

## NPE Series Tankless Water Heaters **Specification Sheet**

- Certified design according to ANSI Z21.10.3 CSA 4.3-2015 standards for both indoor or outdoor installations (with optional Outdoor Vent Kit)
- Compatible with 1/2" gas pipe up to a length of 24 ft\* (\*see Installation Manual for additional information)
- Compatible with 2" PVC vent up to 60 ft\*\* and 150 ft\*\* using 3" PVC vent (\*\*with no elbows)
- Gas Input Ranges NPE-150 - 120,000 to 18,000 BTUh NPE-180 - 150,000 to 15,000 BTUh NPE-210 - 180,000 to 19,900 BTUh NPE-240 - 199,900 to 19,900 BTUh
- Hot Water Flow Rate Capacity (\*based on 35°F temperature rise) NPE-150 - 6.8 GPM NPE-180 - 8.4 GPM NPE-210 - 10.1 GPM NPE-240 - 11.2 GPM
- Dual Primary and Secondary Stainless Steel Heat Exchangers for optimum efficiency and durability
- Built-in Control Panel allows adjustment of temperature settings and displays the operating status and error codes
- ComfortFlow Technology "A" models come included with built-in 0.5 gallon Buffer Tank and Recirculation Pump to provide maximum comfort
- INTELLIGENT Preheating recognizes hot water usage patterns to intelligently provide hot water when needed (optional for "S" models)
- Temperature Options available temperature settings for Residential applications range from 98°F up to 140°F with high temperature Commercial mode capable of up to 182°F
- Ready-Link Cascade Compatible for up to 16 units for increased hot water production
- Common Vent Compatible allows for cascade systems to use a single exhaust and/or intake pipe for up to 8 units with the use of the Common Vent Backflow Damper Collar Kit (#30014367A)
- 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 NPE-180A/210A/240A - 0.96 UEF (0.97 EF for Canada) NPE-150S - 0.96 UEF (0.97 EF for Canada) NPE-180S/210S/240S - 0.97 UEF (0.99 EF for Canada)
- Compatible with Natural Gas (NG) and Propane (LPG)\*\*\* (\*\*\* requires installation of included Field Conversion Kit by a qualified gas servicer)
- Approved for Installations on Mobile/Manufactured Homes
- Certified by CSA, NSF 5, AHRI, AB1953 CA Low Lead, 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)\*\*\*\* 8-Year Heat Exchanger and 5-Year Parts Warranty (Commercial)\*\*\*\* (\*\*\*\* see Navien Limited Warranty)
- Optional accessories are available (see below)





**Built-In Control Panel** with **Diagnostics** 

Sleek Design - Compatible with 2" PVC Vent and 1/2" Gas Pipe

Direct Vent (Indoor)







Non-Direct Vent (Outdoor)





Name:	
-	
ation:	

- Loc
- Enaineer:
- Wholesaler:
- Contractor:
- Model No.:
- Submitted to:

Job





## NPE Series Tankless Water Heaters Specification Sheet

## Dimensions

(auu0), 20 (auu22), 20 (auu22)	
A Air Intake B Exhaust G	Connection Size
B Exhaust G	as vent Φ 2"
2887 (73 tumi) 27.4 (655 mm)	
(umil)1/17 (umil)1/17 23mm (77n	nm) (212mm) 17.3* (440mm)
<ul> <li>Hot Water</li> <li>Recirculat</li> <li>Cold Water</li> <li>Gas Inlet</li> <li>Condensa</li> <li>*"A" models</li> </ul>	tion Inlet* Φ 3/4" er Inlet Φ 3/4" Φ 3/4" ate Outlet Φ 1/2"

