


# iQ3001, 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"/>	Factory Option:	<input type="checkbox"/> iNTouch-BMS
City   State   Zip:	<input type="text"/> <input type="text"/> <input type="text"/>		
Engineer:	<input type="text"/>		
Contractor:	<input type="text"/>		

	Temperature Rise ( $\Delta T$ ) °F						
	40	50	60	70	80	90	100
Flow (GPM)	141.6	113.3	94.4	80.9	70.8	62.9	56.6



## KEY FEATURES

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

## PERFORMANCE

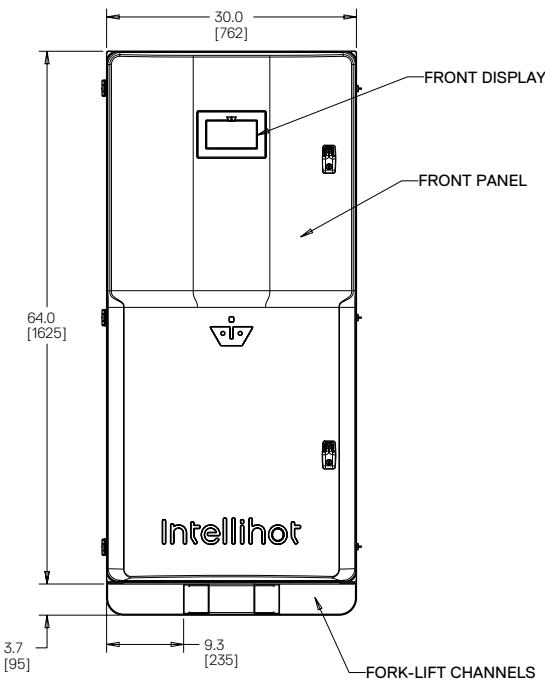
- Turndown Ratio of 100:1 per unit
- Cascade up to 2 units with common venting for a total of over 6,000MBH and a 200:1 total turndown ratio



