



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

