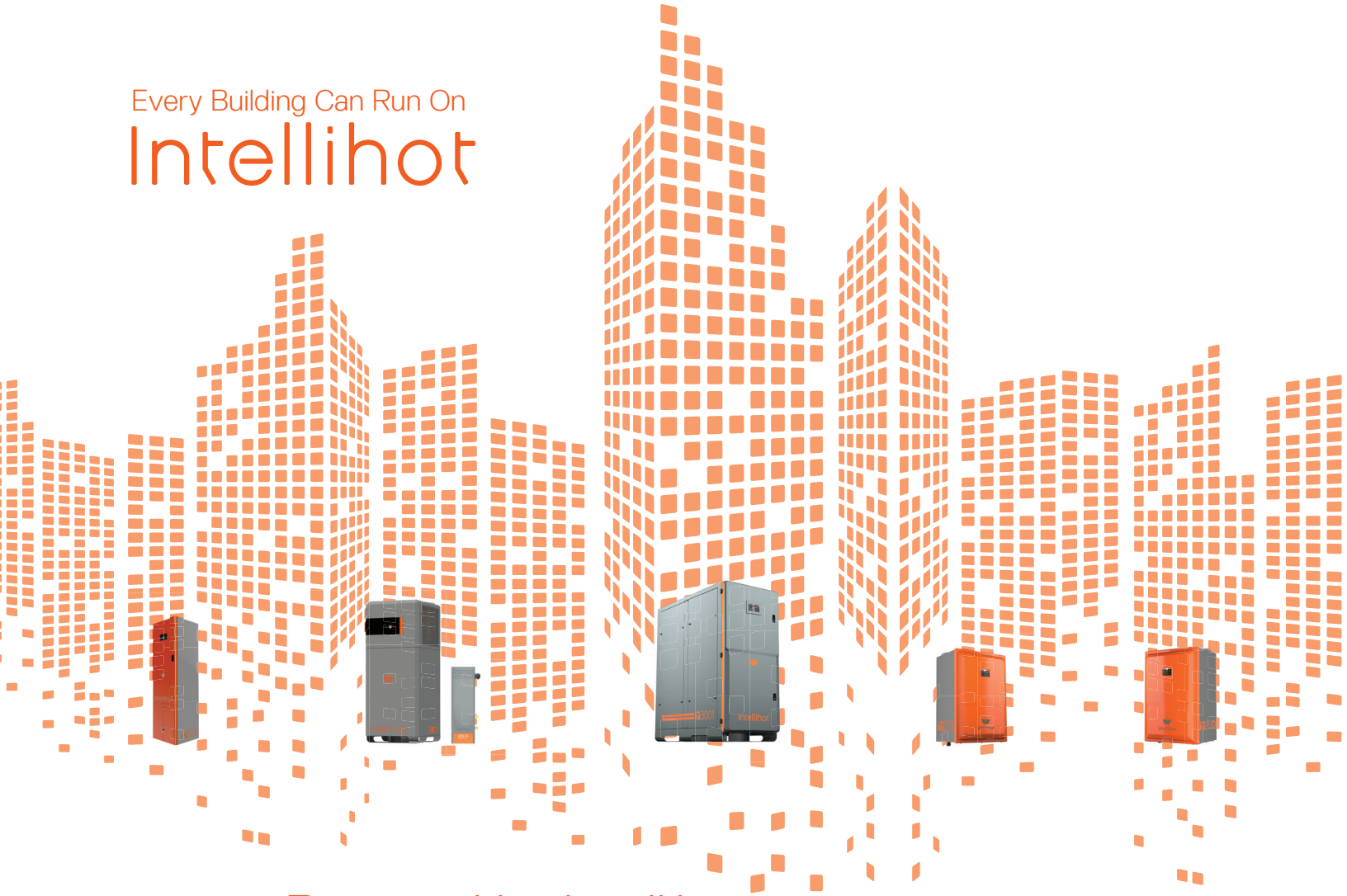
EFFICIENT, HEALTHY, AND SUSTAINABLE WATER HEATING SOLUTIONS

INTELLIHOT PRODUCT GUIDE

Every Building Can Run On

Intellihot



Powered by Intellihot.