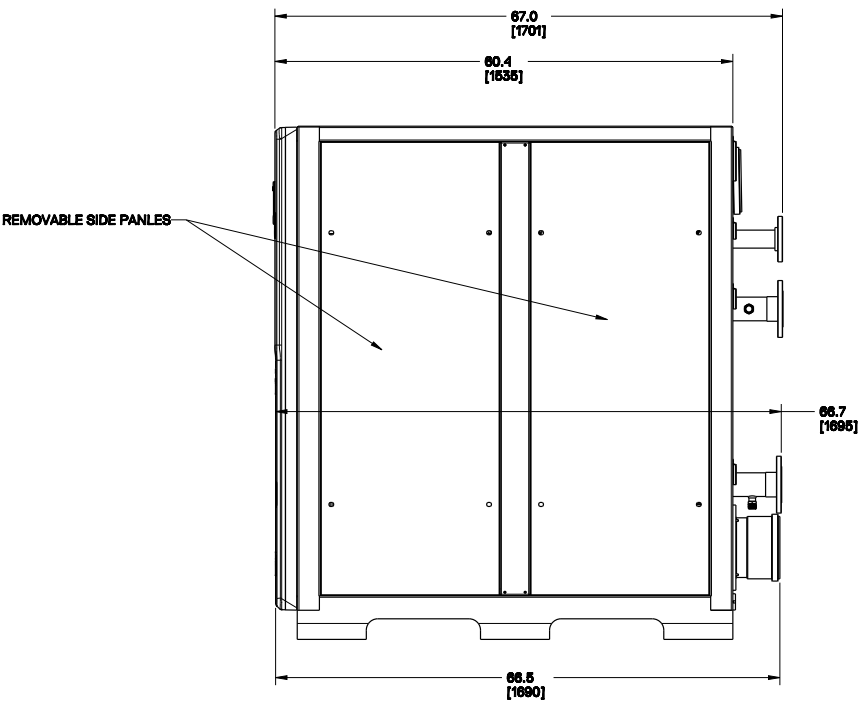
# iQ3001 Specifications

PARAMETERS	MODELS
	<b>iQ3001, Gen II</b>
Type	Indoor/Outdoor, Floor Mounted, Condensing, Fully Modulating, On-Demand Water Heater
Fuel	Preset for NG / LP convertible
Minimum Input (BTU/hr)	30,000
Maximum Input (BTU/hr)	3,001,000
Maximum Output (BTU/hr)	2, 820,940
Thermal Efficiency	94%
Turn Down Ratio (TDR)	100:1
Water Inlet / Outlet Connections	3" Headers with 7.5" OD Flange
Gas Inlet Connection	2" Gas Inlet With 6" OD Flange
Condensate Drain Connection	3/4" Flex PVC
Maximum Condensate Flow Rate (GPH)	21.6
Dimensions H X W X D (Inches)	67.7 X 30 X 60.4 (66 CU. FT)
Service Clearances	Recommend 24" on all sides, 32" in the front
Weight (LBS)	1645 LBS
Venting Type	Direct Vent (2 pipe - intake & exhaust), Power Vent (1 pipe - exhaust only)
Venting Materials (USA)	Sch. 40 PVC, Sch. 80 CPVC, Polypropylene, Stainless Steel (AL29-4C)
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)	8" Ø
Max Vent Length - Single Pipe / Power Vent*	70 ft (8")
Max Vent Length - Two Pipe / Direct Vent*	35 ft (8")
* 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
