

## EcoSmart ECO 8

# EcoSmart ECO 8 Tankless Water Heater Instruction Manual

Model: ECO 8 | Brand: EcoSmart

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your EcoSmart ECO 8 Electric Tankless Water Heater. The ECO 8 is an 8-kilowatt electric tankless water heater designed for point-of-use or low-flow applications, such as a single bathroom sink or a small shower, particularly in climates where the incoming water temperature is 67°F (19°C) or above. It can heat water up to 2 gallons per minute (GPM) and features digital temperature control for precise adjustments in 1-degree increments.

Please read this manual thoroughly before installation and use to ensure proper function and to prevent potential hazards. Verify that this model meets your hot water needs and electrical requirements prior to installation.

## 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.

- **Electrical Hazard:** This unit requires a dedicated electrical circuit. All electrical work must be performed by a qualified electrician in accordance with national and local electrical codes. Ensure the power supply is disconnected before any installation or service.
- **Water Pressure:** Do not operate the unit if water pressure is below 25 PSI or exceeds 150 PSI.
- **Water Temperature:** Hot water can cause severe burns. Exercise caution when setting the temperature.
- **Professional Installation:** It is highly recommended that this unit be installed by a licensed plumber and a qualified electrician.
- **Location:** Install the unit indoors, protected from freezing temperatures and direct sunlight. Ensure adequate clearance for maintenance.

## 3. PACKAGE CONTENTS

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Your EcoSmart ECO 8 Tankless Water Heater package should contain the following:

- One (1) EcoSmart ECO 8 Electric Tankless Water Heater unit
- Instruction Manual (this document)

## **4. INSTALLATION AND SETUP**

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### **4.1 Sizing and Application**

The performance of your tankless water heater depends on the incoming water temperature and the desired flow rate. Refer to the sizing guide below to determine if the ECO 8 is suitable for your specific climate and application needs.



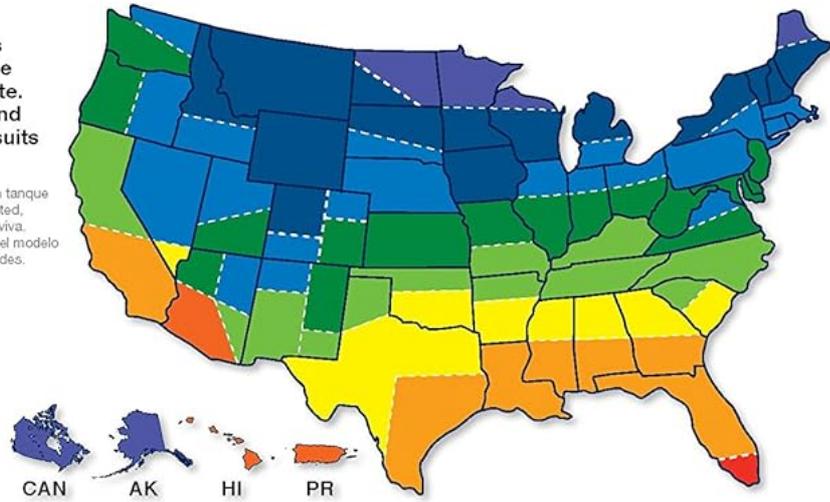
# 3 Smart Steps For Endless Hot Water

3 Pasos Inteligentes para Agua Caliente sin Limite

**1** The EcoSmart tankless water heater you choose depends on your climate. Refer to this chart to find out which model best suits your needs.

El modelo de calentador de agua sin tanque Eco Smart más conveniente para usted, depende del clima en donde usted viva. Consulte este cuadro para encontrar el modelo que mejor se adapte a sus necesidades.

- 37°F
- 42°F
- 47°F
- 52°F
- 57°F
- 62°F
- 67°F
- 72°F
- 77°F



**2** Match your location on the map, shown above, to the corresponding chart below to determine unit capacity. Compare su área de residencia en el mapa que se encuentra arriba, con la gráfica a continuación para determinar la capacidad de la unidad que necesita.

