



Premium Non-Condensing  
Tankless Gas Water Heater

# NPN Series Tankless Water Heaters Specification Sheet

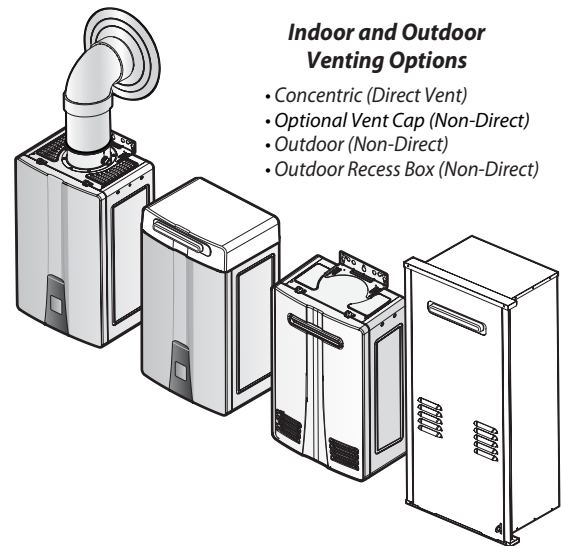
- Certified design according to **ANSI Z21.10.3 - CSA 4.3-2017** standards for both indoor or outdoor installations (with optional Outdoor Vent Kit or Recess Box)
- Compatible with **3/5" Category III Concentric** vent up to **43 ft\*\*** (\*\*with no elbows)
- Designed for use in **Residential and Commercial** applications (see below for available models and warranty terms)
- Gas Input Range  
**NPN-160(U,E)** - 160,000 to 10,700 BTU/h  
**NPN-180(U,E)** - 180,000 to 10,700 BTU/h  
**NPN-199(U,E)** - 199,900 to 10,700 BTU/h
- Hot Water Flow Rate Capacity (\*based on 45°F temperature rise)  
**NPN-160(U,E)** - 5.8 GPM  
**NPN-180(U,E)** - 6.6 GPM  
**NPN-199(U,E)** - 7.4 GPM
- **Stainless Steel Heat Exchanger** for optimum efficiency and durability
- **Built-in Control Panel** - allows adjustment of temperature settings and displays the operating status and error codes
- **Temperature Options** - available temperature settings for various applications range from 98°F up to 140°F
- **Ready-Link Cascade Compatible** for up to 2 units for increased hot water production
- Compatible with **Navilink™ Wi-Fi Control** (#PBCM-AS-001)
- **Freeze Protection** - maintains normal operation during freezing ambient temperatures down to -5°F (standard on all models)
- **Uniform Energy Factor Ratings** for NG and LP units  
**NPN-160(U,E)** - 0.81 UEF  
**NPN-180(U,E)** - 0.81 UEF  
**NPN-199(U,E)** - 0.81 UEF
- Models available for use with **Natural Gas (NG)** or **Propane (LPG)**\*\*\*  
 (\*\*\*) can be field converted with optional Conversion Kit installed by a qualified service agency)
- Approved for Installations on **Mobile/Manufactured Homes**
- Certified by **CSA, NSF 5/Low Lead, AHRI, SCAQMD**  
*(Rule 1146.2 Type 1 - Complies with 14 ng/J or 20 ppm NOx @ 3% O2)*
- **15-Year** Heat Exchanger and **5-Year** Parts Warranty (Residential)\*\*\*\*  
**5-Year** Heat Exchanger and **5-Year** Parts Warranty (Commercial)\*\*\*\*  
 (\*\*\*\* includes 1-Year Labor warranty - see Navien Limited Warranty)
- **Optional accessories** are available (see below)