Intellihot is at home wherever people live, work or play. From wall-hung units that help restaurants, hotels and other businesses cut their energy bills to floor units robust enough for hotels, high-rises, schools, stadiums, apartment buildings and hospitals – **we're committed to progress and helping to improve the way people live.**

We're setting the benchmark for superior performance and efficiency. From the moment they start running, Intellihot water heating units begin to learn your facility's typical usage patterns. Then they adapt, heating up the amount of water you need – no more, no less – improving your facility's energy efficiency by up to 40%.

We are building a waste-free future – without a drop of sacrifice.

We call that progress.

Our mission to create a better water heating system began back in the winter of 2005 when a tank-type water heater broke down and flooded our founder's basement. By combining the principles of a diesel engine's robustness, robotics intelligence, and marine environment durability, Intellihot set out to design a unit from the ground up that would outperform and outlast all others.

Innovation is our hallmark and simplicity, efficiency, and durability are at the core of every Intellihot product. Our water heaters utilize the best attributes of tank and tankless – with intelligent logic and integrated recirculation. The result is a water heating system capable of handling the extreme loads of commercial applications with the preciseness needed for residential applications.

Our products are proudly engineered and built in Galesburg, Illinois making Intellihot the first and only US-based manufacturer of gas-fired condensing tankless water heating systems. Over the past fourteen years, Intellihot has helped commercial customers throughout the nation save thousands of dollars while eliminating downtime. As we continue to expand our coverage across North America, we strive to provide you with the same unmatched performance advantages and savings. Our talented team of dedicated professionals is ready to assist you and help your business succeed.

I thank you for considering our Intellihot products.

Sincerely,
Shamus M. Hurley
CEO, Intellihot Inc.

Wall Hung Units

TECHNOLOGY OVERVIEW

Intellihot's wall hung units pack a powerful punch in a compact form. Ideal for highly variable applications, our wall hung units sport a robust build. Masterless cascading lets you get creative with small spaces reliably.

KEY FEATURES

- **Revolutionary Heat Exchanger** – Features our revolutionary 316L stainless steel heat exchanger that can withstand all thermal shocks and stresses, and provides superior corrosion and erosion resistance.
- **Masterless Cascading** – Cascade up to 10 units together and eliminate single-point failures with our patented Masterless Cascading technology.
- **Efficient Burner** – Features a radially fired, downward-blowing, premixed burner with a negative pressure gas valve and plenum design.
- **Self-Descaling** – Patented self-descaling design prevents lime-scale buildup.
- **Eliminate Mixing Valves & Lower Legionella Risks** – With no storage tanks, there's a lower risk for Legionella growth. By eliminating the need for mixing valves, this feature also reduces their associated unreliability and costs.
- **Multiple Venting Configurations** – Include concentric, snorkeling terminations in different pressure zones and single-pipe vent, with smart common venting.
- **Numerous Levels of Built-in Safety Features** – Prevent flue from back drafting, including fan speed control.
- **Next-Gen Connectivity** – Factory monitoring via telliCare messaging.
- **Masterless Cascading** – Eliminate single-point failures with our patented Masterless Cascading technology. If one cascaded unit is offline for servicing, all other units regroup and continue to operate. Cascade up to 10 units (2,510,000 BTUs/hour) for larger applications.
- **Full Modulation** – Smart units deliver maximum BTU/hr input when needed and zero BTU/hr the rest of the time.
- **Gas-Fired** – By using natural gas our systems lower operating costs and improve ROI vs. electric water heaters. 73KW of heating capacity available with low pressure drop; capable of 9.6 GPM at 50F temperature rise.
- **Common Venting Capabilities** – The iQ251 and iQ251D units transform common venting into smart–common venting.
- **ASME-HLW Compliant** – Suitable for applications managed by engineers, specifiers and contractors. (iQ251, iQ251D)

iQ Series, Gen II

iQ251 | iQ251D (Deionized)

