


# i200, Gen II | i250, Gen II Submittal Data

Date:	<input type="text"/>	Bid Date:	<input type="text"/>
Project Name:	<input type="text"/>	Fuel Type:	<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane
Project #:	<input type="text"/>	Model Selection:	<input type="checkbox"/> i200 <input type="checkbox"/> i250
City   State   Zip:	<input type="text"/> <input type="text"/> <input type="text"/>		
Engineer:	<input type="text"/>		
Contractor:	<input type="text"/>		

 Flow (GPM)	Model	Temperature Rise ( $\Delta T$ ) °F						
		40	50	60	70	80	90	100
	i200	9.6	7.7	6.4	5.5	4.8	4.3	3.8
	i250	12.0	9.6	8.0	6.9	6.0	5.4	4.8



## KEY FEATURES

- Stainless (316L) Heat Exchanger
- Flexible-Floating Design, stress-relieving and thermal shock resistant
- Multi-Unit - Masterless cascading with common venting
- Gas Pressures - Operates on gas pressure range of 2.5"-14" WC
- Designed and Built in the U.S.
- 3.5" Color Touch Screen - access to usage data, troubleshooting, and parts wear
- Wi-Fi Connectivity

## PERFORMANCE

- Turndown Ratio of 7:1 (i200) & 8.3:1 (i250) per unit.
- Cascade up to 10 units with common venting for a total of over 2500MBH and a 83:1 total turndown ratio

