

Rinnai

# SENSEI RX

# SERIES

Built for the PRO, by the PRO™

Featuring the RXP Model with Built-in Pump and

Smart - Circ







0.98

UEF (Uniform Energy Factor)

#### Built for the PRO, by the PRO™

SENSEI®RX Series featuring Smart-Circ™ Intelligent Recirculation™, makes it easier than ever for PROs to sell, install, and service the best-performing condensing tankless water heater Rinnai has ever made. Now you can provide the latest in lifestyle comfort, smart-design, and built-in technology by installing the premium, unlimited hot water experience that only **SENSEI®RX Series** can offer.



Rinnai's proprietary Adaptive Gas Valve Technology adjusts to either Natural Gas or Liquid Propane Gas for optimal combustion - no conversion kit required.



SENSEI®RX Series Offers Natural Gas, Propane Gas, Indoor and Outdoor Capability all in One Model Stock your warehouse and vehicle with the one tankless model that really does it all!

# VERSA-VENT

Outdoor Vent Cap (RXOVC) easily adapts to any SENSEI®RX Series model for outdoor installations providing the ultimate in SKU flexibility (sold separately).





#### SMART CONNECT

Allows you to connect your smart phone or tablet to the SENSEI®RX Series via Bluetooth®. Use the Rinnai Central™ App for quick, simplified tankless water heater set-up and registration, significantly reducing your install time.





Provides an efficient flushing procedure to make periodic preventive maintenance a simple task to perform.





# Superior Performance Requires Superior Components<sup>™</sup>

Rinnai designs and manufactures most of the key components that go into the **SENSEI\*RX Series**, allowing for consistent control of quality, backed by the industry's best warranty.

Built for the PRO, by the PRO™

Model shown: RXP199IN

SENSEI'RX

That's why more consumers and PROs choose Rinnai over any tankless brand.

#### Improved Turbo Fan™

Enables longer vent runs and flexible vent options Industry leading 75 feet with 2"/4" concentric and 2" PVC/CPVC/PP. Up to 150 feet with 3"/5" concentric and 3" PVC/CPVC/PP.

#### Enhanced Primary and Secondary Heat Exchangers

More efficient heat transfer and improved robust design with minimal joints. The tube design is 444

The tube design is 444 Stainless Steel that provides added durability and heat resistance.

# Sets the standard for high efficiency tankless

(0.98 or 0.97 UEF on all models).

#### 4-Speed DC Recirculation Pump

Quieter operation in a compact size with higher head pressure for improved performance.

#### Retro-fit Internal Pump Kit

Adds Rinnai's advanced recirculation capability to non-pump models.

#### Weighs 58 lbs.

10 lbs. lighter than previous models



15 YEARS on the Heat Exchanger

5 YEARS on Parts

Other trademarks and trade names are those of their respective owners.

5 YEARS Reasonable Labor\*
Requires product to be registered within
90 days of installation or Labor Warranty
defaults to 1-year.

ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency

Rinnai.

FIRST

Traditional Tanks

90 days of installation or Labor Warranty defaults to 1-year.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Rinnai is under license.



# SENSEI'RX

Built for the PRO, by the PRO™

#### **Set-up and Registration has Never Been More Convenient**

**Download and Open the** Rinnai Central<sup>™</sup> App Open and create your PRO Account today to gain instant access to product information, training resources. and set-up procedures...

plus much more!





App Store









**Initiate Set-up** (Wi-Fi not required)

Push the Bluetooth button on the tankless controller with the Rinnai Central<sup>™</sup> app open to SMART. CONNECT to your device.



Use the Quick Set-Up screen for speedy unit configuration without removing the cover!

Use **PRO-files**™ to pre-load and save all parameter settings in app for future installs.



Fuel Type SMART&SENSE"

lets you select the fuel source (no orifice change required).

