

Ranein RA65SH

Ranein 2025 GEN II On-Demand 65,000 BTU RV Tankless Water Heater - ExploreFlow Max User Manual

Model: RA65SH

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Ranein 2025 GEN II On-Demand 65,000 BTU RV Tankless Water Heater, ExploreFlow Max model. Please read this manual thoroughly before installation and use, and retain it for future reference. The Ranein ExploreFlow Max is designed to provide continuous hot water for recreational vehicles, featuring high altitude readiness, a multi-function controller, a thermostatic chamber, and an external shower head.

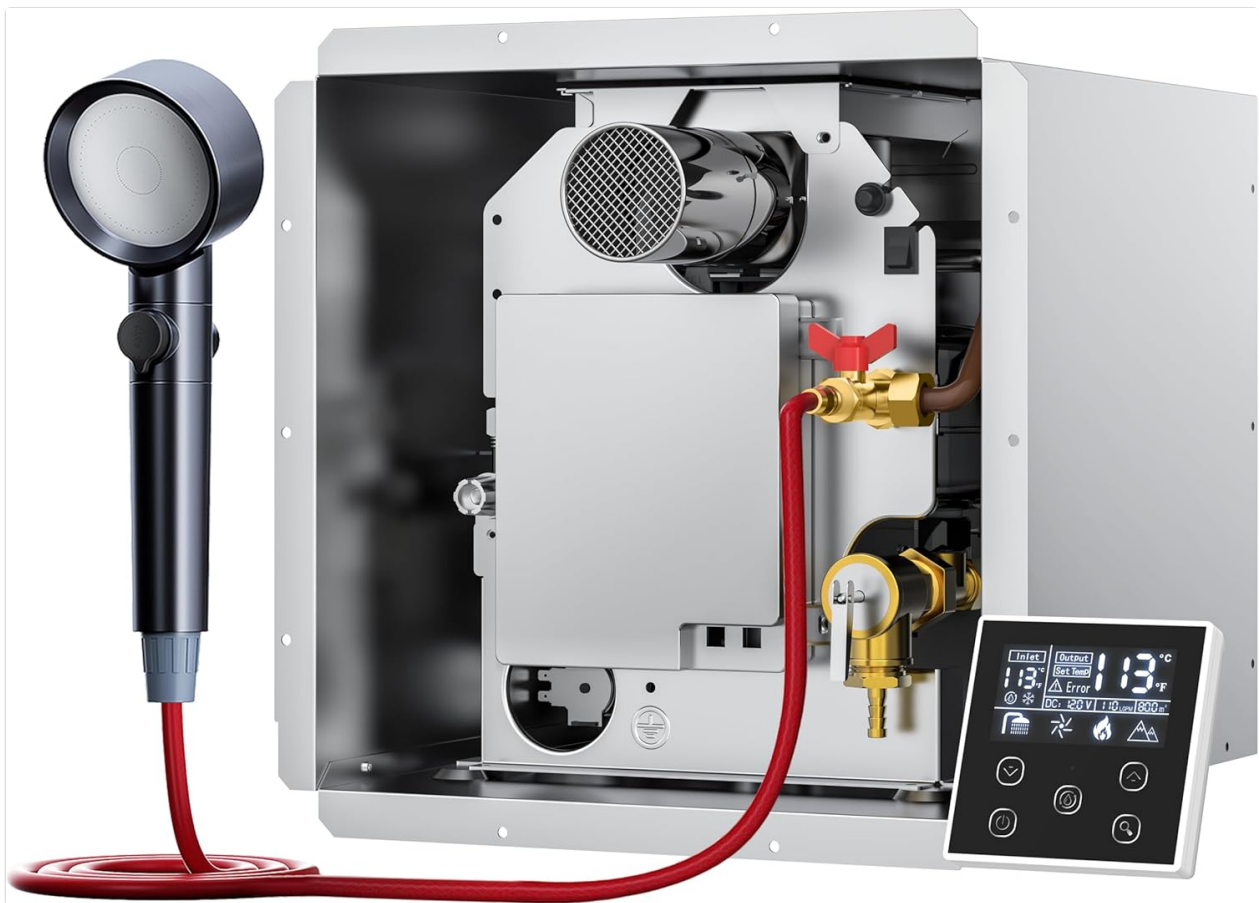


Image 1.1: Ranein ExploreFlow Max RV Tankless Water Heater with included accessories.

2. SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Ensure all gas and water connections are properly sealed and leak-tested before operation.
- Always turn off the power and gas supply to the unit before performing any maintenance or service.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Maintain minimum clearances: 4 inches back, 6 inches sides, 4 inches top.
- This unit is CSA-certified for safety.
- Includes a built-in pressure relief valve; no separate purchase needed.

3. PRODUCT FEATURES

- **Endless Hot Water:** Advanced deep fire row design for maximum heating efficiency, delivering up to 3.9 GPM at 65,000 BTU.
- **Easy Replacement:** Designed to replace most RV water heaters (including Suburban & Atwood 6/10/12-gallon models) with a 12.8" x 12.8" opening. Compatible door kits (15" x 15", 15" x 18", or 18" x 18") are available separately.
- **Enhanced Multi-Function Remote Control:** Displays real-time gas usage, voltage, water flow rate (GPM), anti-freeze activation status, and supports operation at high altitudes up to 9,800 feet.
- **Thermostatic Chamber:** Ensures consistent water temperature by automatically adjusting heat output, preventing sudden fluctuations.

- **Pet-Friendly Shower Kit:** Includes a convenient shower head attachment for washing pets or outdoor gear.
- **Safe & Reliable:** Features a top-mounted exhaust fan for stable combustion, automatic gas shut-off if flames fail, and an anti-freeze system that activates below 42.8°F.

Ranein RV Water Heater

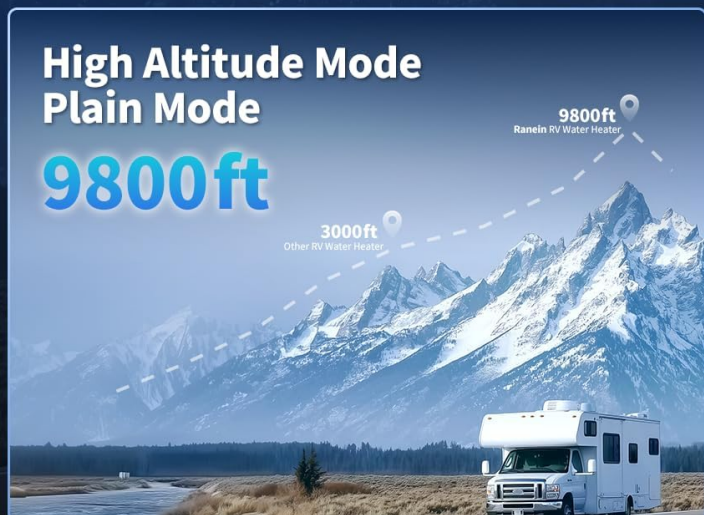


Image 3.1: Overview of key features of the Ranein RV Tankless Water Heater.