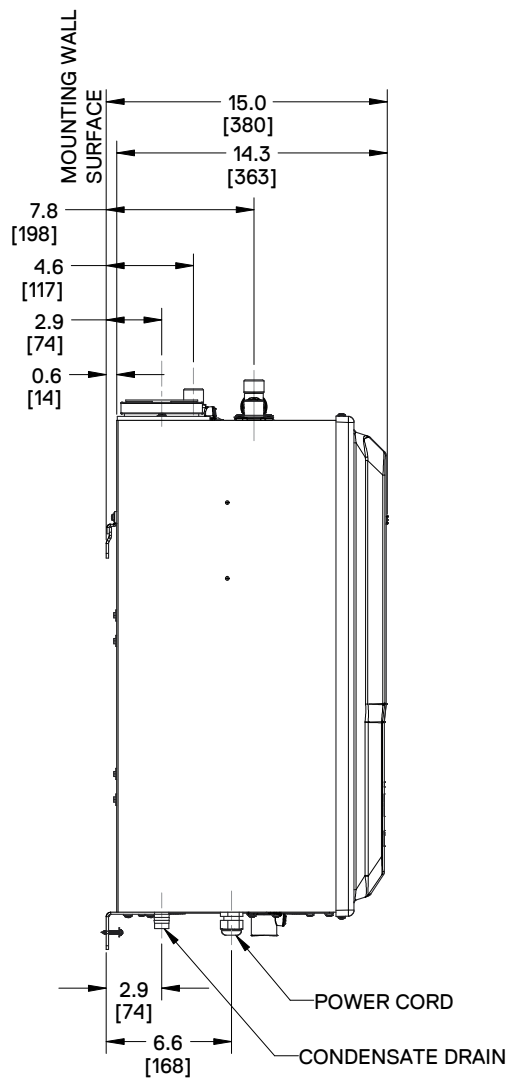


# i200, Gen II | i250, Gen II Specifications

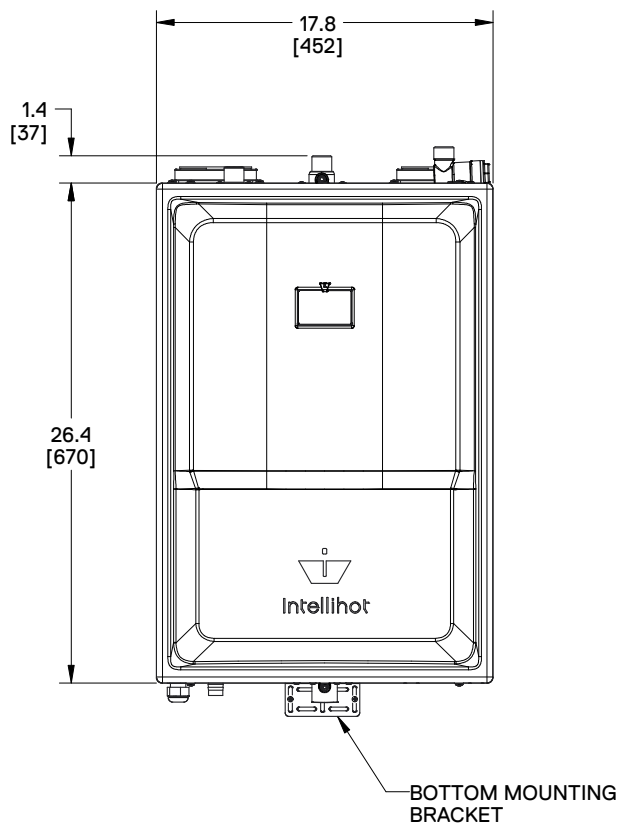
PARAMETERS	MODEL	
	i200, Gen II	i250, Gen II
Type	Indoor/Outdoor, Wall-Hung, Fully Condensing, Direct Ignition	
Fuel	Preset for NG / LP Convertible	
Minimum / Maximum Input (BTU/hr)	30,000 / 199,500	30,000 / 250,000
Thermal Efficiency	96%	96%
Energy Factor	0.93	N/A
Dimensions H X W X D (Inches)	26.2 X 17.7 X 15 (3.9 CU. FT)	
Weight (LBS)	93 LBS	
Water and Gas Connections	3/4" NPT	
Minimum Flow Rate	0.6 GPM	
Venting Materials	Sch. 40 PVC, Sch. 80 CPVC, Polypropylene, Stainless Steel (AL29-4C)	
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
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	
Water Pressure Min / Max (PSI)	30 / 150	
NG/LP - Minimum Static Gas Pressure 1/2" Black Iron (non-corrugated)	5" WC	6" WC
NG/LP - Minimum Static Gas Pressure 3/4" Black Iron (non-corrugated)	2.5" W.C (set Gas regulator to 8" WC for NG 11" WC for LP)	