Indoors / Outdoors

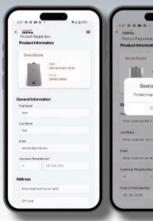
#### **VERSA-VENT**

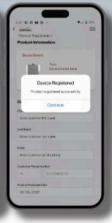
cap allows any unit to install outdoors (purchased separately)

Register the unit Maximize the Rinnai

Warranty by registering the SFNSFI®RX









#### Lifestyle Comfort Options with SENSEI®RXP - Recirculation models



#### Recirculation Schedule Based on Usage Patterns

Smart-Circ™ Extraordinary Convenience Out of the Box

Smart-Circ Intelligent Recirculation

Smart-Circ™ starts learning "users" hot water patterns from the first day and automatically schedules recirculation to provide hot water when they need it. Leverages last 7 days of hot water usage to continuously update hot water recirculation schedule. Users enjoy continuous hot water during regular demand periods, while saving energy and money.







#### Recirculation Schedule Based on User Control

Hot Water Recirculation Scheduling at Your Fingertips



After downloading the Rinnai Central app and connecting to the RWM200 Wireless Module (sold separately), Homeowners can experience the ultimate in accessibility, convenience, and control:

- Activate recirculation schedule (pump-enabled models only)
- · Adjust Water temperature
- · Check real-time water heater status
- · Receive maintenance alerts
- Activate vacation mode to save energy when away for extended periods



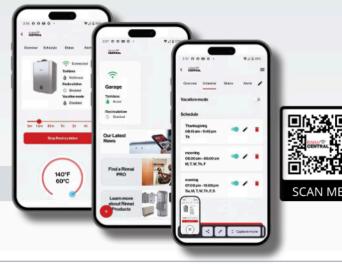
RWM200 Wireless Module

# Smart Home Automation Smart Home Routines for Convenient Control

- Voice Activation with amazon alexa
- · Adjust Water Temperature
- Turn on/off Recirculation
- Schedule Recirculation
- Push Button available for On-Demand Recirculation\*

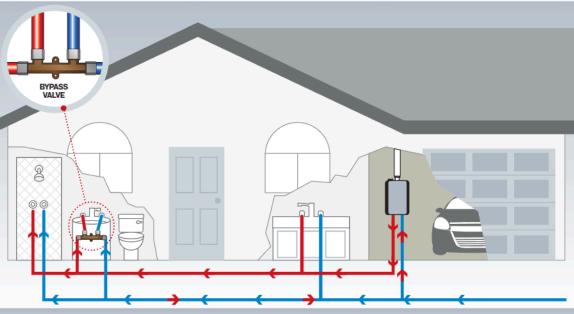






# **Turn Any Plumbing System into a Recirc System**

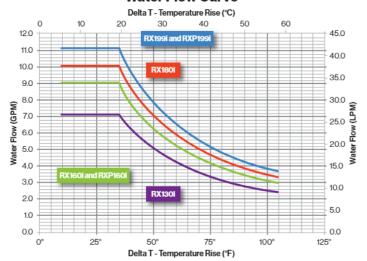
Regardless of whether an existing plumbing system has a dedicated return line, faster hot water can be enjoyed using a Thermal Bypass Valve accessory when installing tankless models featuring a built-in pump with recirculation technology.