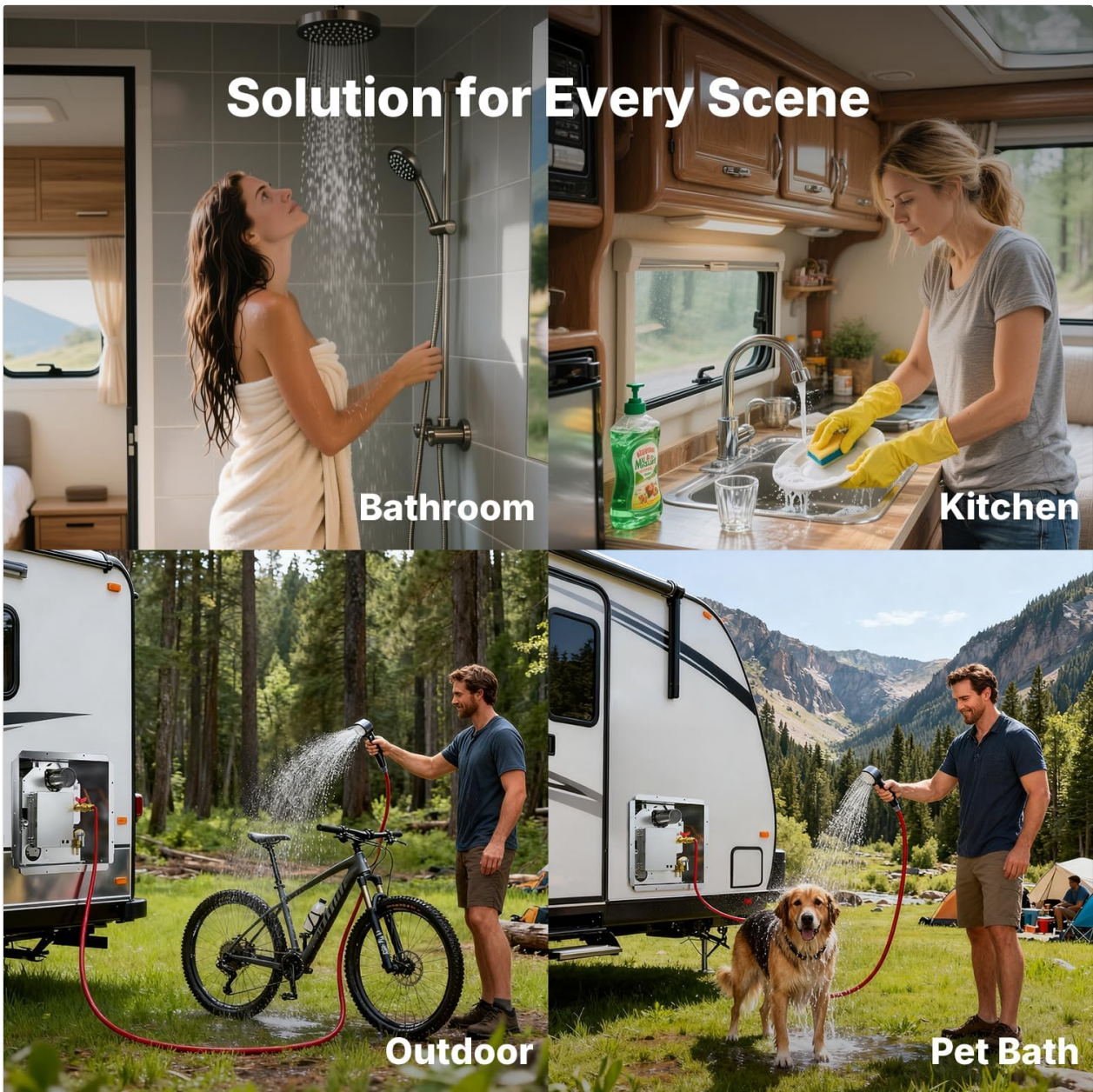


Image 3.2: Details on the 2025 GEN II performance upgrades for the water heater.

4. SPECIFICATIONS

Product Specifications - Ranein ExploreFlow Max (Model RA65SH)

Attribute	Value
Brand	Ranein
Model Number	RA65SH
Product Dimensions	15"W x 15"H
Color	Gray
Efficiency	High Efficiency
Mounting Type	Wall
Is Electric	No

Attribute	Value
Item Weight	29 pounds
Included Components	Water heater x1
BTU	65,000
GPM	MAX 3.9
Fuel	Propane (LP Gas)
Fuel Inlet Pressure	0.4 PSI
Power Input	12V DC
Water Operating Pressure	10 PSI - 110 PSI
Setting Temperature Range	95°F (35°C) - 124°F (51°C)

