

Introducing NHW-AI and NHW-AE



NAVITECH STAINLESS STEEL HX AND BURNER

INTEGRATED CONTROL

0.81 UEF

98°-140°

9.5 GPM @ 35° TEMP RISE



CASCADE CAPABLE



NHW-AI Interior



NHW-AEExterior

One of the industry's most advanced non-condensing tankless water heaters

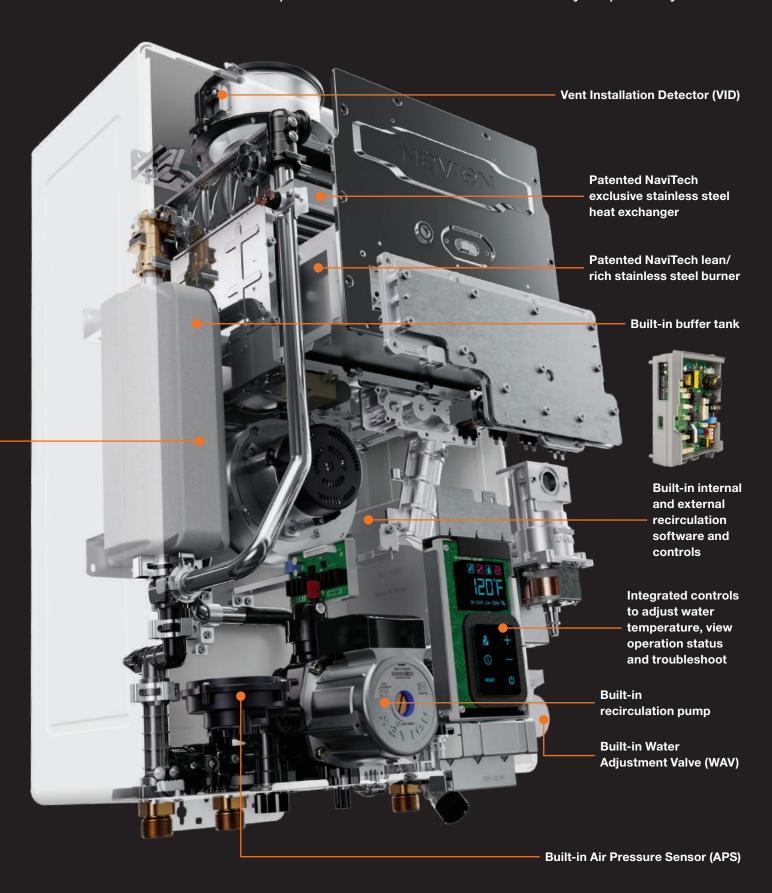
NHW-A is designed with the patented ComfortFlow® recirculation pump and buffer tank within the unit. This Navien exclusive innovation resolves the need for an external pump and controls because all the components and recirculation system controls are built-in. The ComfortFlow system also promotes consistent outlet temperature to minimize the "cold-water sandwich effect".





An inside look at the NHW-A

With features that make performance and functionality a priority



More technology built-in with the ComfortFlow recirculation system

Internal and external recirculation modes

All NHW-A models are available with built-in internal and external recirculation* technology to program Always-On, Weekly** or an Intelligent mode that learns hot water usage patterns. Selecting any of these options will save water by reducing wait time for hot water at a fixture.

NaviCirc optional recirculation valve

Designed for recirculation in application where a dedicated return line is not available.

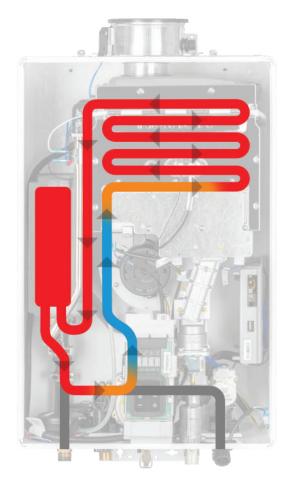


HotButton optional on-demand system

At the push of a button, the HotButton system activates internal recirculation pump and gas fired burner to heat water in supply lines for faster hot water.