Inlet Temp: 37°F			Inlet Temp: 42°F			Inlet Temp: 47°F		
Model	GPM	Approx. Usage	Model	GPM	Approx. Usage	Model	GPM	Approx. Usage
POU 3.5	0.35	1 faucet	POU 3.5	0.38	1 faucet	POU 3.5	0.41	1 faucet
POU 6	0.60	2 faucets	POU 6	0.65	2 faucets	POU 6	0.71	2 faucets
ECO 8	0.80	3 faucets	ECO 8	0.87	3 faucets	ECO 8	0.94	3 faucets
ECO 11	1.10	4 faucets	ECO 11	1.19	4 faucets	ECO 11	1.30	4 faucets
ECO 18	1.81	5 faucets	ECO 18	1.95	5 faucets	ECO 18	2.12	5 faucets
ECO 24	2.41	6 faucets	ECO 24	2.60	6 faucets	ECO 24	2.83	6 faucets
ECO 27	2.71	7 faucets	ECO 27	2.93	7 faucets	ECO 27	3.18	7 faucets

Inlet Temp: 52°F			Inlet Temp: 57°F			Inlet Temp: 62°F		
Model	GPM	Approx. Usage	Model	GPM	Approx. Usage	Model	GPM	Approx. Usage
POU 3.5	0.45	1 faucet	POU 3.5	0.50	1 faucet	POU 3.5	0.56	1 faucet
POU 6	0.77	2 faucets	POU 6	0.85	2 faucets	POU 6	0.95	2 faucets
ECO 8	1.03	3 faucets	ECO 8	1.14	3 faucets	ECO 8	1.27	3 faucets
ECO 11	1.42	4 faucets	ECO 11	1.57	4 faucets	ECO 11	1.75	4 faucets
ECO 18	2.32	5 faucets	ECO 18	2.56	5 faucets	ECO 18	2.86	5 faucets
ECO 24	3.09	6 faucets	ECO 24	3.42	6 faucets	ECO 24	3.81	6 faucets
ECO 27	3.48	7 faucets	ECO 27	3.84	7 faucets	ECO 27	4.29	7 faucets

Inlet Temp: 67°F			Inlet Temp: 72°F			Inlet Temp: 77°F		
Model	GPM	Approx. Usage	Model	GPM	Approx. Usage	Model	GPM	Approx. Usage
POU 3.5	0.63	1 faucet	POU 3.5	0.72	1 faucet	POU 3.5	0.85	1 faucet
POU 6	1.08	2 faucets	POU 6	1.24	2 faucets	POU 6	1.46	2 faucets
ECO 8	1.44	3 faucets	ECO 8	1.66	3 faucets	ECO 8	1.95	3 faucets
ECO 11	1.98	4 faucets	ECO 11	2.28	4 faucets	ECO 11	2.68	4 faucets
ECO 18	3.24	5 faucets	ECO 18	3.73	5 faucets	ECO 18	4.39	5 faucets
ECO 24	4.31	6 faucets	ECO 24	4.97	6 faucets	ECO 24	5.85	6 faucets
ECO 27	4.85	7 faucets	ECO 27	5.59	7 faucets	ECO 27	6.59	7 faucets

- Represents a hand sink faucet opened full with a flow of 1/2 GPM. Representa la llave del fregadero abierta completamente con un flujo de 1/2 GPM.
- Represents a sink faucet opened half way with a flow of 1/4 GPM. Representa la llave del fregadero abierta a la mitad con un flujo de 1/4 GPM.
- Represents a water-saver shower open full with 1 1/2 GPM. Representa la llave de la ducha, con sistema para ahorrar agua, abierta completamente con 1 1/2 GPM.

Results based on outlet temperature of 105°F. Resultados basados en una temperatura de salida de 105°F.

### Applications

Water-Saver Shower Head	1.5 GPM
Ducha con sistema para ahorrar agua	
Standard Shower Head	2.0 GPM
Ducha común	
Standard Hand Sink	0.5 GPM
Lavamanos común	
Kitchen Sink	1-2 GPM
Fregadero	
Bath Tub	≥ 4 GPM
Bañadera	
Dishwasher	1-2 GPM
Lavadora de platos	
Washing Machine	1-1.5 GPM
Lavadora de ropa	

Average Gallons Per Minute (GPM) based on 2010 Plumbing Standards  
Promedio de galones por minuto (GPM) basado en los Estándares de Plomería del 2010

**3** Check dimensions and electrical specifications in the chart below. Compruebe las dimensiones y especificaciones eléctricas en la siguiente tabla.

Model Number	kW	Volts	Required Breaker	Max Power (AHP)	Required Wire	Dimensions	Weight
Número de Modelo	W	Volios	Interruptor Requerido	Potencia Máxima	Alambre Eléctrico	Dimensiones	Peso
POU 3.5	3.5	120	30	29	10	7" x 11" x 3"	4 lbs.
POU 6	6	208	30	29	10	7" x 11" x 3"	4 lbs.
ECO 8	8	240	40	33	8	12" x 9.75" x 3.75"	4.75 lbs.
ECO 11	11	240	60	57	(2) 6	12" x 9.75" x 3.75"	6.5 lbs.
ECO 18	18	240	(2) 40	75	(2) 8	18" x 14" x 3.75"	11.25 lbs.
ECO 24	24	240	(3) 40	100	(3) 8	18" x 17" x 3.75"	13.75 lbs.
ECO 27	27	240	(3) 40	112.5	(3) 8	18" x 17" x 3.75"	13.75 lbs.