Pressure Relief Valve (Select BTU/hr Input Rating to Match Model Max Input)	1"
NG/LP - Min. Dynamic Gas Pressure (Full Fire)	2.5" WC
NG/LP - Maximum Static Gas Pressure	14" WC
Gas Pressure for Adjustments	8" WC for NG, 11" WC for LP
Electrical	(2) 120V AC, 60 Hz
Power Consumption	(2) Max 30 Amps
Internal Water Volume (gallons)	12
Features	<b>iQ3001, Gen II</b>
High Turn Down	100:1
Built-In Redundancy	Multiple Heat Engines w/ Individual Control
Cascading	Masterless, 2 units, Automatic Rotation
Common Venting	Yes - up to 2 units
Heat Exchanger	Expandable, Stainless 316L
Listing	ETL (Z21.10.3 / CSA 4.3), ASME HLW
Performance GPM	<b>iQ3001, Gen II</b>
Hot Water Capacity (45F Rise)	125.9
Hot Water Capacity (70F Rise)	80.9
Hot Water Capacity (90F Rise)	62.9
Hot Water Capacity (100F Rise)	56.9
Hot Water Capacity (140F Rise)	40.5
Warranty (with recirculation, and unlimited thermal cycles)	Heat Exchanger Coil – 10 years, All Other Parts – 2 years

iQ3001 Dimensional Specifications



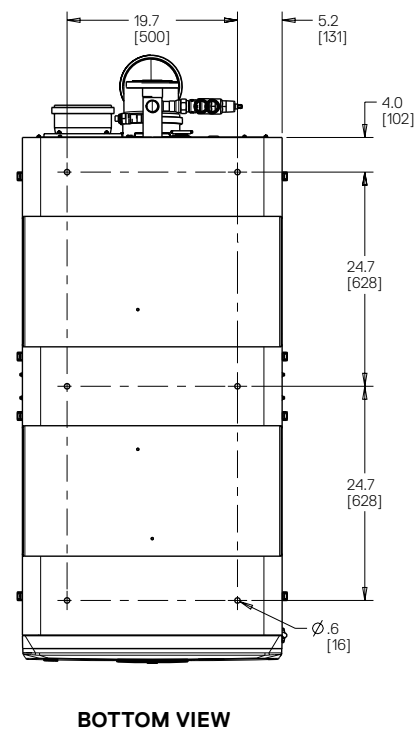
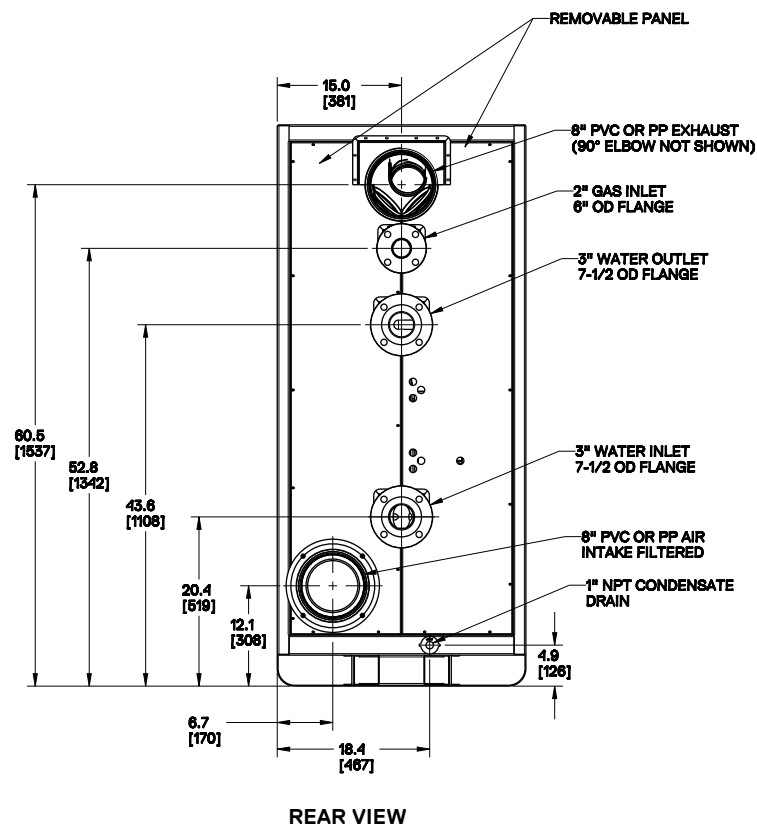
FRONT VIEW