NG/LP - Minimum Dynamic Pressure at Full Firing Rate	0.5" WC	
NG/LP - Maximum Static Gas Pressure	14" W.C (set Gas regulator to 8" WC for NG 11" WC for LP)	
Gas Regulator Pressure Set To	8" WC for NG, 11" WC for LP	
Electrical	120V AC, 60 Hz	
Power Consumption	500W (Max 4.2 Amps), 8W (Standby)	
FEATURES & PERFORMANCE	i200, Gen II	i250, Gen II
Cascading	Masterless, 10 units	
Heat Exchanger	Stainless 316L	
Hot Water Capacity (35F Rise)	11.0	13.8
Hot Water Capacity (45F Rise)	8.5	10.7
Hot Water Capacity (77F Rise)	5.0	6.3
Domestic Hot Water Temperature Settings	100 – 185°F	
Warranty (with recirculation, and unlimited thermal cycles)	Commercial: Heat Exchanger Coil – 6 years, Parts – 1 year Residential: Heat Exchanger Coil – 15 years, Parts – 5 years, Labor – 1 year	



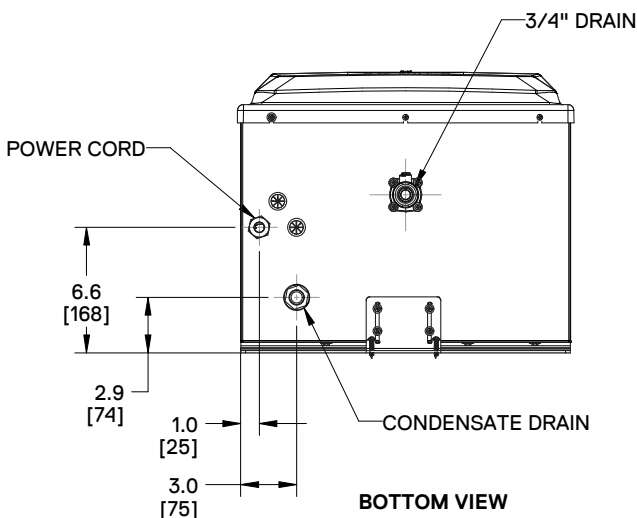
i200, Gen II | i250, Dimensional Specifications