Image 1: EcoSmart Sizing Guide. This map and table illustrate the approximate gallons per minute (GPM) output based on

incoming water temperature and climate zone, helping you select the appropriate model for your needs.

## 4.2 Mounting the Unit

The ECO 8 is designed for wall mounting. Choose a secure, vertical surface that can support the unit's weight. Ensure the unit is installed in an accessible location for future maintenance.



**Image 2:** Front view of the EcoSmart ECO 8 Tankless Water Heater, showing the LED display and control knob.

## 4.3 Plumbing Connections

The unit features 1/2-inch NPT plumbing connections for both inlet and outlet. Connect the cold water supply to the inlet and the hot water outlet to your fixtures. Ensure all connections are watertight to prevent leaks.



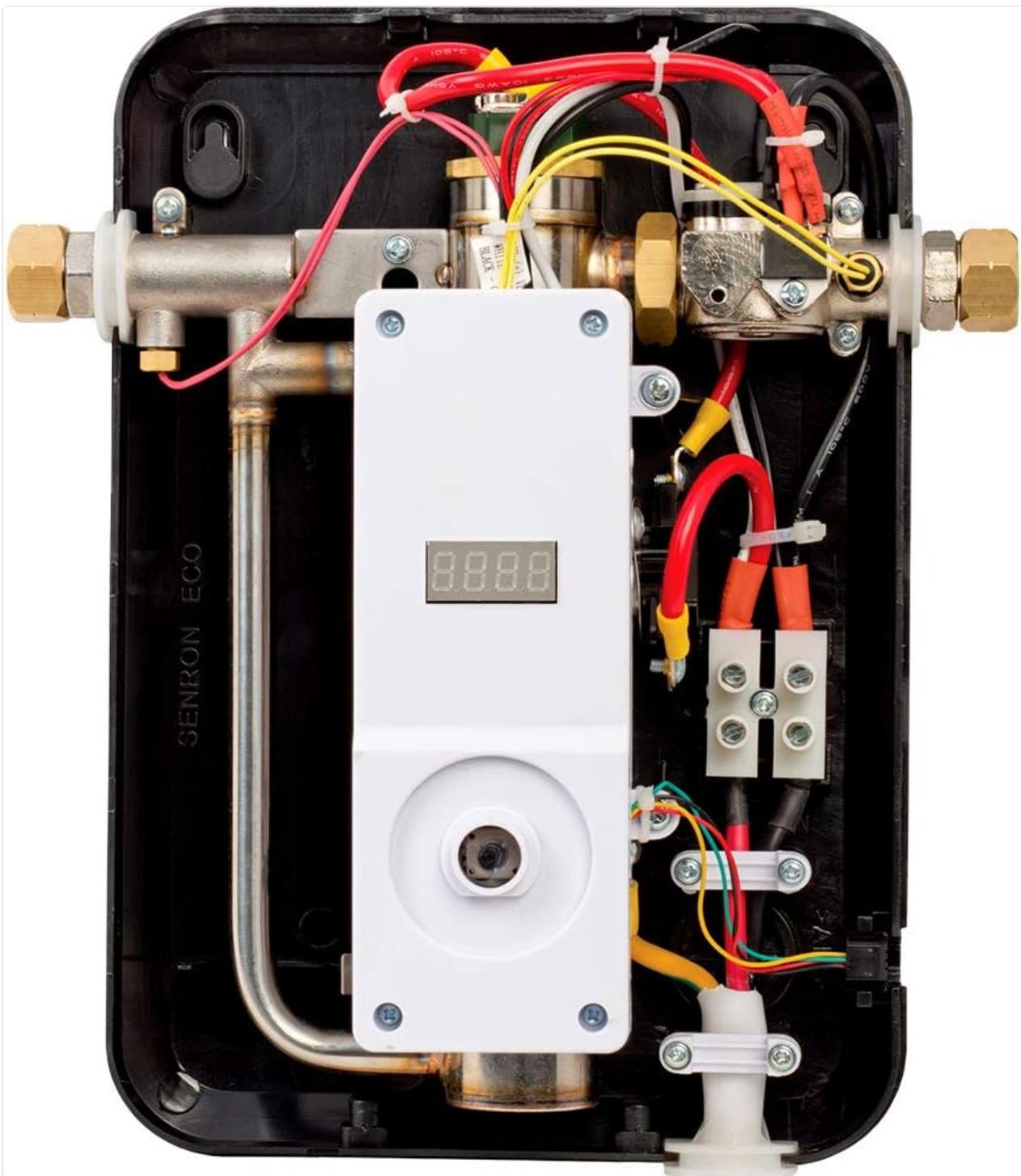
Image 3: Right side view of the EcoSmart ECO 8, clearly indicating the water inlet connection.