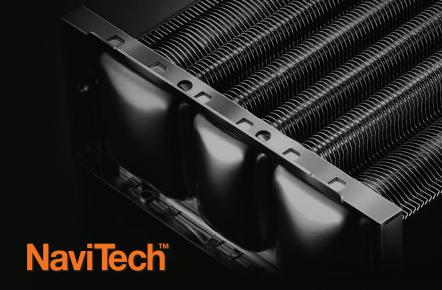


- * Recirculation applications may vary. Additional plumbing or equipment may be required.
- **Weekly requires the addition of the remote (included with NHW-AE, but optional with NHW-AI).



More innovative features and benefits

- NaviVent System matched concentric 3" x 5" venting
- Approved for mobile/manufactured homes
- Available in 3 interior and 3 exterior models (160,000, 180,000 & 199,900 BTU/h)
- Navien designed and built
- Available in Natural Gas (NG) or Liquid Propane (LP) models
- Vent Installation Detector (VID) for superior safety



Durable stainless steel and a Navien-exclusive design contribute to NHW-A's dependability and performance.









Low NO_x emissions





Cascading capability

Accessories

For all optional accessories





NHW-AE





NaviCirc™ Recirculation Valve

NaviCirc™ PFFW-SXX-001 NaviCirc[™] Kit 30022965A







H2Air™ Kit AHU Optimizer PNBD-000001







HotButton[™] **Control Kit** PZZZ-00063

Wall Plate GXXX001427

Push Button



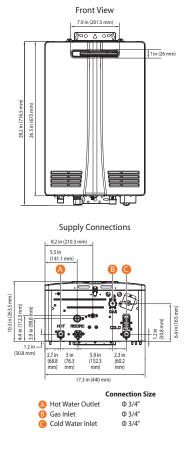
Remote Controller (Optional for NHW-Al Models Only) 30022717B



Recess Box (NHW-AE Only) (Lock not included) 30032303A

Dimensions

Overhead View Overhead View Front View Supply Connections 8.2 in (2103 mm) 5.5 in (1411 mm)



NHW-AE Series

Overhead View





Connection Size

Ф5"

Φ 5/8"

Φ 3/4"

A Exhaust Gas Vent

Condensate Drain

Hot Water Outlet

Air Intake

Gas Inlet
Cold Water Inlet

Customer support and advanced training makes Navien your best choice for tankless

Besides supplying innovative and energy efficient systems for residential and commercial applications, Navien provides extensive field support, webinars and training events for builders, architects and contractors. Our full-time customer support network provides quick answers to installation and operational questions.

