



Intellihot

Endless Water. Zero Waste™

iSeries

COMMERCIAL

Self-learning Tankless Water Heaters

i200, i250, i200P, i250P



Designed and
built in the USA

DESIGNED WITH COMMERCIAL CUSTOMERS IN MIND

i200, i250, i200P, i250P

iSeries Model Overview

Input BTU/h	With Circulation Pump	No Circulation Pump
199,950	i200P	i200
250,000	i250P	i250

Built to withstand the toughest conditions

Hundreds of cycles, continuous recirculation, large temperature rises—Intellihot tankless water heaters outperform and outlast the competition. The reason? Our unique heat exchanger and controls work even under the following adverse conditions:

- Very low gas pressures down to 2½" WC, yet achieve full rate
- Extreme thermal shocks and countless on/off cycles
- ½" schedule 40 black iron gas lines up to 40'
- 2" (to 26') or 3" (to 100') PVC venting

Time- and money-saving retrofits

Did you know you can replace a tank-type, power-vented water heater with an Intellihot tankless model without changing the gas piping or existing plastic venting? Other manufacturers have to sell smaller Btu/h units to work on smaller gas lines, which means much less hot water. Not Intellihot. Our simple retrofits save time, save money and deliver all the hot water you need.

Designed and built in the USA

Founded in 2005, after a traditional water heater broke down and flooded our founder's basement, Intellihot today designs, manufactures and builds tankless water heaters for commercial and industrial applications—the first to do so entirely in the United States.

Contact Information

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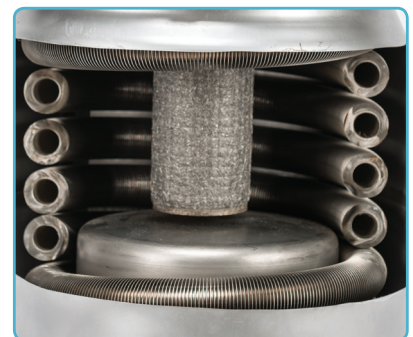
WHAT'S INSIDE?

BURNER SYSTEM

- Features a radially fired, downward-blowing, premixed burner with a negative pressure gas valve and plenum design
- Delivers a more stable flame under a wide range of operating conditions, including low gas pressure, wind and non-equal pressure zone terminations
- Easily converts from natural gas to LP with the turn of a screw—no additional parts required and one SKU for easier inventory management

316L FLEX HEAT EXCHANGER

- Floats freely and acts like a spring to accommodate all thermal shocks and stresses
- Made of 316L stainless steel for superior corrosion and erosion resistance
- Self-descaling heat exchanger design prevents scale buildup



- No welds on the water side ensure robustness to chlorides
- Low pressure drop compared to other tankless designs
- Energy reduction up to 40%+ compared to tank-type water heaters and 15%+ over non-condensing water heaters



WATER INLET STRAINER

- Strainer included and factory installed on the units to deliver debris-free inlet water to the system

INTELLIGENT CONTROLS

- Units can be set to control temperature or allow maximum flow delivery—ideal for short duration demand spikes or large commercial dump loads tied with storage tanks
- After every firing cycle, system circulates internally to equalize temperature, eliminate hotspots and prevent scale (pump models only)

ROBUST VENTING

- Plastic vent temperature overshoot control maintains safe stack temperature below the vent's maximum temperature rating
- Multiple venting configurations include concentric, snorkeling, terminations in different pressure zones and single pipe vent, smart common venting
- Numerous levels of safety built in to prevent flue from back drafting, including fan speed control, a mechanical damper and intelligent unit loss detection algorithms

SELF-LEARNING RECIRCULATION (i200P/i250P)

Use Intellihot under-sink valve (part # IGT-SPR-0061)

- Get instant hot water (eliminates water waste) for any application
- Zero flow-rate activation