SIDE VIEW

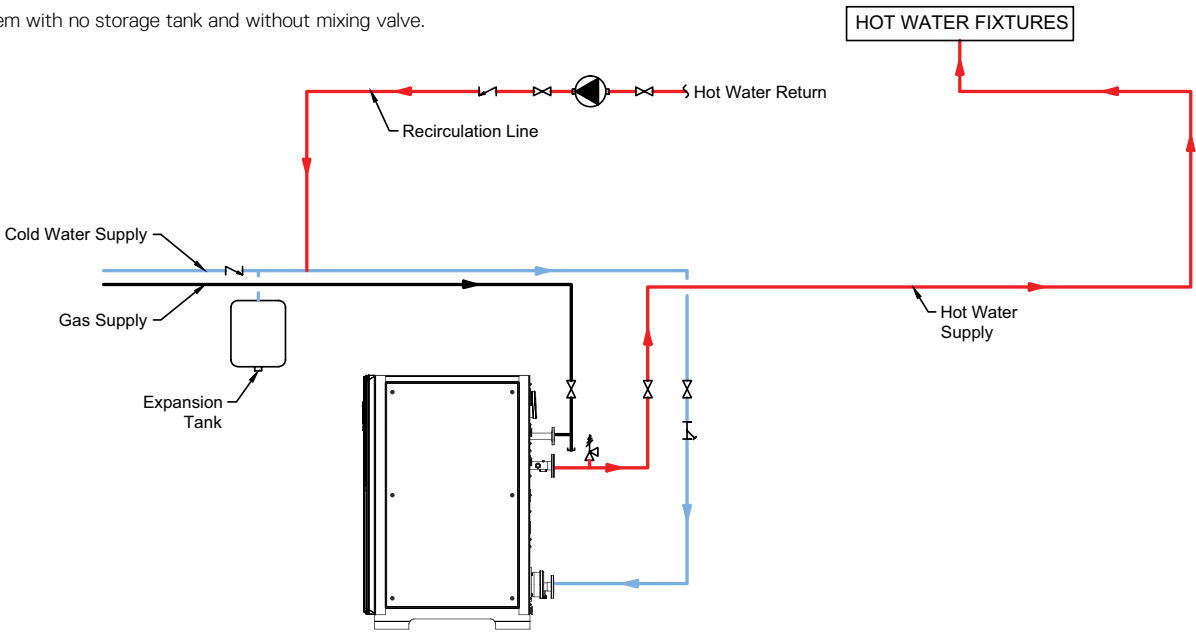


iQ3001 Dimensional Specifications

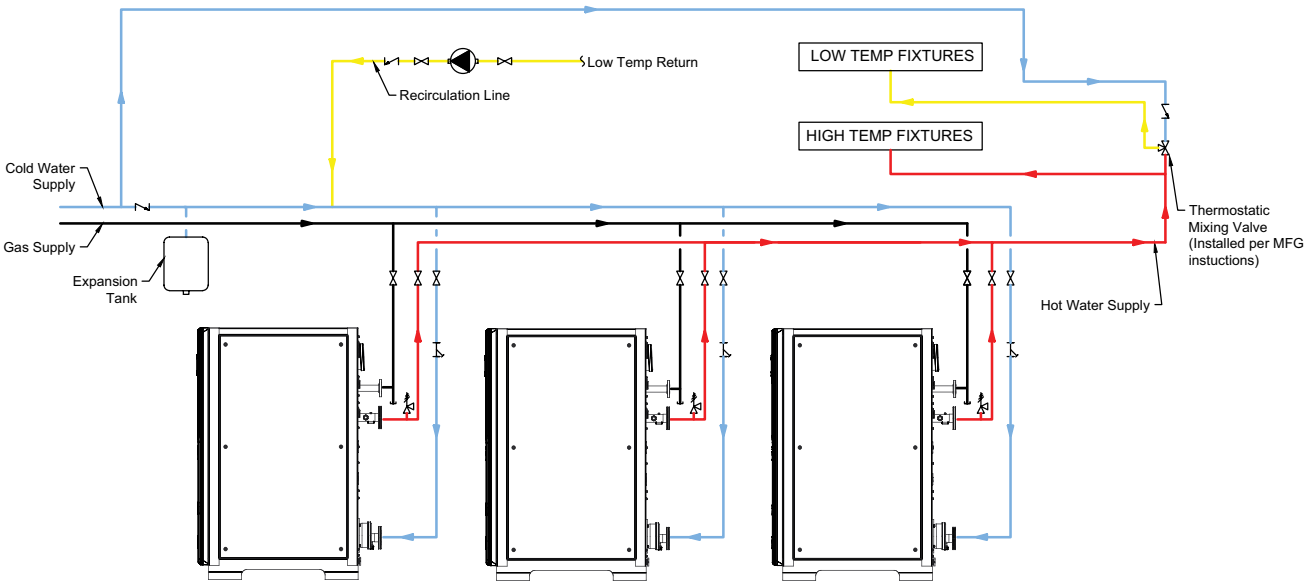


# iQ3001, Gen II Configuration Options

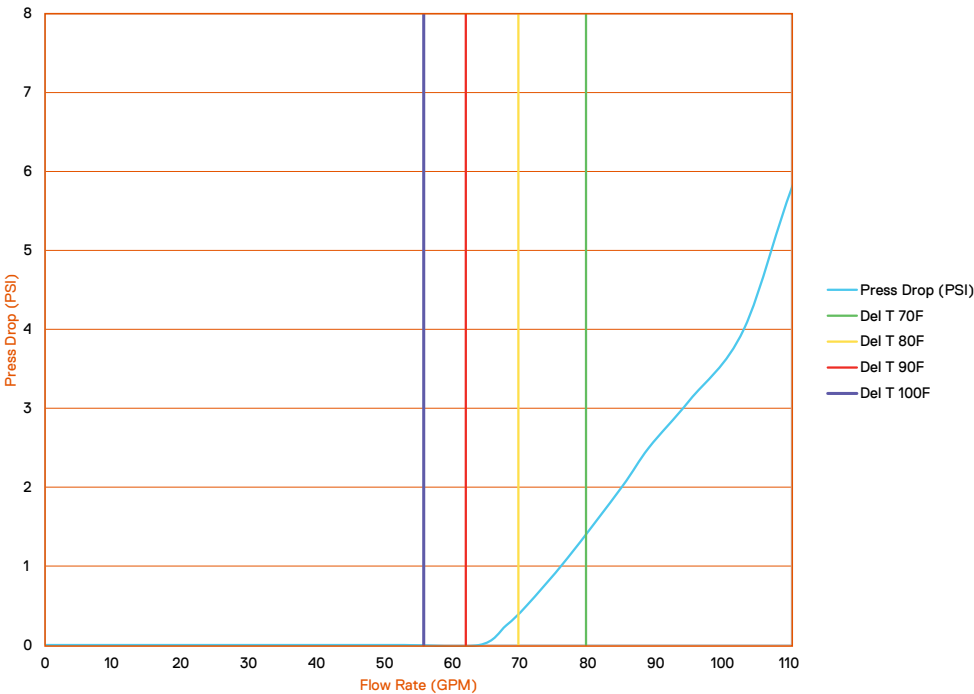
System with no storage tank and without mixing valve.



