

CONDENSING
HIGH EFFICIENCY GAS-FIRED
BOILERS AND WATER HEATERS





IE<sub>2</sub> high efficiency gas-fired boilers and water heaters utilize state-of-the-art Radial Variable Circulation (RVC) stainless steel heat exchangers for maximum heat transfer and operating efficiencies of up to 98%.

Using all of today's modern technologies including pre-mix burners, modulating firing rates of up to 20:1 and integrated cascade controls IE<sub>2</sub> provides users with superior performance and application flexibility.

Available from 199 to 1000 MBH the IE<sub>2</sub> provides flexible solutions for all of your heating and domestic hot water needs. Units are PVC, polypropylene (PP) and stainless steel vent capable and can be installed in multiple unit configurations using its on-board control which provides flexible modulation for maximum efficiency.

## **Features and Benefits**

- 199 1000 MBH
- Up to 98% Ultra-High Efficiency
- RVC Stainless Steel Heat Exchanger
- PVC, PP and Stainless Steel Venting
- · Intuitive Integrated Control Platform
- Multi-Unit Cascade Communication (8 Units)
- MODBUS Based Control
- Pre-Mix Burner Technology
- Up to 20:1 Full Modulation
- Low NOx and CO emissions (<15 ppm)</li>
- 3" Minimum Gas Pressure
- 160 PSI Working Pressure
- Integrated condensate neutralizer system
- Modern Sleek Jacket Design
- Ease of Installation and Maintenance















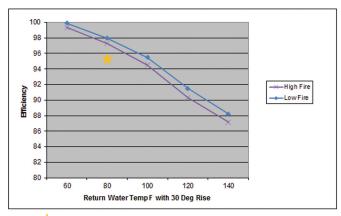


## **Innovative Heat Exchanger Design**

IE<sub>2</sub> boilers and water heaters utilize a patented Radial Variable Circulation stainless steel heat exchanger. RVC high efficiency heat exchangers are manufactured using a series of 3 stainless steel tubes including a uniquely designed AISI 316 Ti stainless steel. Tubes are hydraulically connected without welding protecting the full integrity of the design while providing maximum durability against corrosion.

All RVC heat exchangers are ASME certified for both water heating and space heating and manufactured to the most stringent tolerances in the industry today.

All IE<sub>2</sub> units come with an integrated condensate neutralizer system.



→ 95.2% AHRI Certified Product Performance Thermal Efficiency
Performance values based on 1000 MBH boiler official AHRI Certified Performance Ratings





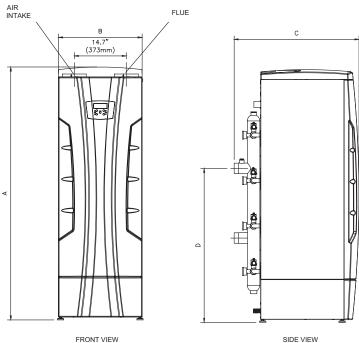
## **Integrated Control Board**

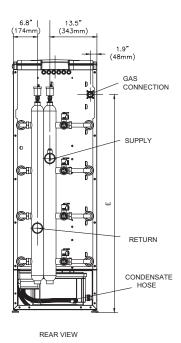
Like a lot of today's applications, the IE<sub>2</sub> can be configured in a master/member cascade configuration providing up to 8000 MBH with unparalleled modulation for maximum system efficiency.

An intuitive control system is the brains behind the IE<sub>2</sub>'s premium performance. The easy set-up control is MODBUS based and provides auto-diagnostics of all major components and functions; including visual notification of system errors and lockouts through continuous monitoring of temperature sensors, fan speed rotation and other application operating sequences. Back-lit visual readouts include water flow sensor, supply temperature, flue temperature and tank temperature for immediate system feedback.

- Outdoor Reset
- Auto Diagnostics
- PC Connections for Diagnostics
- Cascade Capabilities (8 Units)
- Freeze Protection
- System Pump Control, Boiler Pump Control and DHW Pump Control
- DHW Priority
- Back-Lit Readable Display with Auto Shut Off
- Low Water Flow Protection
- Water Pressure Sensor
- Low Water Pressure Protection
- Blocked Flue Pressure Switch







Models
IB = Boiler
IW = Water Heater

Infinite Energy 2 Series – Dimensions										
	Α		В		С		D		E	
Size	In	mm	In	mm	In	mm	In	mm	In	mm
199	45.7	1154	23.6	600	34.8	885	25	634	35.7	908
399	45.7	1154	23.6	600	34.8	885	25	634	35.7	908
500	45.7	1154	23.6	600	34.8	885	25	634	357	908
750	71.4	1815	23.6	600	35.3	896	43.5	1105	61.5	1563
1000	71.4	1815	23.6	600	35.3	896	43.5	1105	61.5	1563

Infinite Energy 2 Series – Dimensions and Ratings*										
	Input		Boiler Output				Connections		Shipping Weight	
Size	MBH	kW	MBH	kW	Flue Vent	Air Intake	Gas	Water	Lbs	Kg
199	200	59	184	54	3"	3"	1"	2"	258	117
399	399	117	376	110	4"	4"	1"	2"	356	162
500	500	147	472	138	4"	4"	1"	2"	371	168
750	750	220	711	208	6"	6"	1 1/4"	2 1/2"	539	245
1000	1000	293	952	279	6"	6"	1 1/4"	2 1/2"	612	278

<sup>\*</sup> Ratings reflect boiler only. For boiler efficiency information please visit www.ahridirectory.org.

Infinite Energy 2 Series Water Heaters – Hourly Recovery Capacity $\Delta$ T (GPH & LPH)**												
	Temperature Rise											
Size	40°F	22°C	60°F	33°C	80°F	44°C	100°F	56°C	120°F	67°C	140°F	78°C
199 <sup>(1)</sup>	566	2140	377	1427	283	1070	226	856	189	713	162	611
399	1154	4364	770	2909	577	2182	462	1745	385	1455	330	1247
500	1460	5519	973	3679	730	2760	584	2208	487	1840	417	1577
750	2127	8040	1418	5360	1064	4020	851	3216	709	2680	608	2297
1000	2806	10607	1871	7071	1403	5304	1122	4243	935	3536	802	3031

<sup>\*\*</sup> For water heater efficiency information please visit www.ahridirectory.org.

<sup>(1)</sup> Size 199 water heater not available for sale in the US market due to DOE regulations.



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