**UNIVERSAL - Concentric Direct Vent**  
INDOOR or OUTDOOR (with Vent Kit)



**EXTERIOR - Non-Direct Vent**  
OUTDOOR use only



### Indoor and Outdoor Venting Options

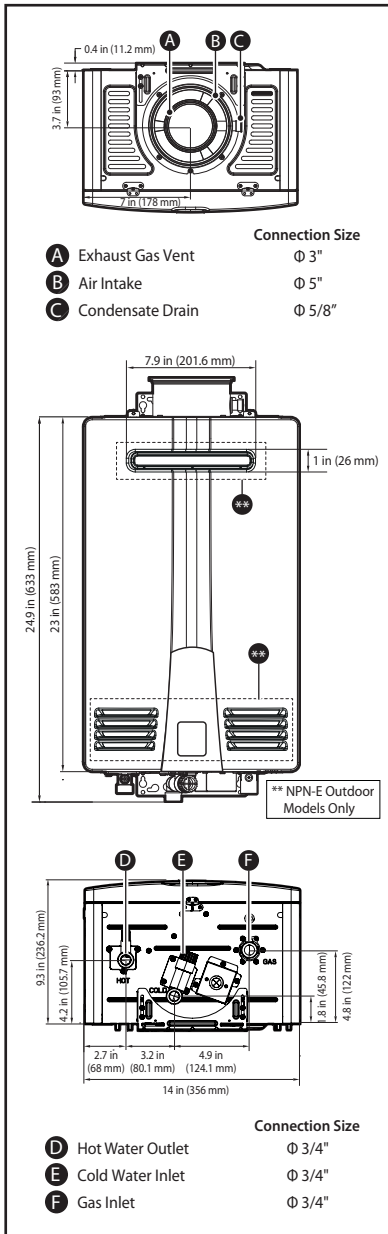
- Concentric (Direct Vent)
- Optional Vent Cap (Non-Direct)
- Outdoor (Non-Direct)
- Outdoor Recess Box (Non-Direct)



**Job Name:** \_\_\_\_\_  
**Location:** \_\_\_\_\_  
**Engineer:** \_\_\_\_\_  
**Wholesaler:** \_\_\_\_\_  
**Contractor:** \_\_\_\_\_  
**Model No.:** \_\_\_\_\_  
**Submitted to:** \_\_\_\_\_

<b>Plumb Easy Valve Set (3/4")</b> (30009323A - Lead Free) (30012581A - for Pipe Cover)	<b>Outdoor Vent Kit</b> (30023991A)	<b>Recess Box (Outdoor Only)</b> (30023550A)	<b>Pipe Cover</b> (30024017A)	<b>NaviLink™ Wi-Fi Control</b> (PBCM-AS-001)	<b>Remote Controller</b> NR-21DU (30022717A)	<b>Ready-Link Communication Cable</b> (GX0000546)

## Dimensions



## Specifications

MODEL		INDOOR or OUTDOOR			OUTDOOR		
		NPN-160U	NPN-180U	NPN-199U	NPN-160E	NPN-180E	NPN-199E
Heat Capacity	Min (Btu/h) (NG & LP)	10,700	10,700	10,700	10,700	10,700	10,700
	Max (Btu/h) (NG & LP)	160,000	180,000	199,900	160,000	180,000	199,900
Efficiency	UEF (NG & LP)	0.81	0.81	0.81	0.81	0.81	0.81
Flow Rate (LPM)	35°F (19°C) Temp. Rise	7.6 GPM (28.8)	8.5 GPM (32.2)	9.5 GPM (36.0)	7.6 GPM (28.8)	8.5 GPM (32.2)	9.5 GPM (36.0)
	45°F (25°C) Temp. Rise	5.8 GPM (22.3)	6.6 GPM (25.0)	7.4 GPM (28.0)	5.9 GPM (22.3)	6.6 GPM (25.0)	7.4 GPM (28.0)
	67°F (37°C) Temp. Rise	4.0 GPM (15.1)	4.5 GPM (17.0)	5.0 GPM (18.9)	4.0 GPM (15.1)	4.5 GPM (17.0)	5.0 GPM (18.9)
Mounting Applications		Indoor or Outdoor Wall-Hung (Optional Vent Kit for Outdoor)			Outdoor Wall-Hung Only		
Weight		55.0 lbs (25 kg)	60.0 lbs (27 kg)	60.0 lbs (27 kg)	55.0 lbs (25 kg)	60.0 lbs (27 kg)	60.0 lbs (27 kg)
Dimensions		14.0 in(W) X 23.0 in(H) X 9.3 in(D)					
Ignition		Electronic Ignition					
Water Pressure		15-150 PSI					
Natural Gas Supply Pressure		3.5 in WC - 10.5 in WC					
Propane Gas Supply Pressure		8 in WC - 13 in WC					
Natural Gas Manifold Pressure		0.7 - 2.8 in WC	0.5 - 2.3 in WC	0.5 - 2.8 in WC	0.7 - 3.2 in WC	0.5 - 2.4 in WC	0.5 - 3.0 in WC
Propane Gas Manifold Pressure		1.4 - 5.9 in WC	1.3 - 5.3 in WC	1.3 - 6.6 in WC	1.4 - 6.3 in WC	1.3 - 5.4 in WC	1.3 - 6.6 in WC
Minimum Flow Rate		0.5 GPM (1.9 LPM)					
Connection Sizes	Cold Water Inlet	3/4 in NPT					
	Hot Water Outlet	3/4 in NPT					
	Gas Inlet	3/4 in NPT					
Power Supply	Main Supply	120V AC, 60Hz					
	Normal	90 W	88W	120W	90W	88W	120W
	Standby	4 W					
	Anti-Frost	114 W					
	External Pump	< 150W, 1.5 A					
	Fuse	5.0 A					
Materials	Casing	Cold Rolled Carbon Steel					
	Heat Exchanger	Stainless Steel					
Venting		Concentric			No Venting (Outdoor Installation Only)		
Flow Control		Flow Adjustment Valve					
Safety Device		Flame Rod, APS, Overheat Protection, Ignition Operation Detector, Temperature High Limit Switch, Power Surge Fuse					