## Flow Rate vs DELTA T Table and Chart

Model	RXP199	RXP160	RX199	RX180	RX160	RX130
Max. BTUH	199,000	160,000	199,000	180,000	160,000	130,000
Recovery Efficiency*	97%	97%	97%	97%	97%	97%
Temperature Rise (°F)	GPM	GPM	GPM	GPM	GPM	GPM
105	3.7	3.0	3.7	3.3	3.0	2.4
100	3.9	3.1	3.9	3.5	3.1	2.5
95	4.1	3.3	4.1	3.7	3.3	2.7
90	4.3	3.5	4.3	3.9	3.5	2.8
85	4.6	3.7	4.6	4.1	3.7	3.0
80	4.8	3.9	4.8	4.4	3.9	3.2
75	5.2	4.2	5.2	4.7	4.2	3.4
70	5.5	4.5	5.5	5.0	4.5	3.6
67	5.8	4.7	5.8	5.2	4.7	3.8
65	6.0	4.8	6.0	5.4	4.8	3.9
60	6.5	5.2	6.5	5.8	5.2	4.2
55	7.0	5.7	7.0	6.4	5.7	4.6
50	7.8	6.2	7.8	7.0	6.2	5.1
45	8.6	6.9	8.6	7.8	6.9	5.6
40	9.7	7.8	9.7	8.8	7.8	6.3
35	11.1	8.9	11.1	10.0	8.9	7:1
30	11.1	9.0	11.1	10.0	9.0	7:1
25	11.1	9.0	11.1	10.0	9.0	7:1
20	11.1	9.0	11.1	10.0	9.0	7:1
15	11.1	9.0	11.1	10.0	9.0	7.1
10	11.1	9.0	11.1	10.0	9.0	7:1

#### Water Flow Curve



Note: Maximum flow rates may vary based on set temperature, Delta T and altitude



<sup>\*</sup>Recovery Efficiency ratings per AHRI Directory.



#### Tankless vs Tank

# **Rinnai**.

#### High Hot Water Usage

Every year **American home owners spend \$400 to \$600**, on average, to heat water for bathing, washing & cleaning.\*

Average Household Consumes 64 Gallons of Hot Water Per Day (23,000 gallons per year)



# TANKLESS WATER HEATERS Continous hot water

VS Over 20 Years

TANK
WATER
HEATERS
Traditional hot
water storage
tank system





Tankless water heaters are **much more energy efficient;** no hot water is stored.

24-34% more efficient than tanks.\*

Tank water heaters are **susceptible to standby heat loss** and a continously heated tank means water is heated all day long, 24/7, for **less efficiency.** 

#### · COST ·

**EFFICIENCY** •

Tankless water heaters have **lower operational costs** and **last much longer than tank water heaters**, which can offset installation costs.

Tank water heaters have a lower purchase price but are **more expensive to operate** since they must constantly keep water heated 24/7.

#### · LIFESPAN ·

With periodic maintenance, tankless water heaters can last for 20+ years.\*

Traditional tank water heaters have a lifespan of 10-15 years.\*

#### · SIZE · SPACE ·

Tankless water heaters are about the size of a small suitcase and are wall mounted for significant space savings.

Traditional tank water heaters **require much more area** for installation than tankless units potentially reducing net living or storage space.

#### • BOTTOM LINE •

- Up to 34% more energy efficient\*
- Compact space saving design
- Longer lifespan
- · Unlimited hot water capacity

- · Heats water even when not being used
- Takes up valuable space
- Shorter lifespan
- · 40-60 gallon capacity

Rinnai LMS Class Enrollment Guide

https://bit.ly/42ITiaQ

#### Rinnai Technical Training Department

Rinnai offers many NO COST training options for PROs, either on-line, in the field or at Rinnai's Peachtree City, Georgia, USA corporate office. The training levels range from an introduction to tankless technology to advanced live technical training where you gain hands-on experience in the installation and troubleshooting of Rinnai products. For more information, contact your local Rinnai representative or enroll today at the Rinnai Online Training Center.



Training Help Email: training@rinnai.us



# Be the PRO in the know

There are a lot of tankless myths out there being spread by people unfamiliar with the technology. Luckily, plenty of PROs know about these misconceptions and are here to tell the Tankless Truths.



To learn about all the Tankless Truths, click on the link below of scan the Tankless Truths QR Code.