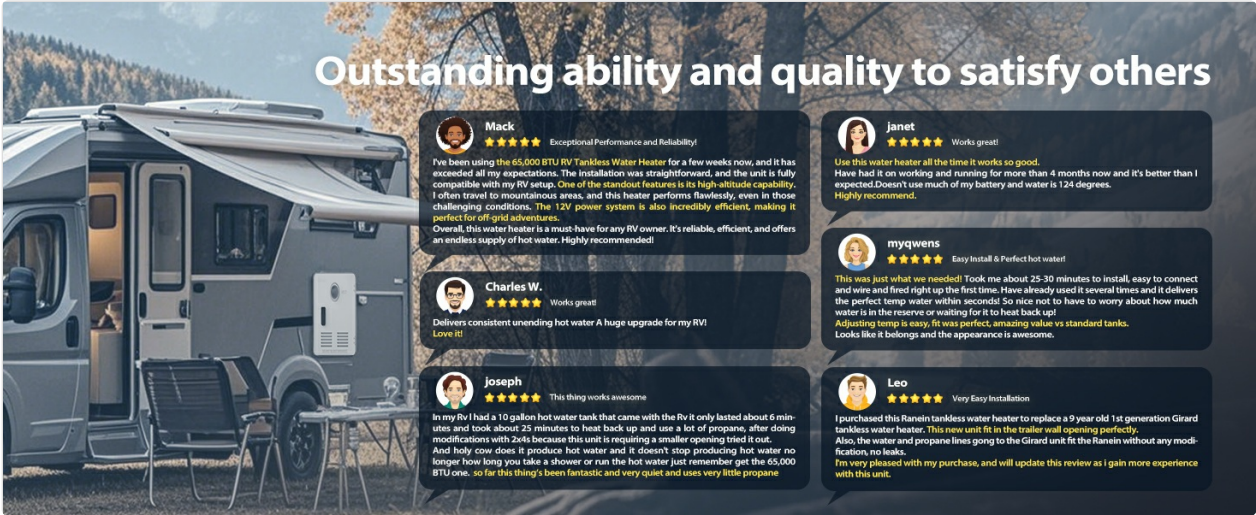


Image 4.1: Visual representation of product dimensions and key specifications.

5. INSTALLATION INSTRUCTIONS

Proper installation is crucial for the safe and efficient operation of your Ranein RV Tankless Water Heater. If you are unsure about any step, consult a qualified technician.

5.1. Preparation

- Wear protective gloves to prevent scratches during handling.
- Ensure the RV's power and gas supplies are turned off before beginning installation.
- The water heater requires a 12.8" x 12.8" opening. If replacing an existing unit, ensure the opening matches or is adapted.
- Apply butyl tape continuously around the flange backside and corners of the water heater for a secure seal.

Your browser does not support the video tag.

Video 5.1: Installation instructions for the Ranein RV Water Heater, covering preparation, connections, and door installation.

5.2. Water and Gas Connections

1. Place the water heater into the RV water heater opening. If you have a larger opening, install the water heater on the right side of the opening.
2. Remove the protective covers from the HOT Water Outlet and COLD Water Inlet.
3. Connect the water pipes to the back of the water heater. Ensure to check the direction of water flow in the RV's pipes first to avoid reversing the connection. Tighten fittings with a wrench.
4. Connect the gas pipe to the back of the water heater. Tighten the fitting with a wrench.
5. After connecting, turn on the gas and check for leaks with a detector or bubble water. If bubbles appear, there is a gas leak that must be repaired immediately.



Image 5.2: Connection diagram for water, gas, and power supply.

5.3. Electrical Connection

1. When connecting to a power source, turn off the power to the RV first.
2. Turn the power switch (boat switch) on the front of the water heater to "OFF".
3. The two blue wires on the back of the water heater are for the remote control. Connect them to the wires of the remote control using wire connectors and stripper pliers.
4. Connect the power supply wires (black and white wires on the rear of the water heater) to the appropriate nominal 12V DC power source connection. The black wire connects to the positive terminal (+12V) and the white wire connects to the negative terminal (-12V) of the power supply.

5.4. Door Frame Installation

The water heater is compatible with various door sizes. Ensure you have the correct door kit for your RV.

- Insert the door flange into the water heater housing and press the flange firmly against the sidewall.
- Secure the door flange with screws.
- Apply a liberal amount of sealant around the door frame to all any gaps in the RV wall. Wipe any excess adhesive.
- For 15"x18" or 18"x18" doors, it is recommended to install wood strips (not included) on the left side of the water heater for reinforcement.