iQ251

iQ251

	i200	i250
Minimum input *(BTU/hr)*	30,000	30,000
Maximum Input *(BTU/hr)*	199,950	250,000
Maximum Output *(BTU/hr)*	191,952	240,000
Thermal Efficiency	96%	96%
Dimensions H X W X D *(Inches)*	26.4 x 17.8 x 15 *(3.9 CU. FT)*	26.4 x 17.8 x 15 *(3.9 CU. FT)*
Weight *(LBS)*	93 LBS	93 LBS
Water Pressure Min/Max *(PSI)*	30/150	30/150
Vent Size *(Diameter)*	3" Ø	3" Ø
NG - *(Static Gas Pressure Range)*	2.5"- 14" WC	2.5"- 14" WC
LP - *(Static Gas Pressure Range)*	8"- 14" WC	8"- 14" WC
Electrical	120V AC,60Hz *(4.2 Amps)*	120V AC, 60Hz *(Max 4.2 Amps)*
	iQ251	**iQ251D**
Minimum input *(BTU/hr)*	30,000	30,000
Maximum Input *(BTU/hr)*	251,000	251,000
Maximum Output *(BTU/hr)*	240,960	240,960
Thermal Efficiency	96%	96%
Dimensions H X W X D *(Inches)*	26.4 x 17.8 x 15 *(3.9 CU. FT)*	26.4 x 17.8 x 15 *(3.9 CU. FT)*
Weight *(LBS)*	90 LBS	90 LBS
Water Pressure Min/Max *(PSI)*	30/160	30/160
Vent Size *(Diameter)*	3" Ø	3" Ø
NG - *(Static Gas Pressure Range)*	2.5"- 14" WC	2.5"- 14" WC
LP - *(Static Gas Pressure Range)*	8"- 14" WC	8"- 14" WC
Electrical	120V AC,60Hz *(4.2 Amps)*	120V AC,60Hz *(4.2 Amps)*

Floor Standing Units

TECHNOLOGY OVERVIEW

Drop-in ready, the Neuron Series packs the energy-saving benefits of tankless units in a reliable design that installs quickly. With the same connections as a traditional boiler for quick startups, and no tank to maintain, the Neuron Series drops in like a breeze.

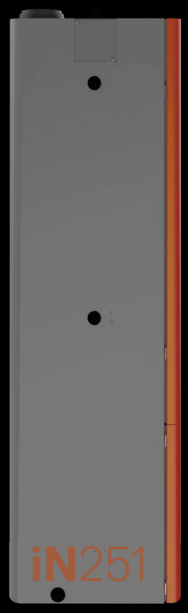
KEY FEATURES

- **Drop-In Ready Replacement** - Neuron Series units feature similarly located water in and out connections for easy hook-up without the need to re-pipe. Replace typical tank units in a flash.
- **Masterless Cascading With Common Venting** - Up to 4 units can be cascaded with common venting for an output of 799,800 - 1,999,996 BTUs/hr.
- **Quick Ship** - Readily available stock, ships quickly with short lead times on orders.
- **Gas Pressure Sensor** - Easy ignition troubleshooting.
- **Water Pressure Sensor** - Allows for scaling checks.
- **Next-Gen Connectivity** - Factory monitoring via telliCare messaging.
- **Control Board OTA** - Over The Air monitoring with software backup and updates.
- **Automatic Pump Control** - Runs only with flow to the unit preventing pump burnout.
- **Lightweight** - The slim, lightweight design makes light work of transporting and installation.
- **ASME Certified** – iN199A, iN251, iN401, iN501
- **Built-In Redundancy** – iN401/iN501 Neuron models come with two separate, independently controlled heat engines; thus eliminating additional expense and space for a redundant backup water heater.
- **Low Gas Pressure Operation** – System operates on low gas pressure, down to 2.5” WC, without reduction of capacity.
- **Flexible-Floating Heat Exchanger Design** – stress-relieving and thermal shock resistant.
- **7” Color Touch Screen** - access to usage data, troubleshooting, and parts wear.

The **Neuron** Series

iN401 | **iN**501

iN501



iN251

GUARANTEED DROP-IN REPLACEMENT PRODUCT

	iN199	iN199A	iN251
Minimum input *(BTU/hr)*	30,000	30,000	30,000
Maximum Input *(BTU/hr)*	199,950	199,950	251,000
Maximum Output *(BTU/hr)*	195,951	195,951	240.960
Thermal Efficiency	98%	98%	96%
Dimensions H X W X D *(Inches)*	67.5 X 20 X 20 *(15 Cu. Ft)*		
Weight *(LBS)*	266 LBS	266 LBS	273 LBS
Water Pressure Min/Max *(PSI)*	30/160	30/160	30/160
Vent Size *(Diameter)*	3" Ø	3" Ø	3" Ø
NG - *(Static Gas Pressure Range)*	2.5"- 14" WC	2.5"- 14" WC	2.5"- 14" WC
LP - *(Static Gas Pressure Range)*	8"- 14" WC	8"- 14" WC	8"- 14" WC
Electrical	120V AC, 60Hz *(Max 9.5 Amps)*		

