iQ3001, Gen II Submittal Data

Date:	Bid Date:		
Project Name:	Fuel Type:	Natural Gas	Propane
Project #:	Factory Option:	iNTouch-BMS	
City State Zip:			
Engineer:			
Contractor:			

	Temperature Rise (ΔT)°F						
T.	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



Recommended Accessories iQ3001:

Condensate Neutralizer Kit - CN3001

This condensate is acidic, with a pH level between 3 and 4. Local building codes may require an in-line neutralizer to be installed (not included) to treat this water.

Outdoor Installation Kit - SPR0115

iBMS BacNET- SPR0128

Intellihot's iNTouch BMS has three unique features that are not available in any other BMS in the industry.

- External Pump Powers building recirculation pumps based on learned water usage of the building.
- Remote Setpoint Allows the temperature to be set remotely via a 0-10 VDC or 4-20mA signal.
- Alarm Buzzes if it detects anything wrong with any of the components it is connected to, and communicates the appropriate error codes so that the user knows which component needs attention.
- Run-time Status
- Louver Interlock
- Louver Power
- · Remote On/Off
- Tank Temperature Sensor if present
- Outdoor Temperature Monitor
- BACNET Interface with BMS/BAS
- Conveys flame status, error status, temperature, firing rate, blower speed, and performance history.
- Supports remote interlock.

Intellihot Exclusive Service:

telli Care **

Zero Downtime, Zero Worries, Zero Problems

24/7/365 monitoring – With telliCare your units will be monitored 24/7/365 by factory personnel, and should any problems arise, they can take appropriate action.

Monitor the boiler room from your phone:

- Notifications- telliCare monitors various parameters and sends appropriate notifications alerting of potential issues. These notifications can be delegated to the appropriate maintenance person or contracting company.
- Prognostics and Predictive Analytics our advanced predictive analytics make these reports available on your mobile device

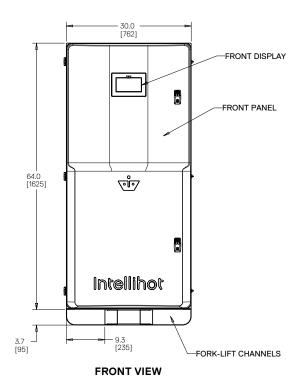
Available on Google play and the Apple app store.

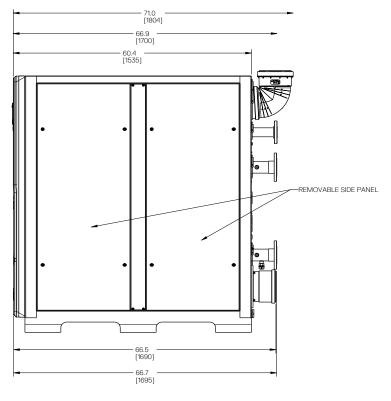


iQ3001 Specifications

PARAMETERS	MODELS iQ3001, Gen II		
I ARAWE LERO			
Туре	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		
5 , ,			
Venting Type Venting Materials (USA)	Direct Vent (2 pipe - intake & exhaust), Power Vent (1 pipe - exhaust only)		
, ,	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 ma	ximum 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	+/- 4ºF		
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)	NG = 2.5" WC LP= 8" WC (set Gas regulator to 8" WC for NG 11" WC for LP)		
NG/LP - Maximum Static Gas Pressure	14" WC (set Gas regulator to 8" WC for NG 11" WC for LP)		
Gas Pressure for Adjustments	8" WC for Natural Gas, 11" WC for Propane		
Electrical	(2) 120V AC, 60 Hz		
Power Consumption	(2) Max 30 Amps		
Internal Water Volume (gallons)	12		
Features	iQ 3001, Gen II		
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	iQ 3001, Gen II		
Hot Water Capacity, 45F Rise (GPM)	125.9		
Hot Water Capacity, 70F Rise (GPM)	80.9		
Hot Water Capacity, 90F Rise (GPM)	62.9		
Hot Water Capacity, 100F Rise (GPM)	56.9		
Hot Water Capacity, 140F Rise (GPM)	40.5		
Warranty (with recirculation, and unlimited thermal cycles)	Heat Exchanger Coil – 10 years, All Other Parts – 2 years		