Gas-fired, tankless, non-condensing, wall-mounted water heater(s) shall be direct vent NPN Series models as manufactured by Navien, Inc. and are certified by CSA Group to the latest edition of ANSI standard Z21.10.3/CSA 4.3. Water heater(s) is designed for both Residential and Commercial applications and shall have a 15-year limited Heat Exchanger warranty and 5-year limited Parts warranty (5-year Heat Exchanger and 5-year Parts for Commercial use) with a 1-year Labor warranty per Navien Limited Warranty. Unit(s) shall be designed to use natural gas and can be for use with propane when a Field Conversion Kit is installed. Water heater(s) shall have a nominal flow rate capacity of \_\_\_\_\_ GPM/GPH at \_\_\_\_\_°F rise with rated input of \_\_\_\_\_ BTU/hr. Water heater(s) shall be vented with 3/5" concentric vent pipe at a distance not to exceed 43' (or equivalent) with each elbow equal to 5' of pipe length. Water heater(s) is rated for 150 PSI working water pressure and 300 PSI test pressure. Gas supply pressure shall be 3.5" to 10.5" WC for natural gas and 8.0" to 13.0" WC for propane. Unit(s) shall have a steel case, stainless steel heat exchanger, power burner, gas valve, air pressure sensor, 3/4" inlet gas connection, 3/4" brass inlet/outlet water connections, water holding capacity of 0.5 gallons for the NPN-160, 0.7 gallons for NPN-180 model, 0.9 gallons for NPN-199. The NPN-160 weighs 55.0 lbs, and the NPN-180/NPN-199 models weigh 60.0 lbs. Unit(s) shall include features such as an adjustment for installations at high elevation, temperature lockout, and temperature options from 98-140°F in 1°F intervals (36°C-60°C in 0.5°C intervals). The water heater(s) shall be controlled by an internal circuit board that monitors the inlet and outlet temperatures with installed thermistors, sensing and controlling flow rate to set point temperature in conjunction with the combustion controls in order to maintain thermal combustion efficiency. Unit(s) shall include safety features such as flame sensor system, high limit sensors, overheat prevention device, freeze protection mode, and fan motor rotation detector. 2-unit cascade applications shall be installed by connecting the units using cable-only connections (Ready-Link). The water heater(s) exceeds the energy efficiency requirements of ASHRAE 90.1-2013 and is listed by SCAQMD rule 1146.2 (Type 1) for Low NOx that complies with 14 ng/J or 20 ppm NOx requirements @ 3% O<sub>2</sub>.