	iN401	iN501
Minimum input *(BTU/hr)*	30,000	30,000
Maximum Input *(BTU/hr)*	399,999	499,999
Maximum Output *(BTU/hr)*	383,999	479,999
Thermal Efficiency	96%	96%
Dimensions H X W X D *(Inches)*	67.5 X 20 X 20 *(15 Cu. Ft)*	67.5 X 20 X 20 *(15 Cu. Ft)*
Weight *(LBS)*	345 LBS	345 LBS
Water Pressure Min/Max *(PSI)*	30/160	30/160
Vent Size *(Diameter)*	4" Ø	4" Ø
NG - *(Static Gas Pressure Range)*	2.5"- 14" WC	2.5"- 14" WC
LP - *(Static Gas Pressure Range)*	8"- 14" WC	8"- 14" WC
Electrical	120V AC, 60Hz *(Max 9.5 Amps)*	120V AC, 60Hz *(Max 9.5 Amps)*

Floor Standing Units

TECHNOLOGY OVERVIEW

With enormous outputs - up to 3 million BTUs/hr, the iQ floor standing units are ideal for large commercial applications. Housing multiple self-operating heat exchangers in a compact build, the units offer revolutionary redundancy. An industry-leading turndown ratios (up to 100:1) reduces gas bills by up to 40% for zero compromise between space, efficiency, and performance.

KEY FEATURES

- **High Capacity in a Compact Size** – At 730 - 1645 lbs. and 30" width (fits elevator doors), iQ floor standing units supply 20 - 80 GPM at 70°F temperature rise non-stop.
- **Masterless Cascading** – Combine multiple units without a master controller for higher demands, or additional redundancy.
- **Next-Gen Connectivity** – Factory monitoring via telliCare messaging.
- **Eliminate Mixing Valves & Lower Legionella Risks** – With no storage tanks, there's a lower risk for Legionella growth. By eliminating the need for mixing valves, this feature also reduces their associated unreliability and costs.
- **Competitive Turndown Ratio** – Unparalleled gas savings with an industry leading turndown ratio, 100:1 for iQ3001, 66:1 for iQ2001, 50:1 for iQ1501, 33:1 for iQ1001, and 25:1 for iQ751.
- **Common Venting Capabilities** – The iQ floor units transform common venting into smart–common venting.
- **ASME-HLW Compliant** – Suitable for applications managed by engineers, specifiers and contractors.
- **Guaranteed** – Backed by a 10 year non-prorated heat exchanger warranty.

Help Your Clients Choose the Right Size of Water Heater with telliSize!

iQ Series, Gen II

iQ2001 | iQ3001

iQ1001

iQ3001

	iQ751	iQ1001	iQ1501	iQ2001	iQ3001
Minimum input *(BTU/hr)*	30,000	30,000	30,000	30,000	30,000
Maximum Input *(BTU/hr)*	751,000	1,001,000	1,501,000	1,999,999	3,001,000
Maximum Output *(BTU/hr)*	705,940	940,940	1,440,960	1,879,999	2,820,940
Thermal Efficiency	94%	94%	96%	96%	94%
Dimensions H X W X D *(Inches)*	67.6 X 30 X 44.3 *(48 CU. FT)*		67.7 X 30 X 60.4 *(66 CU. FT)*		
Weight *(LBS)*	730 LBS	800 LBS	1025 LBS	1225 LBS	1645 LBS
Water Pressure Min/Max *(PSI)*	30/160	30/160	30/160	30/160	30/160
Vent Size *(Diameter)*	6" Ø	6" Ø	6" Ø	8" Ø	8" Ø
NG - *(Static Gas Pressure Range)*	2.5"- 14" WC	2.5"- 14" WC	2.5"- 14" WC	2.5"- 14" WC	2.5"- 14" WC
LP - *(Static Gas Pressure Range)*	8"- 14" WC	8"- 14" WC	8"- 14" WC	8"- 14" WC	8"- 14" WC
Electrical *(120V AC, 60Hz)*	Max 16 Amps	Max 20 Amps	Max 29 Amps	Max 20 Amps (2 Circuits)	Max 30 Amps (2 Circuits)

telliSize is an app specially designed for contractors and service providers to provide quick size and quotations for water heater related requirements of your clients' projects. By entering simple measurements and the number of units in your target site, you can get the exact water heater requirements within minutes. This includes an email with detailed schematics.

