Min - Max)		0.26 - 9.8 GPM (1.0 - 37 L/min)	0.26 - 8.0 GPM (1.0 - 30 L/min)	
Max Flow Rate with Parameter Adjustment		11 GPM (42 L/min)	9 GPM (34 L/min)	
Weight		64 lb (29 kg)	62 lb (28 kg)	
Sound Level		53 dB	52 dB	
	Normal	81 W	49 W	
<u>e</u>	Standby	1.3 W		
Electrical	Freeze Protection	152 W		
Ele	Max Current	4 Amps		
	Fuse	10 Amps		
Temperature		Minimum: 98° F (37° C) Default  Maximum: 140° F (60° C) Default 185° F (85° C) With Parameter Adjustment		
By-Pass Flow Control		Electronic		
Gas Supply Pressure <sup>2</sup>		<ul> <li>Natural: 3.5 in. w.c 10.5 in. w.c.</li> <li>Propane: 8.0 in. w.c 13.5 in. w.c.</li> </ul>		
Ignition System		Direct Electronic Ignition		
Electronic Connections		<ul> <li>Appliance: AC 120 Volts, 60Hz.</li> <li>Temperature Controller: DC 12 Volts (Digital)</li> </ul>		
Water Supply Pressure		<ul> <li>Minimum: 50 PSI (Recommended 60-80 PSI for max performance)</li> <li>Maximum: 150 PSI</li> </ul>		
Controller Cable		Non-Polarized Two Core Cable (Minimum 22 AWG)		
Service Connections		<ul> <li>Gas Supply: 3/4 in. (19 mm) NPT</li> <li>Cold Water Inlet: 3/4 in. (19 mm) NPT</li> <li>Hot Water Outlet: 3/4 in. (19 mm) NPT</li> <li>Condensate Drain: 1/2 in. (13 mm) NPT</li> </ul>		
Clearances • E		<ul> <li>Top: 2 in. (51 mm)*</li> <li>Bottom/Ground: 12 in. (305 mm)</li> <li>Front: 0 in.**</li> <li>Back: 0 in.</li> <li>Sides: 2 in. (51 mm)***</li> <li>Front Exhaust: 24 in. (610 mm)</li> </ul>		

- \* 0 in. from vent components \*\* Clearance for servicing is 24 in. (610 mm) in front of water heater \*\*\* Add 0.25 in. (6.35 mm) for recess box
- <sup>1</sup> Minimum flow may vary slightly depending on the temperature setting and the inlet water temperature.
   Minimum activation flow is 0.4 GPM (1.5 L/min).
   <sup>2</sup> The maximum gas supply pressure must not exceed the value specified by the manufacturer.

# SENSEI<sup>TM</sup> WATER FLOW CURVE

Flow curves apply only to incoming water temperatures of 70° F (21° C) or less. For incoming water temperatures greater than 70° F (21° C), please contact Rinnai.



# SENSEI<sup>TM</sup> DIMENSIONS in. (mm) FRONT 6.00 6.50 (152)(165)٥ <u>å</u> 27.9 (709) 26.4 (670) 18.50 (470)SIDE 12.0 (305).80 28.4 11.45 (290)воттом $\ominus$ GAS В Е D G Connection in. mm 9.54 242 COLD С 3.56 90 Н 14.27 362 HOT В 6.16 156 91 Ε 3.57 GAS D 2.78 71 G 10.39 264 PRV Α 7.60 193