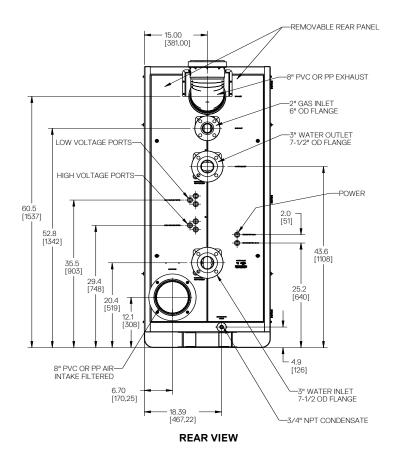


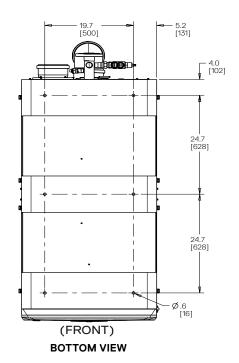






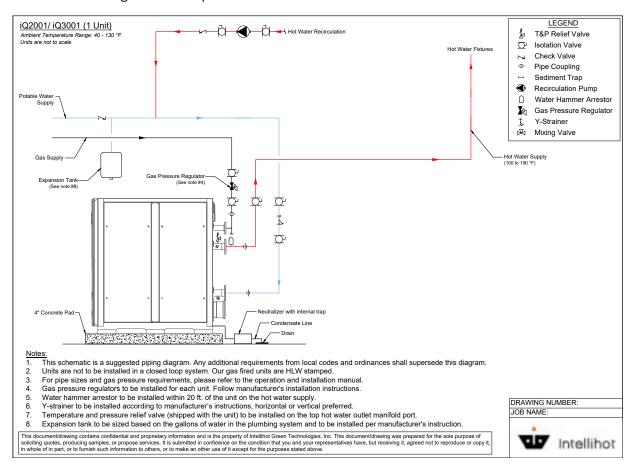
iQ3001 Dimensional Specifications

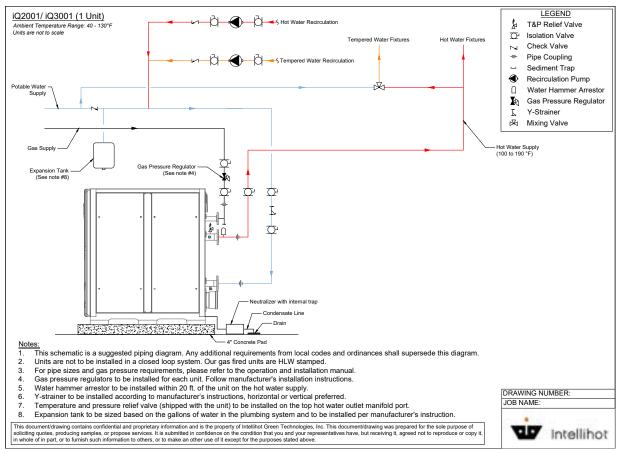




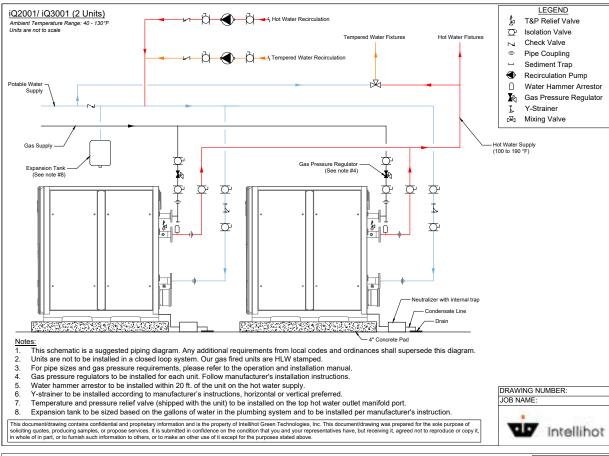


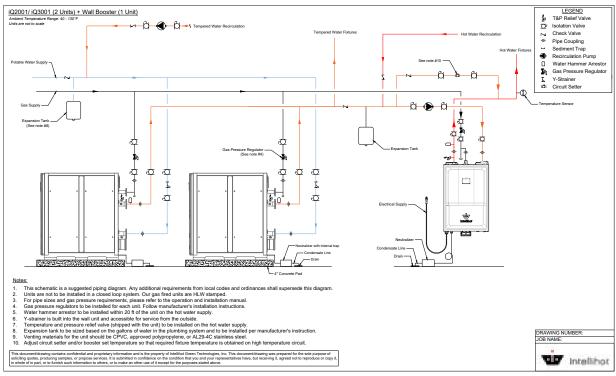
iQ3001, Gen II Configuration Options





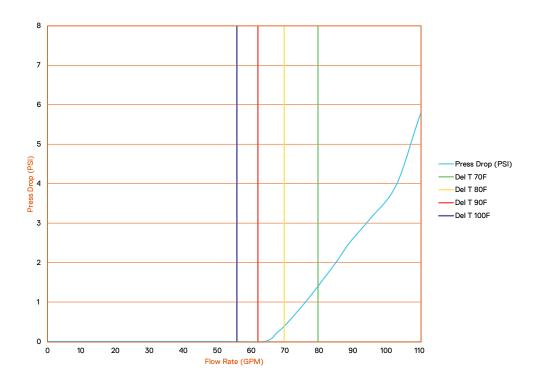
iQ3001, Gen II Configuration Options





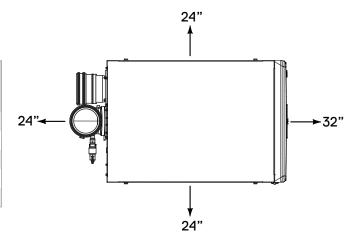


iQ3001, Gen II Pressure Drop & Clearance Requirements



Location	Requ	Recommended	
	From Combustibles	From Non- Combustibles	Service Clearance ¹
Тор	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)