https://www.rinnai.us/tanklesstruths





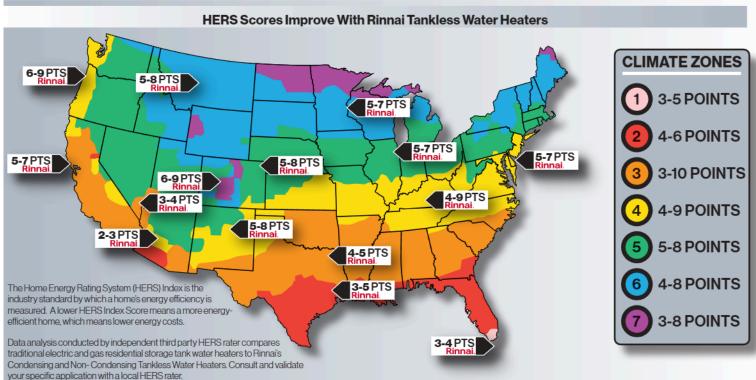


Rinnai LMS Class Schedules

https://bit.ly/443HWcX

<sup>\*</sup>As based on the average operating costs, efficiency and lifespans of tankless vs. storage water heaters per the Department of Energy (energy.gov).





For more information specific to your zone or city, visit: <u>hersindex.com</u>

## REDUCE YOUR SKUs from 24 MODELS to 6!

## **Model Chart and Specifications**

SENSEI®RX SERIES Condensing Tankless Water Heaters











to 6!					B	
MODEL	RXP199IN	RXP160IN	RX199IN	RX180IN	RX160IN	RX130IN
Built-in Pump	Yes			N	lo	
Smart - Circ Intelligent Recirculation	Ye	es	Smart-Circ capable with installation of pump or pump accessory kit			
Product Dimensions W,H,D inches (mm)	18.5 X 30.1 X 11.4 (470 X 765 X 290)					
Product Weight (lbs / kg)	58 (26)	57 (26)	55 (25)	55 (25)	54 (24)	54 (24)
Installation Type	In	door Units (Includes optio	onal outdoor installations	with use of the Rinnai ou	tdoor vent cap accessory	1)
UEF	0.98	0.97	0.98	0.98	0.97	0.97
Min./Max. Btu	15,000/199,000	15,000/160,000	15,000/199,000	15,000/180,000	15,000/160,000	15,000/130,000
Temperature Setting*	Minimum: Normal Operation: 98°F (37°C) (Crossover Mode: 120°F (49°C)) Maximum: Default: 120°F (49°C) with Parameter Adjustment: 140°F (60°C)					
Minimum Activation Rate			0.26 GPM	(0.5 L/MIN)		
Flow Rate (Min-Max)	0.13-11.1 GPM (0.5-42 L/MIN)	0.13-9.0 GPM (0.5-34 L/MIN)	0.13-11.1 GPM (0.5-42 L/MIN)	0.13-10.0 GPM (0.5-38 L/MIN)	0.13-9.0 GPM (0.5-34 L/MIN)	0.13-7.1 GPM (0.5-27 L/MIN)
Controller (Standard)	INTEGRATED					
Controllers (Optional)		MC-601; for sch	eduled recirculation use N	MC-195T-US or RWM200	Wireless Module	
Certifications			AHRI, CSA, EI	NERGY STAR®		
Warranty (Residential)**			15-year on heat exchange s and receive an additiona			
Mobile Home Certified			Y	es		
Thermal Bypass Crossover Valve in Box	Y	es		N	lo	
High Altitude Approved			UP TO 10,200	FT. (3,109 M)		
Venting Options	Concentric/PVC/CPVC/PP Vent Cap (Outdoor Only)					
Ultra Low NOx	Yes					
Residential Rack Compatible	Yes RTBRACKA, RTBRACKS, RTBRACKEXT					
1/2" Gas Line Compatible†	Yes					
Wi-Fi Capable	Yes (Homeowners can use a RWM200 Wireless Module with Rinnai Central App)					

<sup>\*</sup>To achieve temperatures over 140° F (60° C), consult the Operation and Installation Manual.

<sup>\*\*</sup>For complete information and details regarding Rinnai's warranty, visit rinnai.us.

<sup>†</sup>For complete information on gas sizing for Rinnai Tankless Water Heaters, consult the Operation and Installation Manual.