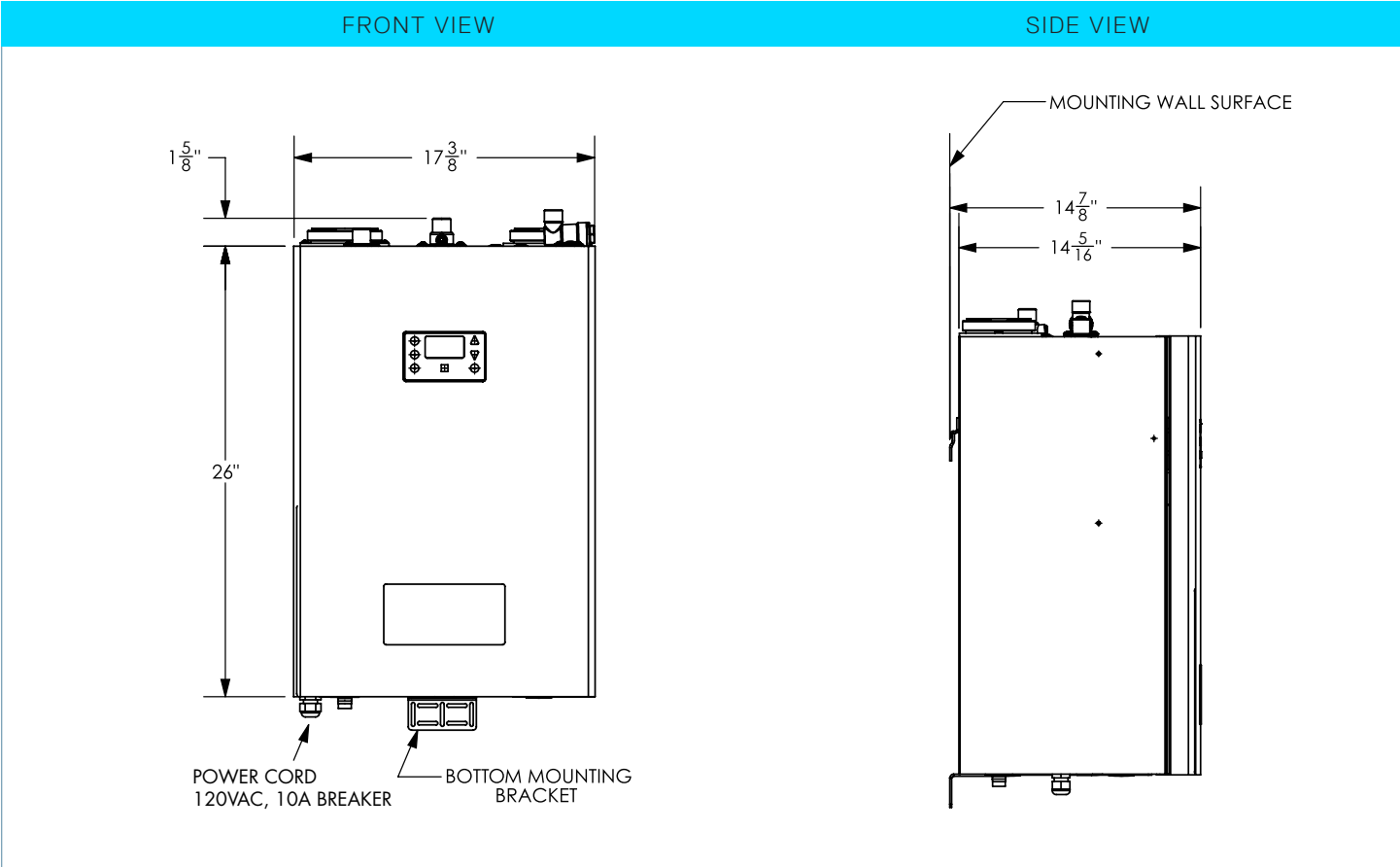
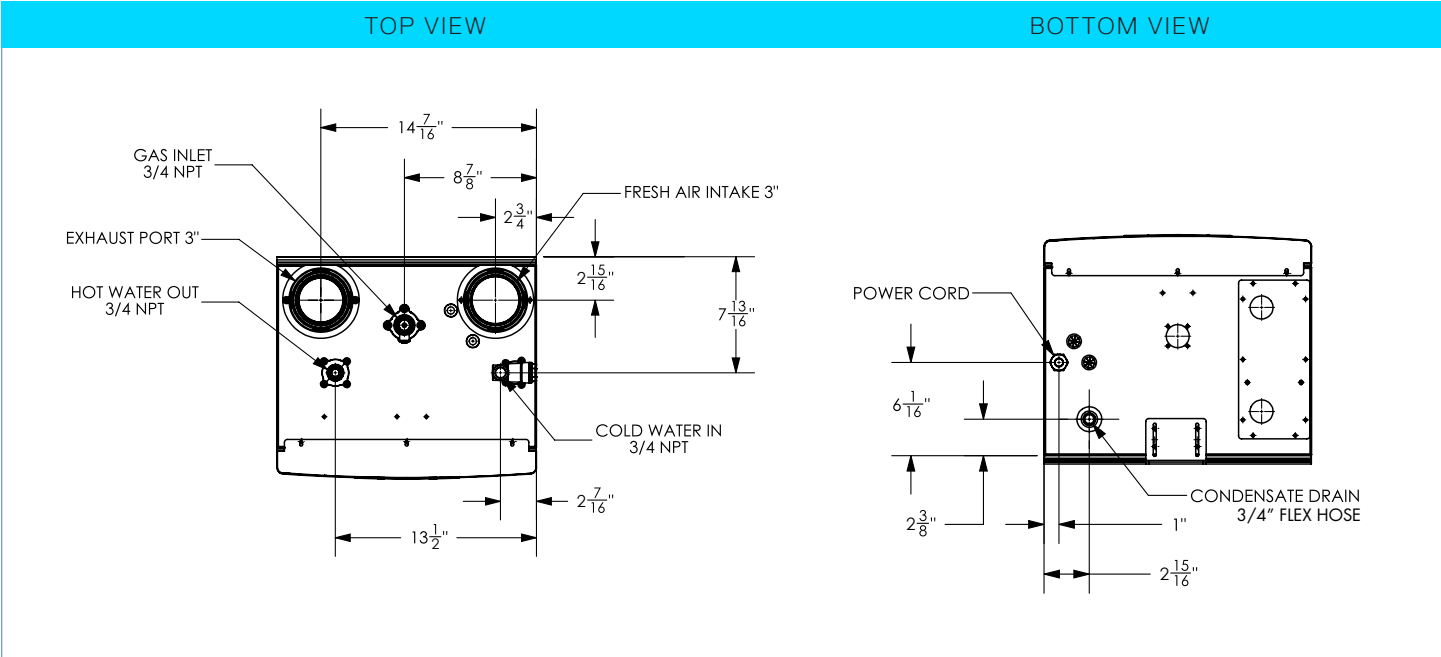
HEATED BUFFER TANK