GET IT ON Google Play

Download on the App Store

Floor Standing Units

TECHNOLOGY OVERVIEW

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. No compromise between health or efficiency unlike others.

KEY FEATURES

- **Ideal for high-pressure, multi-storey buildings.**
- **Handles tough hard-water scaling.**
- **Produces hot water up to 170°F.**
- **Next-Gen Connectivity** - 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.**
- **CO2 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.
- **Free Up Space** – Can be installed outdoors or indoors.
- **Solar-ready and can be upgraded in minutes.**
- **Lightweight & Compact** – 30% smaller
- **Intelligent Leak Sensor** – Multi-fluid detection
- **Innovative Built-In Glycol Concentration Sensor (GCS)**

The World's First Tankless Heat Pump Water Heater!

Electron Series

	iE1 STD	iE1 MID	iE1 MAX
COP	Up to 4.9	Up to 4.9	Up to 4.9
Electrical Input (kW)	3.4 kW	9.4 kW	15.4 kW
Resistive Heating Elements	0 kW	6 kW	12 kW (2x6)
Ambient Temperature Range	-10° to 110°F	-10° to 110°F	-10° to 110°F
Outlet Water Temperature Range	100°F to 170°F	100°F to 170°F	100°F to 170°F
First Hour Rating	154 Gallons	199 Gallons	244 Gallons
Water Inlet & Outlet Connections	1.5” NPT Female	1.5” NPT Female	1.5” NPT Female
Unit Dimensions H X W X D (Inches)	72 X 30 X 30	72 X 30 X 30	72 X 30 X 30
Unit Weight (LBS)	758 LBS (with 5 Gallons Glycol), 1150 LBS (Thermal Battery Full)		
Water Pressure Min / Max (PSIG)	30 / 160	30 / 160	30 / 160
Electrical Input Voltage	208V AC, 60 Hz, 1Ph	208V AC, 60 Hz, 3Ph	208V AC, 60 Hz, 3Ph
Current Max (FLA)	16.6 Amps	45.5 Amps	49.8 Amps
Minimum Circuit Breaker, MCA (Amps)	25 Amp	50 Amp	60 Amp

Intellihot

Point of Use Units (Heat & Disinfect)

TECHNOLOGY OVERVIEW

The Legionator heats and disinfects water simultaneously. A set of high-quality quartz tubes heats water to comfortable temperature. As the water is exiting the unit, ozone is injected into the water. This has two effects – (1) it disinfects the water (2) This ozone is also carried in the water to the faucets and mitigates the bacteria present within the faucet valve seats and aerators.

KEY FEATURES

- **Automatic Ozonation Technology** - Mitigates pathogens in water and automatic faucets.
- **Scale Resistant** - Infrared heating quartz tubes heat water using infrared, mitigating scale formation.
- **Efficient and Healthy** - With no storage, the unit delivers endless hot water on-demand saving energy and producing healthy water.
- **Space Saving** - Eliminate water storage tanks to save space with a tankless unit. Install under a sink or in a nearby closet.

	iL3.5	iL6.0
Supply Voltage	120 Vac, single phase	208, Vac, single phase
Power Rating	3.5 kW	6 kW
Current Draw (Max)	29 Amps	29 Amps
Activation Flow Rate GPM	0.2 GPM	0.2 GPM
Min set point temp °F	100 °F	100 °F
Max set point temp °F	120 °F	120 °F
Min operating pressure psi	30 psi	30 psi
Max operating pressure, psi	150 psi	150 psi
Water in/out connection size	3/8"	3/8"
Dimensions	14.5" H x 4.5" W x 6" D	14.5" H x 4.5" W x 6" D

telliCare 2.0

Monitoring & Alert Service

telliCare 2.0

TECHNOLOGY OVERVIEW

telliCare is a IOT enabled, prognostics and predictive maintenance service for Intellihot's Gen II tankless water heaters. This service allows your Intellihot water heaters to be monitored remotely by the factory and sends up to three designated persons text or email alerts when problems arise.

- **BTUs, Firing Rate, and Flue Gases** - We monitor the BTUs generated by your water heaters on a daily, weekly, and monthly basis..
- **Temperature Monitoring** - We monitor the inlet/outlet temperatures of the water being heated.
- **Flow Rates** - We monitor your flow rates on an hourly, daily, weekly, and monthly basis.
- **Longevity of Parts** - We monitor the longevity of the parts in your units and based on their remaining life, we predict when replacement parts will be needed.