Image 4: Left side view of the EcoSmart ECO 8, showing the water outlet connection.

#### 4.4 Electrical Connections

The EcoSmart ECO 8 requires a 240-volt electrical supply and 8000 watts of power. It needs a dedicated 40-amp double-pole breaker and 8 AWG wiring. All electrical connections are internal and must be made by a qualified electrician. Refer to the internal component view for guidance.



**Image 5:** Internal view of the EcoSmart ECO 8, showing the electrical wiring and heating elements. All electrical work should be performed by a qualified professional.

## 5. OPERATING INSTRUCTIONS

### 5.1 Powering On/Off

To power on the unit, ensure it is properly installed and connected to the electrical supply. The unit will typically power on automatically when water flow is detected. To turn off or reset the unit, disconnect power at the circuit breaker.

### 5.2 Setting Water Temperature

The EcoSmart ECO 8 features a digital LED display and a control knob for temperature adjustment. You can set the desired water temperature in 1-degree Fahrenheit increments. Rotate the knob to increase or decrease the temperature. The LED display will show the set temperature.

To switch between Celsius and Fahrenheit, press and hold the control knob for approximately 3 seconds.

## 6. MAINTENANCE

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Regular maintenance ensures the longevity and efficiency of your EcoSmart ECO 8 Tankless Water Heater.

- **Annual Inspection:** Periodically inspect the unit for any signs of leaks, corrosion, or damage to the wiring.
- **Descaling:** In areas with hard water, mineral deposits (scale) can build up inside the heating elements, reducing efficiency. It is recommended to descale the unit annually or as needed. This process typically involves flushing the unit with a descaling solution. Consult a professional plumber for descaling procedures if you are unsure.
- **Filter Cleaning:** Check and clean the inlet water filter (if present) to ensure unrestricted water flow.

Always disconnect power to the unit at the circuit breaker before performing any maintenance.

## 7. TROUBLESHOOTING

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If your EcoSmart ECO 8 Tankless Water Heater is not functioning correctly, consider the following common issues:

- **No Hot Water:**
  - Check if the circuit breaker has tripped.
  - Ensure the water supply is turned on and there is sufficient water pressure.
  - Verify the temperature setting on the unit.
- **Insufficient Hot Water/Low Flow:**
  - Confirm the unit's capacity matches your demand based on the sizing guide.
  - Check for mineral buildup (scale) in the unit or aerators in your fixtures.
  - Ensure the incoming water temperature is within the unit's operational range for your climate.
- **Leaks:**
  - Inspect all plumbing connections for tightness.
  - If leaks persist, immediately turn off the water supply and electrical power to the unit and contact a qualified plumber.

For complex issues or if troubleshooting steps do not resolve the problem, contact a qualified technician or EcoSmart customer support.

## 8. SPECIFICATIONS

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Feature	Specification
Brand	EcoSmart
Model Number	ECO 8
Product Dimensions (W x H)	8"W x 11.5"H
Item Depth	6.1 inches

Feature	Specification
Item Weight	4.75 pounds
Color	White
Wattage	8000 watts
Voltage	240 Volts
Maximum Flow Rate	2 Gallons Per Minute
Heat Output	8 Kilowatts
Efficiency	99.8%
Special Feature	LED Display
Mounting Type	Wall
Power Source	Corded Electric
Certification	WaterSense
UPC	854920002183
Included Components	Electric tankless water heater

## 9. WARRANTY AND SUPPORT

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### 9.1 Warranty Information

The EcoSmart ECO 8 Tankless Water Heater comes with a **Lifetime Warranty** on electronics, exchanger, and heating elements. This warranty covers the cost of the heater itself but does not cover labor or any incidental damages. Please retain your proof of purchase for warranty claims.

**Important Note:** The warranty may be void if the unit is opened by unauthorized personnel or if installation is not performed according to local codes and this manual.

### 9.2 Customer Support

For technical assistance, warranty claims, or further inquiries, please contact EcoSmart customer support. Refer to the official EcoSmart website for the most current contact information.

You can visit the EcoSmart Store for more information: [EcoSmart Store on Amazon](#)