Compatible with All RV

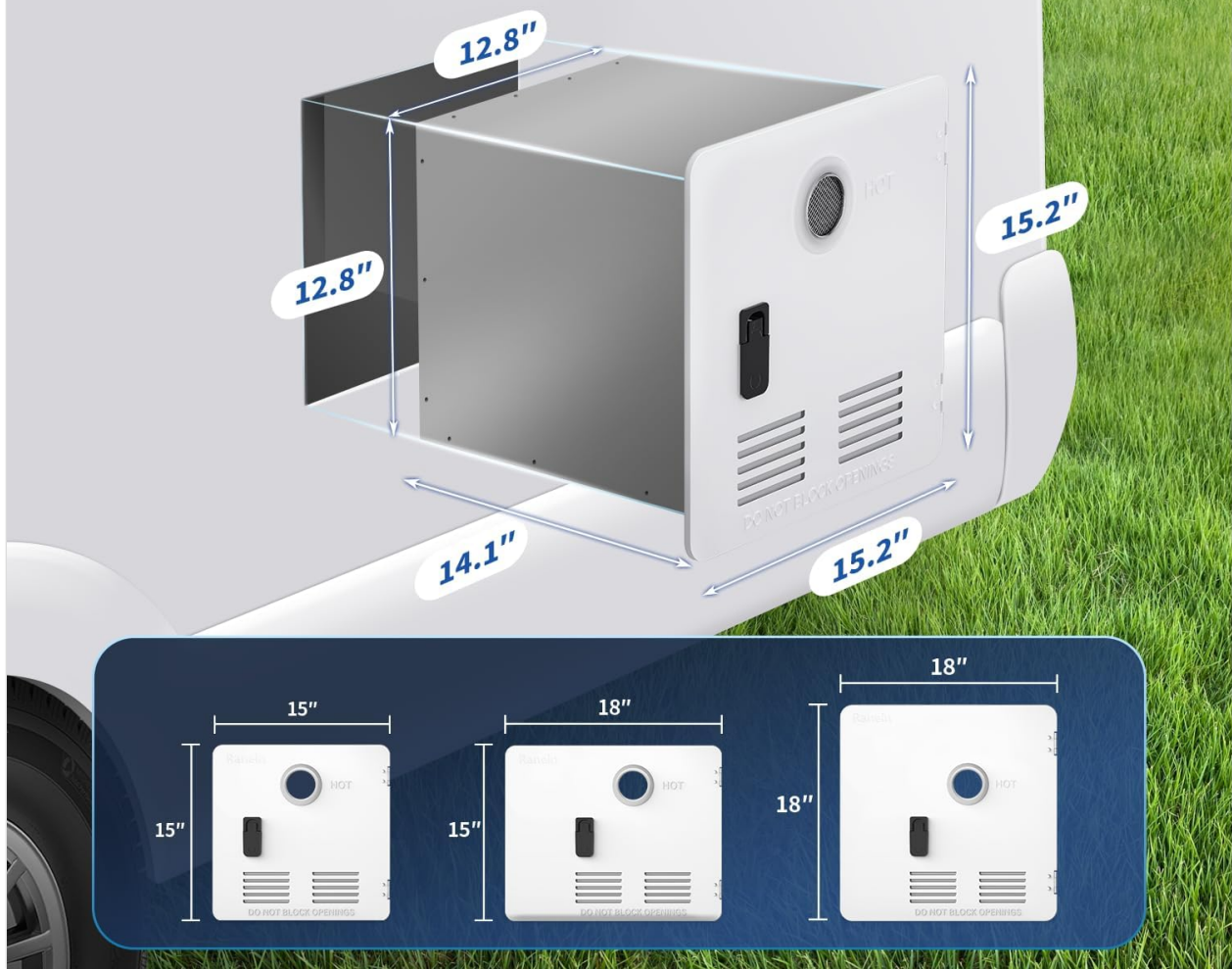


Image 5.3: RV opening and compatible door kit dimensions.

5.5. Wall Controller Installation

1. Fix the installation board to the wall with screws.
2. Clip the monitor (multi-function remote control) into the installation board.

Multi-function Remote Control

You can switch to high altitude mode
check gas usage, anti-freeze on, etc.



Image 5.4: The multi-function remote control for the water heater.

6. OPERATION

After successful installation, follow these steps to operate your Ranein RV Tankless Water Heater:

1. Ensure all water and gas connections are secure and leak-free.
2. Turn on the power to the RV and then to the water heater using the power switch on the unit's front.
3. Turn on the gas supply.
4. Turn on the water supply to the RV.
5. Use the multi-function remote control to set your desired water temperature. The display will show inlet/output temperatures, set temperature, voltage, water flow rate (GPM), and anti-freeze status.
6. The unit will automatically adjust heat output to maintain consistent water temperature thanks to its thermostatic chamber.
7. For high altitude operation (up to 9,800 feet), activate the high altitude mode via the remote control.
8. The anti-freeze system will activate automatically if the temperature drops below 42.8°F.



Image 6.1: The water heater provides hot water for multiple applications.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your water heater.