Emissions & Certifications

Summary & Table

EMISSIONS SUMMARY 2023

Every Intellihot unit in operation contributes to our collective decarbonization goal. Endless Progress is a joint mission.

12.3 BILLION POUNDS OF CO_2

emissions saved as of this year by Intellihot's products & services.

1.05 BILLION THERMS OF ENERGY

saved from Intellihot products & services.

1.24M GAS VEHICLES

Our 2022 CO_2 savings are equivalent to the amount of CO_2 emissions generated by 1,241,538 gas vehicles driven for a year.

6.7M ACRES OF FORESTS

Our 2022 CO_2 savings are equivalent to the amount of CO_2 sequestered by 6.7 million acres of American forests.

628M GALLONS OF GAS

You would need to burn 627.8 million gallons of gasoline to generate the amount of CO_2 emissions that we saved in 2023.

1.1M HOMES' ELECTRICITY

1,085,568 American homes generate the amount of CO_2 emissions we saved in a single year with their electricity usage.

i200 | 199,950 BTU/hr.	✓		✓	✓	✓	
i250 | 250,000 BTU/hr.	✓		✓	✓	✓	✓
iQ251 | 251,000 BTU/hr.	✓	✓	✓	✓	✓	✓
iQ251D | 251,000 BTU/hr.	✓	✓	✓	✓	✓	✓
iN199 | 199,950 BTU/hr.	✓			✓	✓	✓
iN199A | 199,950 BTU/hr.	✓	✓		✓	✓	✓
iN251 | 251,000 BTU/hr.	✓	✓		✓		
iN401 | 399,999 BTU/hr.	✓	✓	✓	✓	✓	✓
iN501 | 499,999 BTU/hr.	✓	✓	✓	✓	✓	✓
iQ751 | 751,000 BTU/hr.	✓	✓	✓	✓	✓	✓
iQ1001 1,001,000 BTU/hr.	✓	✓	✓	✓	✓	✓
iQ1501 | 1,501,000 BTU/hr.	✓	✓	✓	✓	✓	✓
iQ 2001 | 2,001,000 BTU/hr.	✓	✓	✓	✓	✓	✓
iQ3001 | 3,001,000 BTU/hr.	✓	✓		✓	✓	✓
iE1 | 90,000 BTU/hr.	✓			✓	✓	

About Us
Awards & History

RECOGNITION AND AWARDS

- GOLD STEVIE® WINNER: Achievement in Technology Innovation for our iE1
- SILVER STEVIE® WINNER: Communications or PR Campaign of the Year – Technology for our Marketing Campaign "Mercaptan"
- AHR Innovation Awards Finalist 2024 - Heating Category
- Edison Awards Gold 2024
- Chicago Innovation Award 2023 - Climate Champion Award
- Best Workplace for Innovators 2023 - Fast Company
- Edison BIG INNOVATION AWARD 2022

2009-2013

INTELLIHOT FOUNDED, heat exchanger and controls invented, certified, factory setup.

2014

iQ751/1001 LAUNCHED. These were the world's first modular tankless units in a box with autonomous masterless controls and optional connectivity.

The iQ series was designed to power large applications and replace boilers and storage tanks. LEVIS STADIUM is powered by Intellihot

2016

iQ1501 LAUNCHED as the largest tankless in the world. The single unit can power a 150- room hotel.

Intellihot helped redefine and update plumbing codes to include modular units. Connectivity standard.

CHICAGO'S TALLEST RESIDENTIAL BUILDING is powered by Intellihot.

2018

iQ2001 AND iQ3001 LAUNCHED. They are now the world's 1st and 2nd largest tankless units. A single iQ3001 can power a 300-room hotel.

MARRIOTT makes Intellihot the brand standard.

2019

NEURON LAUNCHED as the world's first drop-in tankless to replace tank heaters — built on all the learning from the commercial iQ units.

Unit now features CELLULAR CONNECTIVITY as the standard offering.

2021

iN199 NEURON launched.

2023

Introduced Electron Series - the FIRST EVER tankless heat pump water heater.

Intellihot

WWW.INTELLIHOT.COM

CONTACT US!

Intellihot products have the following certifications, as applicable.