Ratings & Specifications

| Item | | NHW700 — Interior Model | | | NHW700 — Exterior Model | | | | |
|---|---------------------------|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|
| | | 160AI | 180AI | 199AI | 160AE | 180AE | 199AE | | |
| Heat capacity (input) natural gas/ | | 10,700-160,000 (BTU/h) | 10,700-180,000 (BTU/h) | 10,700-199,900 (BTU/h) | 10,700-160,000 (BTU/h) | 10,700-180,000 (BTU/h) | 10,700-199,900 (BTU/h) | | |
| Efficiency rating for NG & LP | | 0.81 UEF | | | | | | | |
| Flow rate (DHW) | 35°F (18°C) temp rise | 7.5 GPM (28 L/m) | 8.5 GPM (32 L/m) | 9.5 GPM (36 L/m) | 7.5 GPM (28 L/m) | 8.5 GPM (32 L/m) | 9.5 GPM (36 L/m) | | |
| | 45°F (23°C) temp rise | 5.8 GPM (22 L/m) | 6.6 GPM (25 L/m) | 7.4 GPM (28 L/m) | 5.8 GPM (22 L/m) | 6.6 GPM (25 L/m) | 7.4 GPM (28 L/m) | | |
| | 67°F (36°C) temp rise | 4.0 GPM (15 L/m) | 4.6 GPM (17 L/m) | 5.1 GPM (19 L/m) | 4.0 GPM (15 L/m) | 4.6 GPM (17 L/m) | 5.1 GPM (19 L/m) | | |
| Dimensions | | 17.3" W x 26.5" H x 10.3" D | | | | | | | |
| Weight (gross) propane gas | | 60 lbs (27 kg) | 65 lbs (29 kg) | 65 lbs (29 kg) | 60 lbs (27 kg) | 65 lbs (29 kg) | 65 lbs (29 kg) | | |
| Installation type | | Indoor wall-hung Outdoor wall-hung | | | | | | | |
| Venting type | | Forced draft direct vent (indoor only) | | | | | | | |
| Ignition type | | Electronic ignition | | | | | | | |
| Water pressure | | 15–150 PSI | | | | | | | |
| Natural gas supply pressure (from source) | | 3.5" WC-10.5" WC | | | | | | | |
| Propane gas supply pressure (from source) | | 8" WC-13" WC | | | | | | | |
| Natural gas manifold pressure (max-min) | | 2.8" WC, 0.7" WC | 2.3" WC, 0.7" WC | 2.8" WC, 0.7" WC | 3.2" WC, 0.8" WC | 2.6" WC, 0.8" WC | 3.2" WC, 0.8" WC | | |
| Propane gas manifold pressure (max-min) | | 5.8" WC, 1.3" WC | 4.5" WC, 1.3" WC | 5.4" WC, 1.3" WC | 6.1" WC, 1.4" WC | 4.9" WC, 1.3" WC | 6.0" WC, 1.3" WC | | |
| Minimum flow rate | | 0.4 GPM (1.5L/m) without ComfortFlow, <0.01 GPM (0.04 L/min) with ComfortFlow* | | | | | | | |
| Connection sizes | | 3/4" NPT cold water inlet 3/4" NPT hot water outlet 3/4" NPT gas inlet | | | | | | | |
| Power supply | Main supply | 120V AC, 60 Hz | | | | | | | |
| | Normal | 95 W | 100 W | 115 W | 99 W | 81 W | 96 W | | |
| | Maximum power consumption | 120 W (Max 2 A), 350 W (Max 4 A) with external pump connected | | | | | | | |
| | External pump | < 150 W, 1.5 A | | | | | | | |
| | Fuse | 5.0 A | | | | | | | |
| Materials | Casing | Cold rolled carbon steel | | | | | | | |
| | Heat exchangers | Stainless steel | | | | | | | |
| Safety devices | | Flame rod, APS, vent installation detector, ignition operation detector, water temperature high limit switch, power surge fuse | | | | | | | |
| Certifications | | NSF ATTRICERTIFED | | | | | | | |

^{*} Available for NHW-A models configured in an optional ComfortFlow* recirculation mode. Energy consumption will increase when the system is configured for recirculation. Navien reserves the right to change specifications at any time without prior notice. Please refer to www.navieninc.com to verify you have the most current information.

Warranty

| Ар | plication | Labor | Parts | Heat Exchanger | |
|----------------------|---|--------|---------|----------------|--|
| Residential | Standard | 1 year | 5 years | 15 years | |
| Residential | Uncontrolled recirculation ² | 1 year | 3 years | 5 years | |
| Commercial or Combil | Standard | 1 year | 5 years | 5 years | |
| Commercial or Combi | Uncontrolled recirculation ² | 1 year | 3 years | 3 years | |

¹Combi refers to a combination potable water and space heating application. Water heaters cannot be used in space heating only applications.

Navien's warranty (which may be changed without prior notice) is subject to the terms and conditions found at www.Navieninc.com.

We are @Navieninc everywhere













²Uncontrolled-recirculation: External pumps configured to circulate continuously through the water heater are subject to the uncontrolled recirculation warranty terms. An aquastat is the minimum pump control requirement for DHW or storage tank recirculation in order to maintain the full controlled recirculation warranty.