- Integrated half-gallon buffer tank eliminates temperature spikes and cold-water sandwiches
- $\pm 2^{\circ}\text{F}$ temperature stability

MASTERLESS CASCADING

- No single-point failure with multiple units—if one goes down with an error or when servicing, all other units regroup and continue to operate
- No user intervention needed

i200, i250, i200P, i250P



FLOW RATES (GPM)

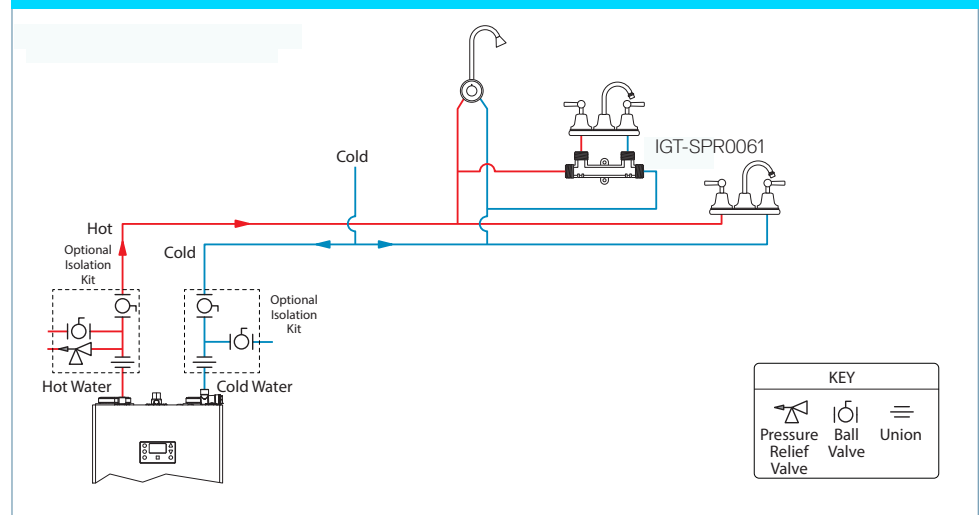
Temperature Rise °F

MODEL	40	50	60	70	80	90	100
i200/i200P	9.4	7.5	6.3	5.4	4.7	4.2	3.8
i250/i250P	11.7	9.3	7.8	6.7	5.8	5.2	4.7

