



iQ251, Gen II

HIGH-OUTPUT, TANKLESS, ON-DEMAND WATER HEATERS



TECHNOLOGY OVERVIEW

When space is at a premium, you can count on our wall-hung iQ251 units for superior performance and reliability. Ideal for highly variable applications using potable hot water, these innovative on-demand, water heaters provide 96% thermal efficiency and are constructed for maximum durability – even in the most demanding commercial applications.

EFFICIENT BURNER SYSTEM

iQ251 units features a radially fired, downward-blowing, premixed burner with a negative pressure gas valve and plenum design. The burner delivers a more stable flame under a wide range of operating conditions, including low gas pressure, wind, and non-equal pressure zone terminations. It easily converts from natural gas to LP with the turn of a screw – no additional parts required.

REVOLUTIONARY HEAT EXCHANGER

Our heat exchanger floats freely to accommodate all thermal shocks and stresses. Made of 316L stainless steel it offers superior corrosion and erosion resistance. It has a patented self-descaling design that prevents lime scale buildup. It has no welds on the water side to ensure robustness to chlorides. Our heat exchangers create energy reduction of up to 40%+ when compared to tank-type water heaters and 15%+ over other non-condensing water heaters.

GEN II - WHAT'S NEW

- **Touch-Screen** – All Gen II units have large, intuitive touch screens. All wall hung units have a 3.5" color touch-screen. Easily access daily, weekly, and monthly usage data, troubleshooting info, and longevity of parts.
- **24/7 Factory Monitoring** – With telliCare 2.0, Intellihot water heaters are monitored remotely by the factory for efficient technical support assistance.
- **Reliable Alerts** – Get crucial alerts about your hot water system including warnings, parts replacement reminders, and monthly usage reports via text and email messages using telliCare messaging.

APPLICATIONS

Retail Buildings, Laundromats, Restaurants, Salons, Car Washes, Commercial Kitchens.

COMPLETELY GREEN

Fully condensing, 96% efficient

KEY FEATURES

- **Masterless Cascading** – Cascade up to 10 units for 2,510,000 BTU/hr capacity for larger applications. Eliminate single-point failure with our patented Masterless Cascading technology. If one cascaded unit is offline for servicing, all other units regroup and continue to operate.
- **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.
- **Full Modulation** – Smart units deliver maximum BTU/hr input when needed and zero BTU/hr the rest of the time.
- **Low Gas Pressure Operation** – System requires very low gas pressure to operate, down to 2.5" WC.
- **Common Venting Capabilities** – The iQ251 units transform common venting into smart-common venting. Accommodates 3" PVC exhaust venting up to 130 feet (power vent).
- **ASME-HLW Compliant** – Suitable for applications managed by engineers, specifiers and contractors.
- **Factory Installed Strainer** – iQ251 units deliver debris-free inlet water to the system.

iQ251 Specifications

PARAMETERS	iQ251
Type	Indoor/Outdoor, Wall Hung, Fully Condensing, Tankless On-Demand Water Heater
Fuel	Preset for NG / LP convertible
Minimum / Maximum Input (BTU/hr)	30,000 / 251,000
Maximum Output (BTU/hr)	240,960
Thermal Efficiency	96%
Dimensions H X W X D (Inches)	26.4 X 17.8 X 15 (3.9 CU. FT)
Weight (LBS)	90 LBS
Water Inlet / Outlet Connection	3/4" NPT
Gas Inlet Connection	3/4" NPT
Minimum Flow Rate for Activation	0.6 GPM
Ignition	Electronic Spark Ignition
Venting Type	Direct Vent (2 pipe – intake & exhaust), Power Vent (1 pipe – exhaust only)
Venting Materials	Sch. 40 PVC, Sch. 80 CPVC, Polypropylene, Stainless Steel (AL29-4C)
Max 3" Vent Length – Single Pipe / Power Vent	130 ft; deduct 5 ft per 90° elbow and 2 ft per 45° elbow
Max 3" Vent Length – Two Pipe / Direct Vent	65 ft; deduct 5 ft per 90° elbow and 2 ft per 45° elbow
Common Venting	Yes
Installation Location Ambient Temperature	40°F – 130°F
Safety	Flame Rod, Thermal Fuse, Overheat Prevention Device, Fan Speed Monitor, Flue Temperature Monitor, Blocked Vent Detector, Water Shut-Off Valve, 2X10A Fuse, Dual Flame Sensing, Flue Damper
Water Pressure Min / Max (PSI)	30 / 160
Natural Gas and Propane – Minimum Static Gas Pressure 1/2" Pipe	6" WC (non-corrugated, black iron) LP=8" WC
Natural Gas and Propane – Minimum Static Gas Pressure 3/4" Pipe	NG=2.5" WC (non-corrugated, black iron); LP=8" WC.
Natural Gas and Propane – Maximum Static Gas Pressure	14" WC (set Gas regulator to 8" WC for NG 11" WC for LP)
Gas Regulator Pressure Set To	8" WC for natural gas and 11" WC for propane
Electrical Requirements	120V AC, 60 Hz, 15 Amp Circuit Breaker
Power Consumption	500W (Max 4.2 Amps), 8W (Standby)
Features	
Listing	ETL (Z21.10.3 / CSA 4.3), ASME HLW, SCAQMD (Low NO _x)
Cascading	Masterless, 10 units
Heat Exchanger	Expandable, Stainless 316L
Hot Water Capacity (35F Rise)	13.8
Hot Water Capacity (45F Rise)	10.7
Hot Water Capacity (77F Rise)	6.3
Commercial Mode Temp. Settings	100 – 190°F
WARRANTY†	
Basic Warranty (without StartUp)	Hex – 1 Year, Parts – 1 Year, Labor - None
Enhanced Warranty (with StartUp)	Hex – 10 Years, Parts – 2 Years, Labor - None
Labor Warranty (with Start Up & telliCare Connection)	Hex – 10 Years, Parts – 2 Years, Labor - 1 Year

Note: Due to Intellihot's policy of continuous product improvements, design and technical specifications are subject to change without notice. Version 8.19.24

† Heat Exchanger assembly (HEX) does not include, gas valve/blower assembly & sidecast. On 10 year| prorated after year 5. On 6 year| prorated after year 3. telliCare Service is free for one year. Start of warranty is: Per startup report or 2 months from date of manufacture. More specific warranty details can be found in 1/0 Manuals section 18.

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