Multiple unit system with mixing valve but no storage tank.

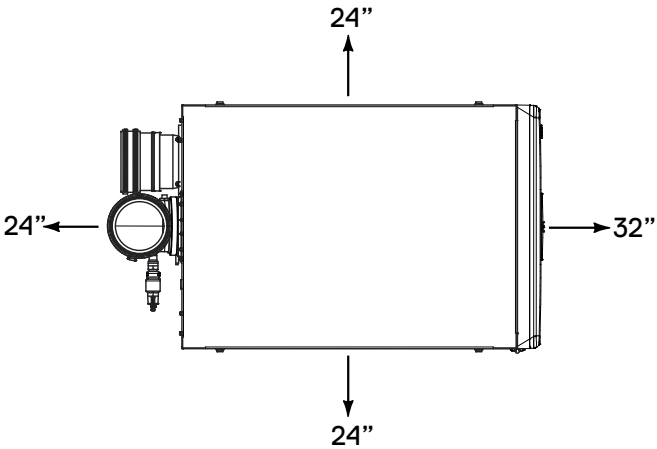


iQ3001, Gen II Pressure Drop & Clearance Requirements



Location	Required		Recommended Service Clearance <sup>1</sup>
	From Combustibles	From Non-Combustibles	
Top	6" (152 mm)	2" (50.8 mm)	18" (457 mm)
Back	5/8" (15.8 mm)	5/8" (15.8 mm)	24" (610 mm)
Sides	1" (25.4 mm)	1/2" (12.7 mm)	24" (610 mm)
Front	2" (51 mm)	2" (50.8 mm)	32" (813 mm)
Bottom	0" (0 mm)	0" (0 mm)	0" (0 mm)

<sup>1</sup> Service clearances are recommended dimensions to allow for normal service of the unit.

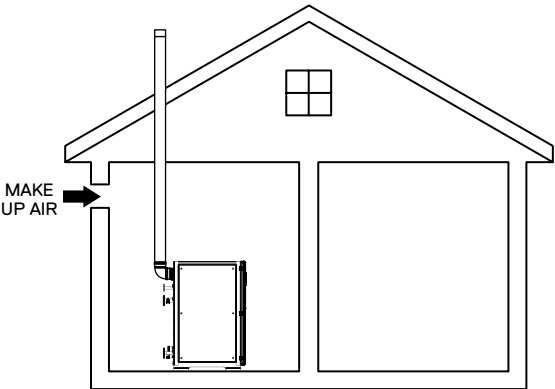


iQ3001, Gen II Venting

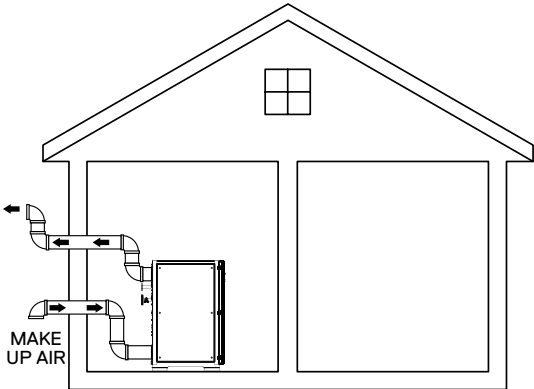
Maximum Pipe Length in Feet				
Number of Units	Venting Type	8" Diameter	10" Diameter	12" Diameter
		iQ3001	iQ3001	iQ3001
1	1 pipe - PV	70	220	220
	2 pipe - DV	35	110	110
2	1 pipe - PV	-	60	150
	2 pipe - DV	-	30	75

PV = Power Vent  
DV = Direct Vent

**Note:** 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.



1-Pipe Direct Vent



2-Pipe Direct Vent

iQ3001, Gen II Electrical Data

Electrical power required for the water heater is (2) 120V AC, 60 Hz. The circuit breaker for each circuit (each unit has 2 circuits) shall be sized for a power consumption of 30A (FLA). Larger breakers can be used for multiple units. Please ensure correct polarity of wiring before powering up unit.