

## Condensing High Efficiency Gas-Fired Boilers and Water Heaters





IE<sub>2</sub> high efficiency gas-fired boilers and water heaters utilize stateof-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















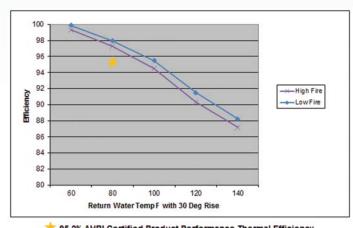


## **Innovative Heat Exchanger Design**

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





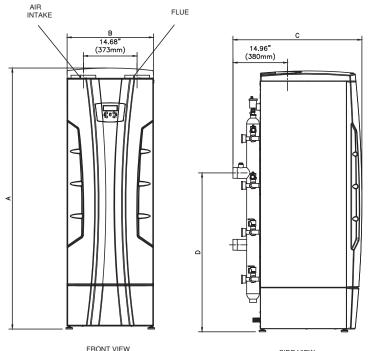
## **Integrated Control Board**

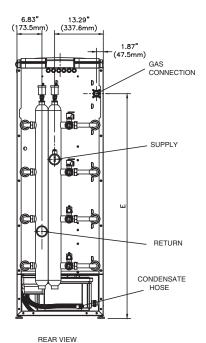
Like a lot of today's applications, the IE<sub>2</sub> can be configured in a master/member cascade configuration providing up to 8000 MBH with unparalleled modulation for maximum system efficiency.

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







FROIT VIEW	SIDE VIEW	REAR VIEW

Infinite Energy 2 – Dimensions and Ratings											
	A		В		С		D		E		
Model	In	cm	In	cm	In	cm	In	cm	In	cm	
IW 199	45.7	116	23.6	60	29	72.4	35.8	90.8	25.7	65.3	
IB/IW 399	45.7	116	23.6	60	34.8	88.5	25	63.4	35.8	90.8	
IB/IW 500	45.7	116	23.6	60	34.8	88.5	25	63.4	35.8	90.8	
IB/IW 750	71.5	181.5	23.6	60	35.3	89.6	43.5	110.5	61.5	156.3	
IB/IW 1000	71.5	181.5	23.6	60	35.3	89.6	43.5	110.5	61.5	156.3	

Infinite Energy 2 – Dimensions and Ratings											
	Input		Output				Connections		Weight		
Model	MBH	kW	MBH kW		Flue Vent	Air Intake	Gas	Water	Lbs	Kg	
IW 199	Currently in Testing										
IB/IW 399	399	117	376	110	4"	4"	1"	2"	325	147	
IB/IW 500	500	147	472	138	4"	4"	1"	2"	340	154	
IB/IW 750	750	220	711	208	6"	6"	1 1/4 '	2 1/2"	550	250	
IB/IW 1000	999	293	952	279	6"	6"	1 1/4"	2 1/2"	635	288	

Infinite Energy 2 – Hourly Recovery Capacity												
	Temperature Rise											
Model	40°F	22°C	60°F	33°C	80°F	44°C	100°F	56°C	120°F	67°C	140°F	78°C
IW 199	Currently in Testing											
IB/IW 399	1131	4274	754	2849	565	2137	452	1710	377	1425	323	1221
IB/IW 500	1420	5368	947	3578	710	2684	568	2147	473	1789	406	1534
IB/IW 750	2139	8085	1426	5390	1069	4043	856	3234	713	2695	611	2310
IB/IW 1000	2864	10826	1909	7217	1432	5413	1146	4330	955	3609	818	3093



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