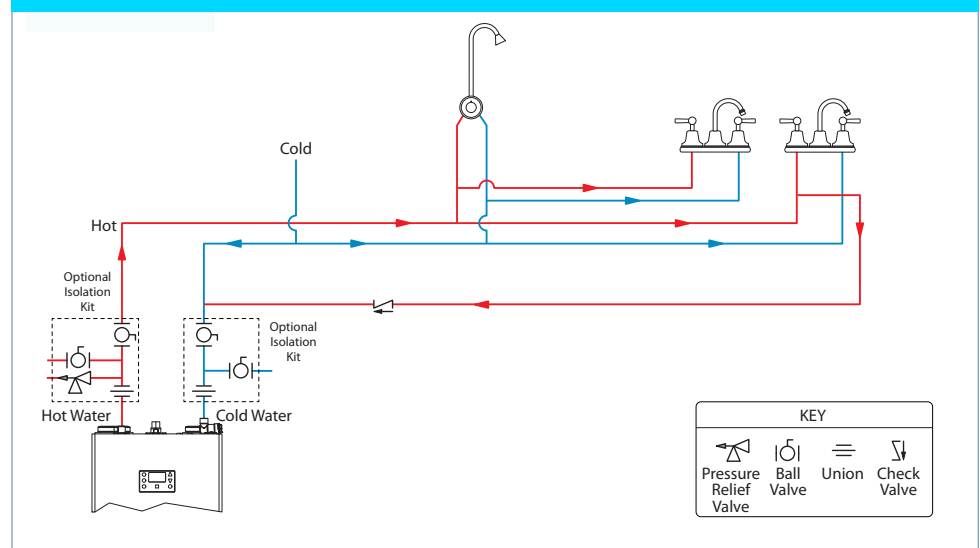
SELF-LEARNING RECIRCULATION

“P” models have a built-in circulation pump with self-learning that eliminates water waste and minimum flow rate requirements. They can also work either with a dedicated recirculation line or with under-faucet cross-over valves to provide hot water to fixtures more quickly, enabling recirculation for any new or existing homes.

