



The NEURON Series

Finally, a drop-in solution that allows you to go tankless

When space and cost are important deciding factors, you can count on our Neuron Series units for superior performance and reliability. Ideal for commercial applications, our tankless water heaters provide 94% thermal efficiency and are constructed for maximum durability – even in the most demanding commercial applications.

KEY FEATURES

- **Compact Drop-In Replacement** – Neuron units are over 8” slimmer than a typical tank and feature similarly located water in and out for easy hook up without the need to re-pipe. Replace typical tank units in a flash.
- **Built-In Redundancy** – All Neuron models come with two separate heat engines, independently controlled thus eliminating additional expense and space for a redundant backup water heater.
- **Direct Cell-LTE Connectivity** – Remotely access and monitor our Neuron unit via LTE cell connectivity feature. No need for your building’s Wi-Fi.
- **Mobile App, telliCare®** – Use Intellihot’s mobile app and start monitoring your unit. Check water inlet/outlet temperatures, flow rates, flue gas temperatures and life of key parts, available on your mobile device of choice.
- **Low Gas Pressure Operation** – System operates on low gas pressure, down to 2.5” WC, without reduction of capacity.
- **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.

INDUSTRY BEST WARRANTY

10-Year Commercial HX Warranty

APPLICATIONS

Hotels, Restaurants, Schools



SCALE FREE 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.

The NEURON Series Specifications

PARAMETER	MODELS	
	iN401	iN501
Type	Indoor, Floor Mounted, On-Demand Water Heater	
Fuel	Preset for NG / LP convertible without additional parts	
Minimum Input (BTU/hr)	30,000	
Maximum Input (BTU/hr)	399,999	499,999
Maximum Output (BTU/hr)	383,999	479,999
Thermal Efficiency	96%	96%
Turn Down Ratio (TDR)	13.3:1	16.7:1
Water Inlet / Outlet Connections	1-1/2" NPT	
Gas Inlet Connection	1-1/2" NPT	
Condensate Drain Connection	3/4" PVC	
Maximum Condensate Flow Rate (GPH)	2.8	3.6
Unit Dimensions H X W X D (Inches)	67.5 X 20 X 20 (15 CU. FT)	
Service Clearances	4" on the back, 6" on the top, 12" on the front, and 1" on the sides	
Unit Weight (LBS)	345 LBS	
Shipping Crate Dimensions H X W X D / Weight	85 X 29.5 X 27 (Inches) / 445 (LBS)	
Venting Type	Direct Vent (2 pipe - intake & exhaust), Power Vent (1 pipe - exhaust only, room air)	
Venting Materials (USA)	Sch. 40 PVC, Sch. 80 CPVC, Polypropylene, Stainless Steel	
Venting Materials (Canada)	Type BH Gas Vent Classes: II A (PVC), II B (CPVC), II C (Polypropylene), I (AL 29-4C SS)	
Vent Size (Diameter)	4" Ø	
Max Vent Length - Single Pipe / Power Vent*	250 ft	180 ft
Max Vent Length - Two Pipe / Direct Vent*	125 ft	90 ft
* Venting Note: From the maximum lengths above, deduct 5 ft. per 90° elbow and 2 ft. per 45° elbow		
Ignition	Electronic Spark Ignition	
Temperature Range	100°F – 190°F	
Temperature Stability	+/- 4°F	
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, Dual Flame Sensing	
Water Pressure Min / Max (PSIG)	30 / 160	
NG/LP - Min. Dynamic Gas Pressure (Full Fire)	2.5" WC (non-corrugated, black iron)	
NG/LP - Maximum Static Gas Pressure	14" WC	
Gas Pressure for Adjustments	8" WC for NG, 11" WC for LP	
Electrical	120V AC, 60 Hz	
Power Consumption	Max 9.5 Amps, 16W (Standby)	
Internal Water Volume (gallons)	1	1
Features	iN401	iN501
Built-In Redundancy	Multiple Heat Engines with Individual Control	
Cascading	Masterless, 4 units, Automatic Rotation	
Common Venting	Yes - up to 4 units	
Heat Exchanger	Expandable, Stainless 316L	
Listing	ETL (Z21.10.3 / CSA 4.3), ASME HLW	
Performance GPM	iN401	iN501
Hot Water Capacity (45F Rise)	17.1	21.4
Hot Water Capacity (70F Rise)	11.0	13.8
Hot Water Capacity (90F Rise)	8.6	10.7
Hot Water Capacity (100F Rise)	7.7	9.6
Hot Water Capacity (140F Rise)	5.5	6.9
Warranty	Heat Exchanger Coil – 10 years, All Other Parts – 2 years	

Note: Due to Intellihot's policy of continuous product improvements, design and technical specifications are subject to change without notice. Version 6.20

