



Commercial Product Comparison

The right water heater for any spec job



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www.hotwater.com/spec

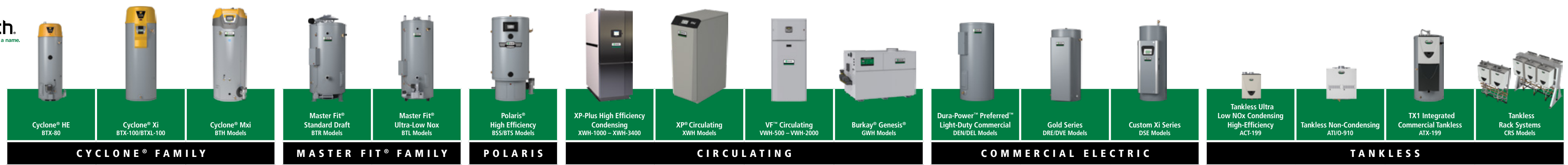
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THE RIGHT OPTION FOR ANY JOB

We know that in your line of work no two projects are the same. That's why A. O. Smith offers the most complete line of commercial water heaters featuring innovative gas, electric, hybrid and tankless technologies. As the industry leader, we continually develop new solutions to give you the best options for any job you decide to take on.





	CYCLONE® FAMILY			MASTER FIT® FAMILY		POLARIS	CIRCULATING				COMMERCIAL ELECTRIC			TANKLESS			
Thermal Efficiency	94%	96%	UP TO 98%	80%	80%	96%	96%	96%	86%	84%	98%	98%	98%	96%	80%	96%	96%
Top Product Features	<ul style="list-style-type: none"> Helical heat exchanger lengthens the heat transfer cycle. Intelli-Vent™ gas control with silicon nitride hot surface ignitor provides precise temperature control and eliminates standing pilot. Blue Diamond® glass coating with two heavy duty anode rods for corrosion resistance. 	<ul style="list-style-type: none"> Helical heat exchanger lengthens the heat transfer cycle. Blue Diamond® glass coating with two heavy duty anode rods for corrosion resistance. Easy-to-read intelligent control system with LCD display. 	<ul style="list-style-type: none"> Modulating burner adjusts firing rate to increase efficiency and save money. Helical heat exchanger lengthens the heat transfer cycle. Easy-to-read intelligent control system with LCD display. 	<ul style="list-style-type: none"> Efficient automatic flue damper minimizes standby heat loss. Inlet/outlet connections located top, front and rear for installation flexibility. Space-saving units are up to one foot shorter than models they replace. Installs stand-alone, manifolded or connected to storage tanks. 	<ul style="list-style-type: none"> Fan-assisted Category I, Ultra Low NOx combustion. A stainless steel air flapper minimizes standby heat loss and reduces height. Inlet/outlet connections located top, front and rear for installation flexibility. Fully automatic digital controls with safety shutoff. 	<ul style="list-style-type: none"> Tank and helical heat exchanger are constructed from 444 stainless steel for excellent corrosion resistance without the need for an anode. Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water. Two front access panels expose all serviceable components. Modular components are all easily removed. 	<ul style="list-style-type: none"> Multi-pass/multi-burner stainless steel heat exchanger optimizes efficiency. Advanced modulating control. Multiple burner operation provides redundancy for greater reliability. 	<ul style="list-style-type: none"> Advanced Control System – Large touchscreen display, economy mode with programmable setback All heating surfaces are 316L stainless steel to provide a long and trouble-free service life. Fully modulating capability prevents energy-stealing short cycling and provides smooth system operation with higher overall system efficiencies. 	<ul style="list-style-type: none"> Advanced high efficiency, Low NOx combustion technology. Advanced modulating control. All bronze factory-sized pump standard. High efficiency copper fin tube heat exchanger. 	<ul style="list-style-type: none"> Electronic control with precise temperature management. Stage gas firing system. Copper finned tube heat exchanger. 	<ul style="list-style-type: none"> Tank interior is coated with glass specially designed by A. O. Smith for water heater use. Most models convert to three-phase or single-phase in field for easy installation. Elements feature zinc-plated copper sheaths for longer life. 	