#### **Accessories for SENSEI®RX**

Numerous optional accessories are available for purchase for your Rinnai Tankless Water Heater.
Listed below are some commonly purchased accessories. For a complete list of accessories, visit

www.rinnai.us
For questions, or to purchase an accessory, contact your local Rinnai dealer/distributor
or Rinnai Customer Care at 1-800-621-9419.

or Rinnai Customer Care at 1-800-621-9419.					
Product/Part#	Product Description				
Isolation Valve Kit MIVK-T-LW	Isolation valves provide the ability to isolate the water heater from the structure's plumbing system and allow quick and easy access to flush the heat exchanger. Rinnai strongly recommends use of these valves for service and maintenance.				
Outdoor Vent Cap RXOVC	Allows the water heater to be installed outdoors.				
BLE Recirculation Push Button RPB200	Mounted in a convenient location, i.e. near a kitchen or bathroom sink, the BLE push buttons works with the SENSEI®RXP tankless water heater or Wireless Module to activate the recirculation system by pushing the button.	Rinnai			
Dedicated Return & Isolation Valve Kit 107000639	Valve kit including tee, drain valve, pressure relief valve, check valve & isolation valves (cold & hot) to simplify set-up of a dedicated recirculation line.				
Internal Add-on Recirculation Conversion Kit RX2RXPCK	Allows a non-pump RX model to be converted to a RXP internal pump model.				
Condensate Neutralizer 804000074	Neutralizes the condensate generated by the water heater.	The state of the s			
Wireless Module RWM200	Controls On-Demand recirculation, remotely adjust temperatures, and communicates with the service provider portal. The module and MC-195T-US controller are not compatible accessories and must not be installed together.				
Additional Controller MC-601	Additional controllers are available for user convenience.	11.			
Additional Controller MC-195T-US	Additional controllers are available for user convenience.	京			

Accessories for SENSEI®RX					
Product/Part#	Product Description				
ScaleCutter 103000038	Prevents the formation of scale buildup in the water heater extending product life while improving performance.				
ScaleCutter Refill Cartridge 103000039	Refill cartridge for the ScaleCutter filter assembly.				
Drain Down Kit 104000059	Provides freeze protection by immediately draining the water heater upon loss of power.				
Room Air Screen 108000104 for 2" 108000105 for 3"	Recommended room air screen for use in room air applications only.				
EZConnect™ Cable REU-EZC-3	Electronically connects two water heaters and allows them to function as one hot water source.	2			
OPU Switch REU-OPU3	Normally Closed (NC) switch that connects to the tankless water heater PC Board. When used with a hydronic air handler, the switch gives priority to domestic hot water during high demand.	FINA			
RTBRACKA	Tankless Floor Standing Rack, standard height				
RTBRACKS	Tankless Floor Standing Rack, low profile				
RTBRACKEXT	Rack Extension Kit, add-on				
Recess Box RGBCTWHRX	Allows a water heater to be recessed into a wall. A vent adapter is provided with the recess box.				
Pipe Cover PCD11-SHS	Encloses the piping below the water heater for aesthetic purposes.				

Accessories for SENSEI®RX					
Product/Part#	Product Description				
Single Unit Standoff Brackets 109001376	The Single Unit Standoff Brackets create 1.5 inches (38mm) of clearance between the water heater and the wall allowing pipe runs directly behind the tankless unit. Top and bottom bracket included.				
Venting Laser Guide Kit 103000121  Helps identify hole location on the wall or ceiling when using Concentric or PVC venting with Rinnai TWH or Boiler units.					
Kit contains gas conversion manual and conversion rating plate label (adheres to water heater to display new gas type)-for post install conversions).		Water Heater Certified for use in the United States and Canada Models: [RX130] Conversion Rt a: [104000333] for [NATURAL] Cas Cass Supply Pressure Min. [3.5*W.C. (0.87Re9). Max. [10.5*W.C. (2.61lr.Pa) Marintidat Pressure. [0.7*W.C. (-0.04lr.Pa). Max. [10.5*W.C. (2.61lr.Pa) Max. [10.5*W.C. (2.61lr.Pa). Max. [10.5*W.C. (2.61lr.Pa) Marintidat Pressure. [0.7*W.C. (-0.04lr.Pa). Max. [10.5*W.C. (2.61lr.Pa) Max. [10.5*W.C. (2.61lr.Pa). Max. [10.5*W.C. (2.61lr.Pa). Max. [10.5*W.C. (2.61lr.Pa) Max. [10.5*W.C. (2.61lr.Pa). Ma			
Tankless Battery Back-Up System R-UPS500A	Battery Backup System 500A	1500			