- **Winterization:** If the unit is to be stored in a freezing environment or for long periods of time, it must be winterized. Drain all water from the unit and pipes to prevent freezing damage. Consult a qualified technician if unsure.
- **Cleaning:** Periodically clean the exterior of the unit. Do not use abrasive cleaners.
- **Filter Maintenance:** Regularly check and clean the water inlet filter to prevent blockages.
- **Gas System Check:** Annually inspect gas connections and hoses for wear or leaks.
- **Pressure Relief Valve:** The built-in pressure relief valve will automatically drain excess water if pressure is too high. Ensure the outlet is not obstructed.

8. TROUBLESHOOTING

This section provides solutions to common issues. For problems not listed here, contact customer support.

Common Troubleshooting Guide

Problem	Possible Cause	Solution
No hot water	No gas supply, no water flow, power off, low water pressure.	Check gas tank, open water valves, ensure power is on, check water pressure.
Water not hot enough	Temperature setting too low, high flow rate, cold inlet water.	Increase temperature setting on controller, reduce water flow, allow unit to adjust.
Unit not igniting	No gas, faulty igniter, gas pressure issue.	Verify gas supply, check for error codes on controller, contact service.
Error code displayed	Specific system fault.	Refer to the error code section in the full manual (if available) or contact customer support with the code.

9. WARRANTY AND SUPPORT

Ranein offers comprehensive product problem-solving service and a 2-year warranty against manufacturing defects.

- **Warranty Period:** 2 years against manufacturing defects.
- **After-Sales Contact:**
 - Email: service@ranein.net
 - US Phone: (424)-452-2630

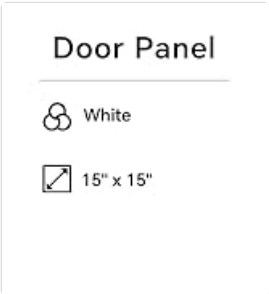
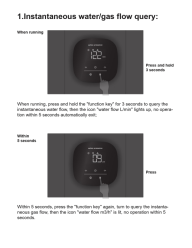





Image 9.1: Ranein customer service and warranty information.

Related Documents - RA65SH

	<p>Ranein RV Tankless Water Heater Installation and Use Manual</p> <p>Comprehensive instructions for installing and using the Ranein RV Tankless Water Heater. Covers safety warnings, product features, installation steps, operation, winterizing, and troubleshooting for models RA65EH, RA65LH, RA65SH, and RA65ZH.</p>
	<p>Ranein 12L Propane Tankless Water Heater Installation Manual</p> <p>Installation manual for the Ranein 12L propane gas tankless water heater, providing up to 3.18 GPM and 68,000 BTU for on-demand hot water.</p>

 <p>1. Instantaneous water/gas flow query:</p> <p>When running, press and hold the "Temperature" key for 2 seconds to query the instantaneous water flow. When the flow is low, the "Water Flow" light will not light up, and the unit will not operate automatically.</p> <p>When it is running, press the "Temperature" key for 2 seconds to query the instantaneous gas flow. When the gas flow is low, the "Water Flow" light will not light up, and the unit will not operate automatically.</p>	<p>RANEIN Tankless Water Heater User Guide</p> <p>This guide provides instructions for operating the RANEIN Natural Gas Tankless Water Heater, covering features like instantaneous flow query, cumulative flow query, four seasons temperature function, kitchen function, bathtub function, and high-temperature lock function.</p>
	<p>Ranein Tankless Electric Water Heaters: Installation and Use Manual</p> <p>Comprehensive guide for Ranein RE18K and RE27K tankless electric water heaters, covering safety, installation, operation, maintenance, and troubleshooting.</p>
	<p>Ranein Tankless Electric Water Heater: Installation and Use Guide</p> <p>Comprehensive guide for Ranein RE6.5K, RE9K, and RE11K tankless electric water heaters. Covers installation, operation, safety precautions, technical specifications, and maintenance.</p>
	<p>Ranein RO4K-Y Portable Tankless Gas Water Heater: Installation and Use Manual</p> <p>Comprehensive guide for the Ranein RO4K-Y portable tankless gas water heater, covering installation, operation, safety precautions, troubleshooting, and warranty information. Learn how to safely and effectively use your Ranein water heater for outdoor and recreational purposes.</p>