SIDE VIEW



FRONT VIEW

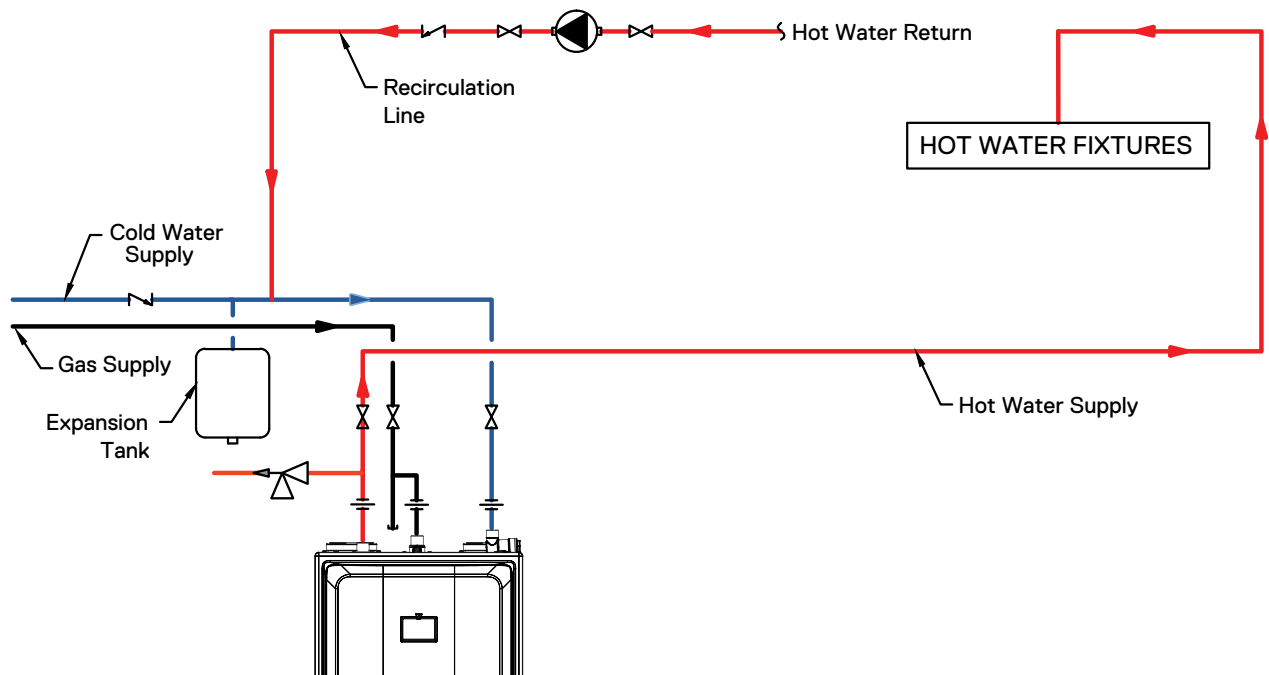


BOTTOM VIEW

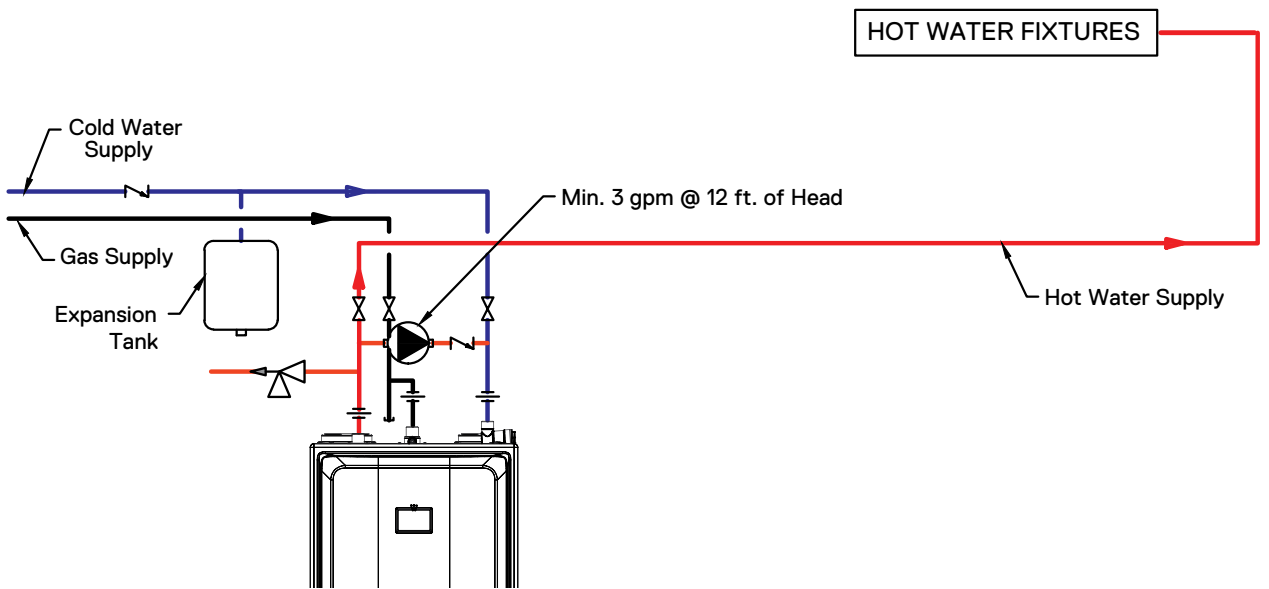
Dimensions Shown Are In Inches (mm)



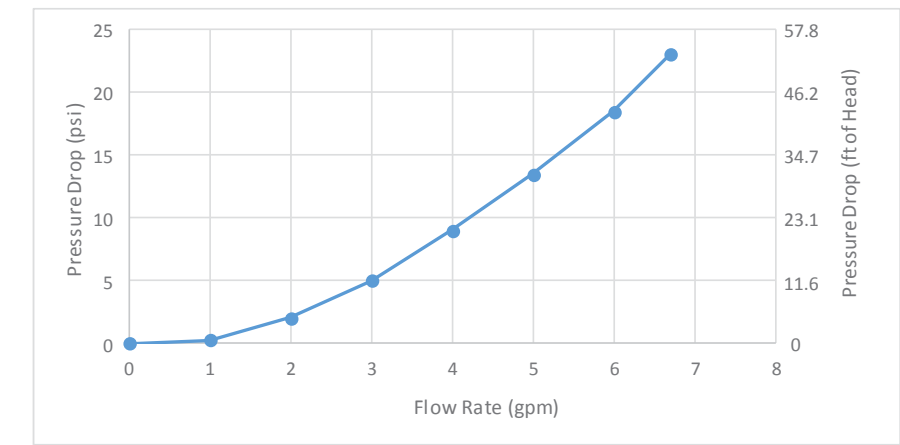
i200, Gen II | i250, Gen II External Recirculation



