



Intellihot

Endless water. Zero waste.™

INDUSTRIAL

iQ251D, Gen II

DEIONIZED, TANKLESS, ON-DEMAND WATER HEATERS



GEN II - WHAT'S NEW

- **Touch-Screen** – Easily access daily, weekly, and monthly usage data, troubleshooting info, and longevity of parts via an intuitive touch screen. iQ251D features a 3.5" color touch-screen.
- **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.

COMPLETELY GREEN

Fully Condensing, 96% Efficient

TECHNOLOGY OVERVIEW

The wall-hung iQ251D on-demand water heater is designed to be a commercial "workhorse." Each unit delivers 251,000 BTU/hr and is ideal for highly variable applications using deionized hot water. Ideal where space is at a premium, the iQ251D is the most compact and only gas-fired, deionized on-demand water heater on the market.

LARGE CAPACITY, NO SINGLE POINT FAILURE

Up to ten iQ251D units can be cascaded together for a combined capacity of over 2,510,000 BTU/hr capacity. With our patented Masterless Cascading technology, we've eliminated the need for a master controller, thus eliminating any single-point system failures. Each unit is also equipped with enough internal logic to continue to operate independently. If any one of the cascaded units needs to be serviced, the other units will continue to function smoothly to ensure continuous hot water.

KEY FEATURES

- **Masterless Cascading** – Eliminate single-point failure with multiple units. If one 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.
- **316L Stainless-Steel Construction** – The unit is durable, built to withstand highly corrosive deionized water.
- **Flexible Heat Exchanger** – Built to accommodate quick temperature changes and continual on-off cycles with minimal stress.
- **Compact Unit** – Nearly the size of a carry-on suitcase (26"x17"x15.9"), the units each weigh approximately 100 lbs.
- **ASME-HLW Compliant** – Suitable for applications managed by engineers, specifiers and contractors.
- **Natural Gas** – By using natural gas our systems lower operating costs and improve ROI vs. electric water heaters.
- **High Power, Small Package** – Our units require as little as 73KW, substantially less than electric water heaters with no need for 440V or large amperage.

APPLICATIONS

Industrial Finishing/Cleaning, Electronic Parts Fabrications, Food Processing, Water Purification, Reverse Osmosis Systems, Aerospace, Cosmetics, Pharmaceutical and Glass Industries.

iQ251D Specifications

PARAMETERS	iQ251D
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, Stainless 316L
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	NG=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 Pressure for Adjustments	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
Fittings and Internal Piping	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

*The unit does not include a temperature and pressure relief valve (T&P). The customer is responsible for supplying the T&P based on the application. Please refer to section 3.6 of the I/O Manual.
 † 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 I/O Manuals section 18.

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 Built for the world.™