#### **Tankless Water Heater Series Reference Guide** RE · SERIES OROUDLY ASSEMBLIA NON-CONDENSING TECHNOLOGY **REP** (with built-in pump) RE Z GAIRAW, GEORGIA REPMODELS **REMODELS** UEF (Uniform Energy Factor)\* 0.81-0.82 0.81-0.82 Wi-Fi Capable Natural Gas or Propane Indoor and Outdoor installation Smart-Circ Intelligent Recirculation Thermal Bypass Valve included Isolation Valves included Smart Home Automation\*\*

SENSEI'RX CONDENSING TECHNOLOGY					
RX	RXP (with built-in pump)				
East tasts integr	MAG AN AND AND				
RX MODELS	RXPMODELS				
0.97 - 0.98	0.97 - 0.98				
✓	✓				
✓	✓				
<b>✓</b>	✓				
Smart-Circ capable with installation of pump or pump accessory kit	✓				
	✓				
<b>√</b>	✓				

As based on the 2017 DOE new metric for communicating the energy efficiency of residential water heaters.
Rinnai RWM200 Wireless module necessary (module sold separately). When used on models with Smart-Circ™ for scheduled or on demand recirculation, the Wireless module overrides Smart-Circ™ recirculation patterns.





#### Venting Components for SENSEI®RX 2"/4" Condensing Concentric Vent System **Part Number Product Description** 229031 12", 2"/4" Condensing Horizontal Termination Kit (PPtl) 229032 21", 2"/4" Condensing Horizontal Termination Kit (PPtI) 229033 2"/4" Condensing Horizontal Termination (2 wallplates) (PPtl) 2"/4" Condensing Roof Discharge, 20" Above Roof (PPtl) 224359 229318 10", 2"/4" Condensing Vent Pipe Extension (PPtl) 229319 19.5", 2"/4" Condensing Vent Pipe Extension (PPtl) 39", 2"/4" Condensing Vent Pipe Extension (PPtl) 229320 185348NPP 2"/4" Condensing Roof Terminal Extension Kit 229208 2"/4" Condensing 45 Deg Elbow (Qty: 2) (PPtl) 229233 2"/4" Condensing 90 Deg Elbow (PPtl) 229252 2"/4" Condensing 90 Deg Starter Elbow 3"/5" to 2"/4" (PPtl) 227413 2"/4" Condensing Starter Straight/ Vertical 3"/5" to 2"/4" (PPtl) 224055 2"/4" Thimble (1 piece per box) 169044 Pipe Clamp Universal - Plastic 169013 2"/4" Pipe Clamp - Metal 224056 2"/4" Vent Support Bracket-Metal 710265 2"/4" Wall Plate White 710192 2"/4" Wall Plate Black 2"/4" Wall Plate Gray 711262 188481 2"/4" Retrofit Wall Plate White (for 3/5 opening) 188485 2"/4" Retrofit Wall Plate Black (for 3/5 opening) 188486 2"/4" Retrofit Wall Plate Gray (for 3/5 opening) 710202NPP 2"/4" Condensing 90 Degree Diverter Nose