"RESTAURANT" OPTION WITH NO BUILDING RECIRCULATION



i200, Gen II | i250, Gen II Pressure Drop & Clearance Requirements

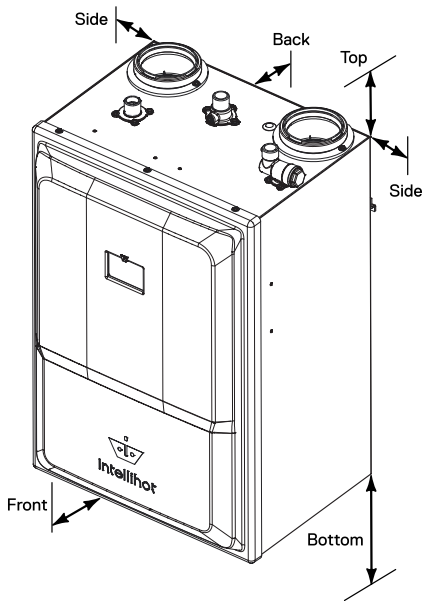


Location	Required		Recommended Service Clearance <sup>1</sup>
	From Combustibles	From Non-Combustibles	
Top	6" (152 mm)	2" (50.8 mm)	12" (305 mm)
Back	5/8" (15.8 mm)	5/8" (15.8 mm)	5/8" (15.8 mm)
Sides	1" (25.4 mm)	1/2" (12.7 mm)	5/8" (15.8 mm)
Front	2" (51 mm)	2" (50.8 mm)	30" (762 mm)
Bottom	12" (305 mm)	12" (305 mm)	12" (305 mm)

<sup>1</sup> Service clearances are suggested to allow for normal service.

<sup>2</sup> Mounting bracket automatically sets this dimension.

Model (Max Number of Cascaded Units)	i200	i250
i200	Yes (Max 10)	Yes (Max 10)
i250	Yes (Max 10)	Yes (Max 10)
iQ251, iQ251D, iN401, iN501, iQ751, iQ1001, iQ1501, iQ2001 and iQ3001	Not Supported	



i200, Gen II | i250, Gen II Electrical Data

Electrical power required for the water heater is 120V AC, 60 Hz. The circuit breaker shall be a minimum of 15 amps. Only one water heater should be plugged into an outlet. Please ensure correct polarity of outlet before plugging in heater.



## i200, Gen II | i250, Gen II Venting

Maximum Pipe Length in Feet										
Number of Units	Venting Type	2" Diameter	3" Diameter		4" Diameter		6" Diameter		8" Diameter	
		i200	i200	i250	i200	i250	i200	i250	i200	i250
1	1 Pipe	26	200	130	200	130	-	-	-	-
	2 Pipe	21	100	65	100	65	-	-	-	-
2	1 Pipe	-	-	-	200	130	-	-	-	-
	2 Pipe	-	-	-	100	65	-	-	-	-
3	1 Pipe	-	-	-	100	30	200	130	-	-
	2 Pipe	-	-	-	50	30	100	65	-	-
4	1 Pipe	-	-	-	-	-	200	130	-	-
	2 Pipe	-	-	-	-	-	100	65	-	-
5	1 Pipe	-	-	-	-	-	200	130	-	-
	2 Pipe	-	-	-	-	-	100	65	-	-
6	1 Pipe	-	-	-	-	-	200	130	-	-
	2 Pipe	-	-	-	-	-	100	65	-	-
7	1 Pipe	-	-	-	-	-	150	45	-	-
	2 Pipe	-	-	-	-	-	75	45	-	-
8	1 Pipe	-	-	-	-	-	100	30	200	130
	2 Pipe	-	-	-	-	-	50	30	100	65
9	1 Pipe	-	-	-	-	-	-	-	200	130
	2 Pipe	-	-	-	-	-	-	-	100	65
10	1 Pipe	-	-	-	-	-	-	-	200	130
	2 Pipe	-	-	-	-	-	-	-	100	65

1 Pipe - Only exhaust out pipe is connected and the combustion air intake is from within the room. For example, one i200 with a 3" diameter, the maximum exhaust pipe length for 1 pipe is 200 feet.

2 Pipe - Both the combustion air intake and the exhaust pipe are connected. In this case, the table specifies the maximum length per pipe. For example, one i200 with 3" diameter, 100 feet maximum is allowed for combustion air intake pipe and exhaust out pipe. The 100 feet maximum is per pipe.

### Note:

1. Reduce the maximum equivalent length above by 5 feet per 90° elbow used and by 2 feet per 45° elbow used. Do not exceed the above set limits.
2. If multiple units are common vented, then the units must be cascaded. Please refer to the combustion section for how to do combustion with common vented units.