<ul style="list-style-type: none"> Low watt density Incoloy® elements for superior service in all water conditions. Power-circuit fusing protects all elements, thermostats, and internal wiring circuits against excess current flow. Terminal block comes factory installed for easy installation. DVE models come with LCD control to reduce surges, control temperature and display operational information in English. 	<ul style="list-style-type: none"> Advanced electronic control with large LCD display provides precise temperature control and English text with animated icons. Industrial-grade, immersion Incoloy sheathed heating elements are designed for rugged, long-lasting commercial service. 	<ul style="list-style-type: none"> Commercial grade primary copper heat exchanger protects against erosion. Corrosion-resistant secondary 316L stainless heat exchanger. Safety features include freeze, overheat, surge protection and troubleshooting diagnostic codes. Able to link up to 20 heaters together with multi-link system. 	<ul style="list-style-type: none"> Commercial grade primary copper heat exchanger protects against erosion. Corrosion-resistant secondary 316L stainless heat exchanger. Safety features include freeze, overheat, surge protection and troubleshooting diagnostic codes. Continuous maximum flow rates of up to 14.5 GPM. 	<ul style="list-style-type: none"> Heat exchanger constructed of commercial grade copper with a secondary heat exchanger constructed of 316 L grade stainless steel. 4.1 GPM pump. Multiple anodes for more added protection to the glass lined tank. 	<ul style="list-style-type: none"> Rack constructed of anodized aluminum frame. Able to link up to 20 heaters together with multi-link system. Reduce installation costs with three simple connections (cold water, hot water, and gas). Wall mount, In-line, and Back-to-Back configurations. Utilizes ACT-199 commercial high efficiency tankless water heaters
Venting Options	POWER VENT	POWER VENT & POWER DIRECT VENT	POWER VENT & POWER DIRECT VENT	ATMOSPHERIC	ATMOSPHERIC	POWER DIRECT VENT	POWER VENT & DIRECT VENT	POWER VENT & DIRECT VENT	POWER VENT & DIRECT VENT	POWER VENT & DIRECT VENT	– NA –	– NA –	– NA –	POWER VENT & DIRECT VENT	POWER VENT & DIRECT VENT	POWER VENT & DIRECT VENT	POWER VENT & DIRECT VENT
Venting Materials	Vents using Schedule 40 PVC, CPVC or Polypropylene Pipe	Vents using PVC, CPVC or Polypropylene Pipe	Vents using PVC, CPVC or Polypropylene Pipe	Metal Venting, Standard Double Wall Type "B" Vent	Metal Venting, Standard Double Wall Type "B" Vent	Vents using PVC, CPVC or Polypropylene Pipe	PVC/CPVC/AL29-4C and Polypropylene Pipe	PVC/CPVC/AL29-4C and Polypropylene Pipe	AL29-4C Stainless Steel	Category I, III and VI	– NA –	– NA –	– NA –	Vents using PVC, CPVC or Polypropylene Pipe	5" Category III Stainless Steel	Vents using PVC, CPVC or Polypropylene Pipe	Vents using PVC, CPVC or Polypropylene Pipe
ENERGY STAR® Qualified	NO	YES	YES	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES	YES
Warranty	3-Year Limited Tank 1-Year Limited Parts	3-Year Limited Tank 1-Year Limited Parts	3-Year Limited Tank 1-Year Limited Parts	3-Year Limited Tank 1-Year Limited Parts	3-Year Limited Tank 1-Year Limited Parts	3-Year Limited Tank 1-Year Limited Parts	5-Year Limited Heat Exchanger 1-Year Limited Parts	5-Year Heat Exchanger 1-Year Limited Parts	5-Year Limited Heat Exchanger 1-Year Limited Parts	5-Year Heat Exchanger 1-Year Parts	3-Year Limited Tank 1-Year Limited Parts	3-Year Limited Tank 1-Year Limited Parts	3-Year Limited Tank 1-Year Limited Parts	6-Year Limited Heat Exchanger 5-Year all other parts	6-Year Limited Heat Exchanger 5-Year all other parts	6-Year Limited Heat Exchanger 5-Year all other parts	6-Year Limited Heat Exchanger, 5-Year all other parts, 1-Year rack components