¹ Service clearances are recommended dimensions to allow for normal service of the unit.





iQ3001, Gen II Venting

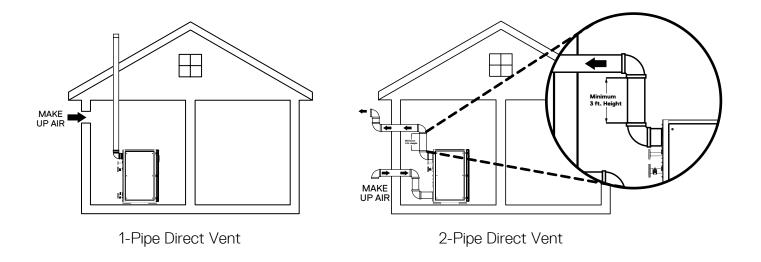
Maximum Pipe Length in Feet					
Number of Units	Venting Type	8" Diameter	10" Diameter	12" Diameter	14" Diameter
	.,,,,	i Q 3001	iQ 3001	i Q 3001	i Q 3001
1	1 pipe - PV	70	220	500	500
	2 pipe - DV	35	110	250	250
2	1 pipe - PV	-	60	150	320
	2 pipe - DV	-	30	75	160
PV - Pov	vor Vont				

V = Power Vent

DV = Direct Vent

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. SAFETY INSTRUCTIONS: Do not connect any other appliance vents to the water heater inlet or outlet pipes.



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.

