



## The Electron Series iE1

### WORLD'S FIRST TANKLESS HEAT PUMP WATER HEATER

Intellihot offers a unique electric heat pump water heating system that is healthy and sustainable.

Our Electron series is the world's first electric tankless heat pump water heater that heats water on-demand by using energy stored in a thermal battery. It produces clean, healthy, and efficient hot water without storage while providing the utmost reliability.

- ♦ **CO<sub>2</sub> Refrigerant** – Lowest impact on the environment with a Global Warming Potential (GWP) of 1, zero Ozone Depleting Potential (ODP) and better cold weather performance.
- ♦ **On-Demand & Tankless** – Absorbs & stores energy from the air in a specially-designed thermal battery. This energy is used to heat water on-demand without any storage, thereby mitigating Legionella risks.
- ♦ **No Power Constraints** – Select a model that suits your electrical infrastructure the best:
  - iE1 Std** | No Resistive Electric Heating Element  
25 Amps circuit breaker required
  - iE1 Mid** | One Resistive Electric Heating Element (6kW)  
50 Amps circuit breaker required
  - iE1 Max** | Two Resistive Electric Heating Elements (12kW total)  
60 Amps circuit breaker required



### KEY FEATURES

- ♦ **Ideal** for high-pressure, multi-storey buildings
- ♦ **Handles** tough hard-water scaling
- ♦ **Produces** hot water up to 170°F
- ♦ **Worry-free** 24/7 factory monitoring via telliCare messaging
- ♦ **Automatic** software updates over the air
- ♦ **Grid-enabled** via CTA-2045
- ♦ **Seamlessly cascade** using Bluetooth, up to 6 units, no wires
- ♦ **Free up space** install indoors or outdoors
- ♦ **Solar-ready** upgradable in minutes
- ♦ **Lightweight** & compact, 30% smaller
- ♦ **Intelligent leak sensor** Multi-fluid detection
- ♦ **Innovative** built-in Glycol Concentration Sensor (GCS)

Technical Data	iE1 STD	iE1 MID	iE1 MAX
Type	Indoor / Outdoor, Floor Mounted		
Power Source	Electric		
Supply Input Voltage	208 V AC, 60 Hz, 1Ph	208 V AC, 60 Hz, 3Ph	
Number of Wires	3 Wires (L1, L2 and G)	5 Wires (L1, L2, L3, N and G)	
Electric Input, kW	3.4	9.4	15.4
Heating Output (BTU/Hr)	Up to 57,000	Up to 77,000	Up to 97,000
Current, FLA (Amps)	16.6	45.4	74.2
Minimum Circuit Ampacity, MCA (Amps)	20.8	49.6	54.1
Minimum Recommended Circuit Breaker	25	50	60
Maximum Overcurrent Protection, MOP (Amps)	35	70	90
Resistive Heating Elements	0	1 (6 kW)	2 (2 x 6 kW)
COP	Up to 4.9 (without Heating Elements)		
Compressor Type	Rotary		
Safety Devices	Pressure Switch, Thermal Cutout, and Overheat Protection		
Ambient Installation Temperature	-10° to 110°F		
Air Flow Requirement	3500 CFM		
Outlet Water Temperature Range	100°F to 170°F		
Temperature Stability	+/- 4°F		
First Hour Rating	154 Gallons	199 Gallons	244 Gallons
Connectivity	Cellular and Bluetooth		
Operational Modes	Efficiency, Hybrid, Electric, Self-learning		
Grid Connectivity	Via CTA-2045 module (customer supplied)		
Refrigerant	R744, CO2 refrigerant		
Refrigerant Charge Quantity	3.96lbs (1.8 kg)		
Refrigerant Max Allowable Pressure	2175 PSI (15 MPa)		
Cascading Protocol	Masterless, Up to 6 units		
Noise Level	Up to 55 dBA		
Domestic Heat Exchanger	Stainless Steel, 316L		
Energy Storage	Water-Propylene-Glycol based Thermal Battery		
Water Inlet & Outlet Connections	1-1/2" NPT Female		
Unit Dimensions H X W X D	72 in X 30 in X 30 in		
Shipping Weight / Unit Weight	880 LBS / 758 LBS (with 5 Gallons Glycol), 1150 LBS (Thermal Battery Full)		
Water Pressure Min / Max	30 PSI (0.21 MPa) / 160 PSI (1.1 MPa)		
<b>Clearances</b>			
Back	24"		
Front	30"		
Top	30"		
Sides	12"		
Certifications	Energy Star, NSF 372, UL 60355-2-40, CSA C22.2 and CTA-2045		
Warranty	1 Year on Parts and Compressor, 3 Years on Thermal Battery		
Note: Due to Intellihot's policy of continuous product improvements the design and technical specifications are subjected to change without notice.			

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