Codes and Standards	<ul style="list-style-type: none"> Meets UBC, CEC and HUD national codes Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 AHRI Certified 	<ul style="list-style-type: none"> CSA certified Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 Complies with SCAQMD Rule 1146.2 for Low NOx emissions AHRI Certified 	<ul style="list-style-type: none"> CSA certified Meets ASHRAE/IESNA 90.1 requirements Meets NSF 5 standard Complies with SCAQMD Rule 1146.2 for Low NOx emissions ASME tank construction optional on all models AHRI Certified 	<ul style="list-style-type: none"> CSA certified Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 Meets NSF 5 standard Optional ASME tank construction available on select models AHRI Certified 	<ul style="list-style-type: none"> CSA certified Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 Meets NSF 5 standard Optional ASME tank construction available on select models AHRI Certified Complies with SCAQMD Rule 1146.2 for Low NOx emissions 	<ul style="list-style-type: none"> Design-certified by CSA International according to ANSI Z21.10.3 – CSA 4.3 Standards. Meets UBC, CEC, and ICC National Codes. Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 Complies with SCAQMD Rule 1146.2 for Low NOx emissions 	<ul style="list-style-type: none"> Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 CSA certified AHRI Certified 	<ul style="list-style-type: none"> CSA certified Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 AHRI certified 	<ul style="list-style-type: none"> Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 CSA certified 	<ul style="list-style-type: none"> Meets ASHRAE/IESNA 90.1-2004 CSA certified ASME HLW Meets SCAQMD Rule 1146.2 air quality standards 	<ul style="list-style-type: none"> Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 UL Approved Field Conversion Program AHRI certified 	<ul style="list-style-type: none"> CSA certified ASME rated T&P relief valve AHRI Certified 	<ul style="list-style-type: none"> CSA certified Meets NSF 5 standard ASME HLW UL AHRI certified 	<ul style="list-style-type: none"> Complies with SCAQMD Rule 1146.2 for Low NOx emissions Complies with lead-free standards CSA certified AHRI certified 	<ul style="list-style-type: none"> ASME models available Low NOx emissions Complies with lead-free standards CSA certified Meets NSF 5 standard ASME HLW 	<ul style="list-style-type: none"> Design certified by Underwriters Laboratories (UL) Inc., to ANSI Z21.10.3 - CSA 4.3 Standards Meets DOE thermal efficiencies and standby requirements and ASHRAE/IES 90.1 Meets NSF standard 5 for 180°F (62°C) water Complies with SCAQMD Rule 1146.2 for Low NOx emissions 	<ul style="list-style-type: none"> Complies with SCAQMD Rule 1146.2 for Low NOx emissions Complies with lead-free standards CSA certified AHRI certified
iCOMM	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BACnet / Modbus	– NA –	BACnet/Modbus	BACnet/Modbus	– NA –	– NA –	– NA –	Modbus Contacts for BMS Control	– NA –	Contacts for 0-10 VDC BMS	– NA –	– NA –	BACnet/Modbus (DVE models)	BACnet/Modbus	– NA –	– NA –	– NA –	– NA –
Gallon Capacity Range	50	50 – 75	60 – 119	65 – 100	81 – 100	34 – 50	Requires storage tank	– NA –	Requires storage tank	Requires storage tank	6 – 119	50 – 120	50 – 120	TANKLESS	TANKLESS	119	TANKLESS
Input BTUH Range	76,000	100,000	120,000 – 499,900	120,000 – 500,000	199,000 – 390,000	130,000 – 199,000	1 million – 3.4 million	150,000 – 800,000	500,000 – 2 million	399 – 2070	– NA –	– NA –	– NA –	15,000 – 199,000	15,000 – 380,000	199,000	15,000 – 1,194,000
Recovery Capacity (100°F GPH)	83	116	138 – 576	100°F: 116 – 485 40°F: 291 – 1212	100°F: 119 – 385 40°F: 298 – 962	165 – 253	1,037 to 3,833 GPH at 100°F rise	173 – 931	527 to 2,109 at 100°F rise	412 to 2133 at 100°F rise	36 – 126	25 – 221	12 – 369	– NA –	– NA –	165 – 772	– NA –