			Specifi	cations						
ltem		NPE-150S	NPE-180A	NPE-180S	NPE-210A	NPE-210S	NPE-240A	NPE-2405		
Heat	Natural Gas	18,000-	15,000-150,000 BTU/H		19,900-180,0	19,900-180,000 BTU/H		900 BTU/H		
Capacity (Input)	Propane Gas	120,000 BTU/H	15,000-150,000 BTU/H		19,900-180,000 BTU/H		19,900-199,900 BTU/H			
Efficiency	UEF (for NG & LP)	0.96	0.96	0.97	0.96	0.97	0.96	0.97		
Ratings	EF (Canada) (for NG & LP)	0.97	0.97	0.99	0.97	0.99	0.97	0.99		
Flow Rate (DHW)	35°F(19°C) Temp Rise	6.8 GPM (26 L/m)	8.4 GPM (32 L/m)		10.1 GPM (38 L/m)		11.2 GPM (42 L/m)			
	45°F(25°C) Temp Rise	5.3 GPM (20 L/m)	6.5 GPM (25 L/m)		7.8 GPM (30 L/m)		8.7 GPM (33 L/m)			
	67°F(36°C) Temp Rise	3.2 GPM (12 L/m)	4.3 GPM (16 L/m)	4.2 GPM (16 L/m)	5.0 GPM (19 L/m)	5.2 GPM (20 L/m)	5.6 GPM (21 L/m)	5.7 GPM (22 L/m)		
Dimensions		17.3"(W) x 27.4	l"(H) x 13.2"(D)							
Weight		55 lbs (25kg)	75 lbs (34kg)	67 lbs (30kg)	82 lbs (37 kg)	75 lbs (34kg)	82 lbs (37 kg)	75 lbs (34kg)		
Installation T	уре	Indoor or Outdoor Wall-Hung								
Venting Type	2	Forced Draft Direct Vent								
Ignition		Electronic Ignition								
Water Pressure		15-150 PSI								
Natural Gas Supply Pressure (from source)		3.5 in WC-10.5 in WC								
Propane Gas Supply Pressure (from source)		8 in WC-13in WC								
Natural Gas Manifold Pressure (min-max)		-0.04 in WC - -0.38 in WC	-0.04 in WC0.84 in WC -0.05 in WC0.36 in WC			-0.05 in WC0.58 in WC				
Propane Gas Manifold Pressure (min-max)		-0.04 in WC - -0.42 in WC	-0.05 in WC0.50 in WC0.10 in WC0.66 in WC				-0.10 in WC0.78 in WC			
Minimum Flow Rate		0.5 GPM (1.9 L/m), < 0.01 GPM (0.04 L/m) option for "A" models*								
c	Cold Water Inlet	3/4 in NPT								
Connection Sizes	Hot Water Outlet	3/4 in NPT								
	Gas Inlet	3/4 in NPT	3/4 in NPT							
Dannar	Main Supply	120V AC, 60Hz								
Power Supply	Maximum Power Consumption	200W (max 2A), 350W (max 4A) with external pump connected								
	Casing	Cold Rolled Carbon Steel								
Materials	Heat Exchangers	Primary Heat Exchanger: Stainless Steel Secondary Heat Exchanger: Stainless Steel								
Venting	Exhaust	2" or 3" PVC, CPVC, Polypropylene 2" or 3" Special Gas Vent Type BH (Class II, A/B/C)								
	Intake	2" or 3" PVC, CPVC, Polypropylene 2" or 3" Special Gas Vent Type BH (Class II, A/B/C)								
	Vent Clearances	0" to combustibles								
Safety Devices	Flame Rod, APS, Ignition Power Surge Fuse	on Operation De	tector, Water Te	emperature Hig	h Limit Switch	, Exhaust Temp	perature High L	imit Sensor,		

Specifications

\* Available for "A" models configured in an optional ComfortFlow recirculation mode. Additional energy use will occur when using recirculation.

Gas-fired, tankless, condensing, wall-mounted water heater(s) shall be direct vent NPE 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) shall have a 15-year limited Heat Exchanger warranty and 5-year limited Parts warranty (8-year Heat Exchanger and 5-year Parts for Commercial use) per Navien Limited Warranty. Unit(s) shall be designed to burn 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 2" PVC/CPVC vent pipe at a distance not to exceed 60' (or equivalent) with each elbow equal to 8' of pipe length or 3" PVC/CPVC vent pipe at a distance of 150' (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, dual stainless steel heat exchangers, eco premixed burner, negative pressure gas valve, dual venturi, 3/4" inlet gas connection, 3/4" brass inlet/outlet water connections, water holding capacity of 0.6 gallons for the NPE-150S, 1.0 gallon for the NPE-180A model (0.7 gallons for NPE-180S model), 1.2 gallons for the NPE-210A/NPE-240A models (0.7 and 0.9 gallons for NPE-210S and NPE-240S models respectively), and a condensate collector. The NPE-150S model weighs 55 lbs, the NPE-180A model weighs 75 lbs (NPE-180S weighs 67 lbs), and the NPE-210A/NPE-240A models weigh 82 lbs (NPE-210S and NPE-240S weigh 75 lbs). Unit(s) shall include features such as an adjustment for installations at high elevation, temperature lockout, and temperature options from 98-120°F in 1°F intervals and 125-140°F in 5°F intervals. The unit(s) shall include additional temperature options of 150-180°F in 10°F intervals, and 182°F for high temperature commercial applications. All NPE "A" models shall include an internal circulation pump and 0.5 gallon buffer tank. 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 with air-fuel ratio 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. Multi-system (cascade) applications that require 2 to 16 units shall be installed by connecting the units using cable-only connections (Ready-Link). Cascade systems can be common vented with up to 8 units when a Common Vent Backflow Damper Collar Kit is installed. 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% O2.

\*Navien reserves the right to change specifications at any time without prior notice