UNDER-SINK VALVE OPTION

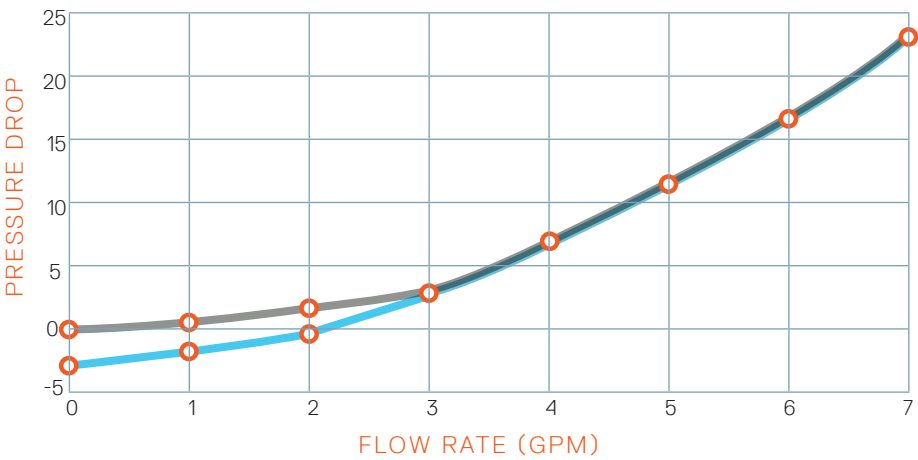


RETURN LINE OPTION



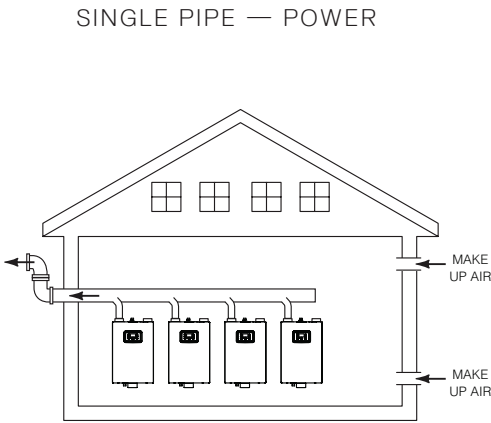
PRESSURE DROP

i200/i250 
i200P/i250P 

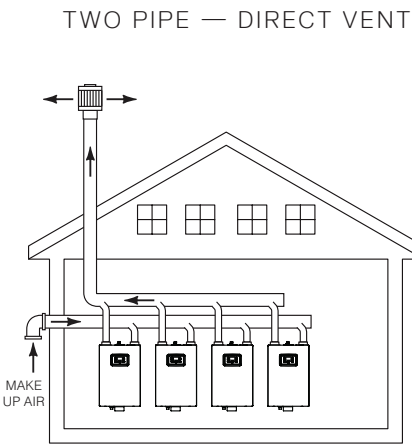


VENTING

Maximum Vent Lengths



	Duct Size	2"		3"		4"		6"		8"	
		Model	i200	i200	i250	i200	i250	i200	i250	i200	i250
# Units Cascaded Together	1		26	200	130	200	130				
	2					200	130				
	3					100	30	200	130		
	4							200	130		
	5							200	130		
	6							200	130		
	7							150	45		
	8							100	30	200	130
	9									200	130
	10									200	130



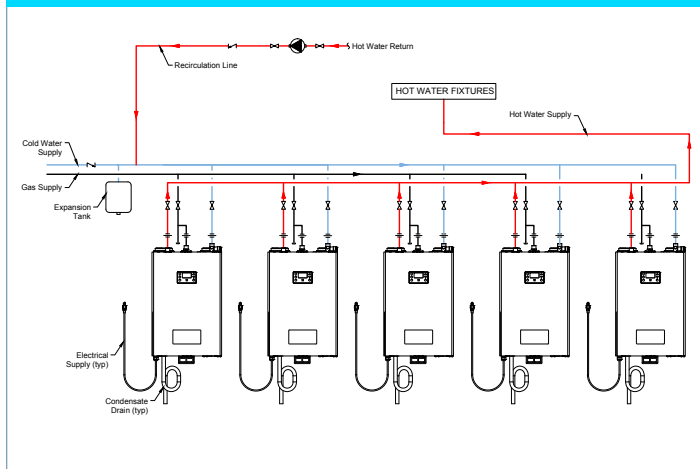
	Duct Size	2"		3"		4"		6"		8"	
		Model	i200	i200	i250	i200	i250	i200	i250	i200	i250
# Units Cascaded Together	1		21	100	65	100	65				
	2					100	65				
	3					50	30	100	65		
	4							100	65		
	5							100	65		
	6							100	65		
	7							75	45		
	8							50	30	100	65
	9									100	65
	10									100	65

SUPPLY LARGE DEMANDS

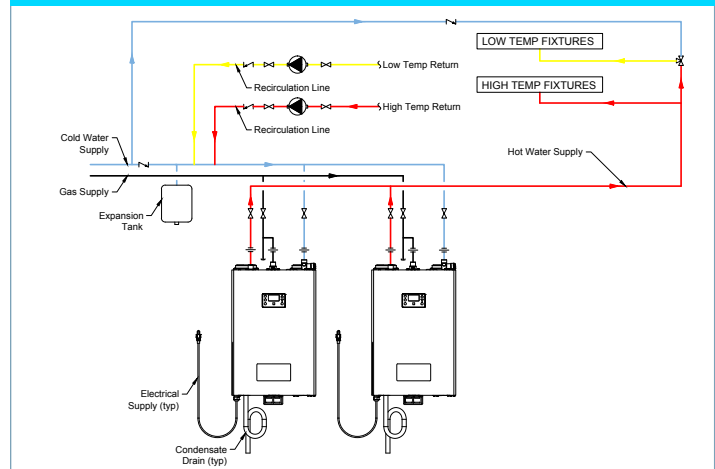
Easily power up five to 50GPM. The applications shown here represent just a small sampling of what Intellihot units can do. We can design a solution for any situation that requires hot water delivered in an efficient, economical way.



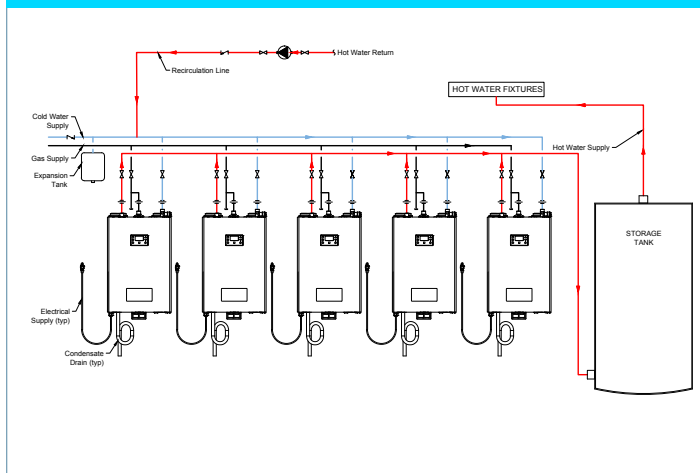
Multi-Unit with Building Recirculation and No Storage