#### **Venting Components for SENSEI®RX** 3"/5" Condensing Concentric Vent System **Part Number Product Description** 223174PP 8.7", 3"/5" Condensing Horizontal Termination Kit 223176PP 12", 3"/5" Condensing Horizontal Termination Kit 223177PP 21", 3"/5" Condensing Horizontal Termination Kit 223186PP 19", 3"/5" Condensing Horizontal Termination Diverter Nose Kit 184162PP 3"/5" Condensing Roof Discharge Termination Kit, 20" Above Roof 3"/5" Condensing Roof Termination Extension Kit 185344PP 185346PP 3"/5" Condensing Termination Extension 224087PP 10", 3"/5" Condensing Vent Pipe Extension 224079PP 19.5", 3"/5" Condensing Vent Pipe Extension 224080PP 39", 3"/5" Condensing Vent Pipe Extension 3"/5" Condensing 45 Deg Elbow (Qty:2) 224077PP 224078PP 3"/5" Condensing 90 Deg Elbow



<b>Venting</b>	Componer	nts for SENS	EI <sup>®</sup> RX
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Roof Flashing	Part Number	Product Description		
	189958	Universal Shingle Roof Flashing 1/2 to 16/12 pitch		
	50171949	Tile/Shingle Roof Flashing, 1/12 to 6/12		
	50171954	Tile/Shingle Flashing, 8/12 to 16/12		
	50171961	Tile/Shingle Flashing, 6/12 to 12/12		
	242141	Flashing for Metal Roof		
	146141	Roof Flashing Assembly-Flat Roof		
Other Accessories	Part Number	Product Description		
	224045	3 in. / 5 in. Thimble (1 piece per box)		
	710342	3 in. / 5 in. Rubber Wall Plate White		
	710602	3 in. / 5 in. Rubber Wall Plate Black		
	711390	3 in. / 5 in. Rubber Wall Plate Gray		
	224049	3 in. / 5 in. Vent Support Bracket		
-	102000012	3 in. / 5 in. Horizontal Flashing Panel		
0	169043	3"/5" Pipe Clamp - Metal		
6	169044	Pipe Clamp Universal-Plastic		
	224042	Universal Bug Guard		

IPEX Concentric termination for 2" and 3" PVC Venting				
43	196005PVC	IPEX 2" Concentric Condensing Vent Termination 2x16		
	196105PVC	IPEX 2" Concentric Condensing Vent Termination 2x28		
7 1	196125PVC	IPEX 2" Concentric Condensing Vent Termination 2x40		
	196984PVC	IPEX 2" Condensing Low Profile Vent Termination		
	196116PVC	IPEX 3" Concentric Condensing Vent Termination		
	196985PVC	IPEX 3" Condensing Low Profile Vent Termination		
	224008PPS	IPEX 2" to 3" PP Condensing Increaser/ adaptor		
	108000105	3" Mesh Metal, SS screen for PVC intake		

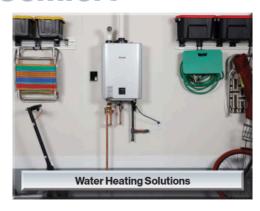
# Rinnai.

## **Over 100 Years of Smart Comfort**



With headquarters in Japan and a global network of subsidiaries and sales offices, Rinnai has enhanced the way businesses and residences heat their water.

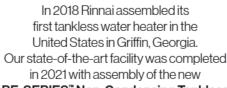
Dedicated to a smarter kind of comfort, our value-added products continue to stay in step with demands of a changing world.





# Proudly assembling Tankless Water Heaters at our state-of-the-art factory located in Griffin, Georgia, USA

Rinnai established its US operations in 1974 and introduced Tankless Water Heating to the North American Market in 1999.



RE•SERIES<sup>™</sup> Non-Condensing Tankless Water Heaters beginning in 2022.

Rinnai continues to make significant investments in expanding its operations and product portfolio.







# Creating a healthier way of living®

Learn more about Rinnai high-performance Tankless Water Heaters, Hybrid Water Heating Systems, Boilers, EnergySaver® Direct Vent Wall Heaters, Hydronic Air Handlers, Electric Heat Pump Water Heaters, and Accessories.

#### rinnai.ca

Rinnai America Corporation | 103 International Drive | Peachtree City, Georgia 30269 | rinnai.us | rinnai.ca | 1 \* 800 \* 621 \* 9419