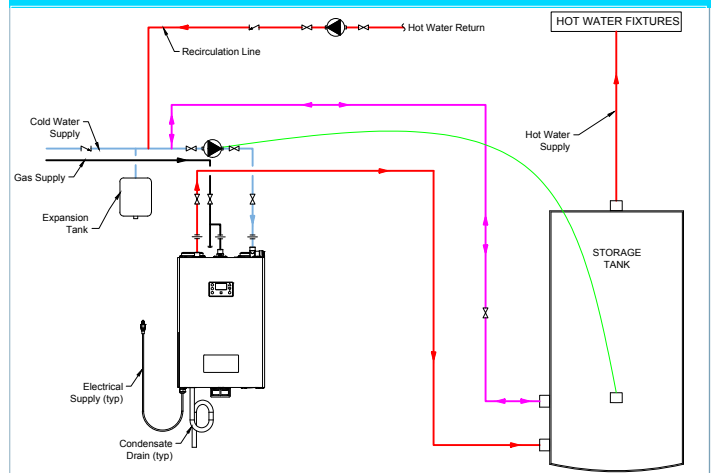
Multi-Unit with Building Recirculation and Mixing Valve



Multi-Unit with Building Recirculation and Storage



Single Unit with Tank for Dump Applications



iSeries Specifications

PARAMETERS	MODEL	
	i200, i200P	i250, i250P
Type	Indoor/Outdoor, Wall-Hung, Fully Condensing, Direct Ignition	
Fuel	Preset for NG / LP Convertible	
Minimum / Maximum Input (Btu/h)	30,000 / 199,950	30,000 / 250,000
Thermal Efficiency	94%	92%
Energy Factor	0.93	N/A
Dimensions H X W X D (inches)	26 X 17.4 X 14.9 (3.9 cu. ft)	
Weight	"P" models - 98 lbs / Non "P" models - 93 lbs	
Water and Gas Connections	3/4" NPT	
Minimum Flow Rate	"P" models - No min. flow / Non "P" models - 0.6 GPM	
Venting Materials	Sch. 40 PVC, Sch. 40 CPVC, Polypropylene, Stainless Steel	
Max 3" Vent Length - Single Pipe / Power Vent	200 ft, deduct 5 ft per 90° elbow	130 ft, deduct 5 ft per 90° elbow
Max 3" Vent Length - Two Pipe / Direct Vent	100 ft, deduct 5 ft per 90° elbow	65 ft, deduct 5 ft per 90° elbow
Max 2" Vent Length - Single Pipe / Power Vent (2" not allowed at elevations above 4,000 ft)	26 ft, deduct 5 ft per 90° elbow	N/A
Max 2" Vent Length - Two Pipe / Direct Vent (2" not allowed at elevations above 4,000 ft)	21 ft, deduct 5 ft per 90° elbow	N/A
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	
Water Pressure Min / Max (PSI)	30 / 150	
NG/LP - Minimum Static Gas Pressure 1/2" Black Iron (non-corrugated)	5"	6"
NG/LP - Minimum Static Gas Pressure 3/4" Black Iron (non-corrugated)	2.5"	
NG/LP - Minimum Dynamic Pressure at Full Firing Rate	0.5"	
NG/LP - Maximum Static Gas Pressure	14"	
Gas Pressure for Adjustments	8" for NG, 11" for LP	
Electrical	120V AC, 60 Hz	
Power Consumption	500W (Max 4.2 Amps), 8W (Standby)	
FEATURES & PERFORMANCE	i200, i200P	i250, i250P
Recirculation	Built-in Pump for "P" models	
Cascading	Masterless, 10 units	
Heat Exchanger	Stainless 316L	
Hot Water Capacity (35F Rise)	10.8	13.2
Hot Water Capacity (45F Rise)	8.4	10.3
Hot Water Capacity (77F Rise)	5.0	6.0
Domestic Hot Water Temperature Settings	100 – 190°F	
Warranty as of Jan 31, 2016 (with recirculation, and unlimited thermal cycles)	Commercial: Heat Exchanger Coil – 6 years, Parts – 1 year, labor - none	

Note: Due to Intellihot's policy of continuous product improvements, design and technical specifications are subject to change without notice. Version 10.22.2016



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