MAXIMUM EFFICIENCY.
POWERFUL PERFORMANCE.
SMART CONTROL.

FRIEDRICH H-SERIES™
Super High Efficiency
Gas Water Heater
With LeakSense™

Premium models meet a stringent set of our company's internally defined sustainability standards

SUSTAINABILITY STANDOUT®

FRIEDRICH

Friedrich.com/WaterHeating

Designed by Plumbers,
Loved by Homeowners

We boldly crafted the Friedrich® H-Series™ Super High Efficiency Gas Water Heater to provide the best of everything. It was designed by plumbers and perfected by our engineers to give homeowners continuous hot water, MaxMode™ and smart features—all from a water heater that installs as easily as a standard product.

Not only did we make it easy to install and service, but we also made it powerful, smart and dependable. So when you're looking for a gas water heater for your homeowners, why look for the best when you can install the greatest?

SMART CONTROL

Built-in Wi-Fi
Powered by EcoNet® Technology
Allow your homeowners to control and optimize their water heater experience from their smartphone[3]

SMART PROTECTION

LeakSense™ Leak Detection System
Detects any water leak—large or small, internal or external[6]

MAXIMUM EFFICIENCY

Up to 0.90 UEF
Reduces energy usage and carbon footprint by up to 36%[1] while still heating water 2X faster than a standard gas tank[2]
ENERGY STAR® certified

POWERFUL PERFORMANCE

Fast Recovery
Provides up to 2.5X the hot water of a standard 50-gallon water heater[4], enough for up to seven simultaneous showers[5]

"Tank-type water heaters . . . best-in-class first-hour delivery."

Steve,
Plumber

Easy to Sell. Easy to Install. Easy to Service.

The Friedrich® H-Series™ Gas Water Heater is what you've been waiting for. Now you can give more homeowners the continuous hot water they want without the costs typically required, from a tank that installs no different than the many you've installed before. Because it was designed by plumbers and perfected by our engineering, it's a win-win solution that makes you come out looking like a hero.

Advanced Diagnostics
View detailed diagnostics, alerts and alarm codes while at the water heater to expedite service.

Start Up Verification
Be 100% sure your customer is up and running before you leave the job to prevent callbacks.

Leak Sensor Channel
Leak sensor replacement is easy by opening the thermostat panel and snaking the new leak sensor down the channel—360° protection, all from the front of the tank.

Perfect for Replacement
Easy replacement with the same dimensions as a standard gas water heater.

0" Clearance on Sides
Fits in a closet and is fully serviceable from the front.

Contact Info in the App
If anything ever goes wrong, your contact info in the EcoNet® App gives homeowners an easy way to reach and share codes with you for repeat business and simpler service calls.

Maximum Efficiency

As the most efficient water heater in its class, The Friedrich® H-Series™ Gas Water Heater is ENERGY STAR® certified and helps deliver up to $1,100+ in energy cost savings over 12 years.[7] And it may save even more with available tax credits or local utility rebates.

Earth-Friendly Design

It was designed with a powerful, efficient burner that helps it outperform, so there's no need to choose between sustainability goals and enjoying hot water. It helps homeowners reduce their carbon footprint and energy use by up to 36%[1] and reduce their NOx emissions up to 75%.[8]

Save Water with Recirculation

Pair with a recirculation pump (sold separately) to save over 3,000 gallons of water from being wasted down the drain each year[9] (premium models).

Space Heating Ready

Side water connections built-in for use with a space heating, hydronic air handler—no need for a second tank or a furnace.

This product meets a stringent set of our company's internally defined sustainability standards

This Product Demonstrates a BRAND BEST Level of CO_2 Reduction*

As compared to our baseline product

Powerful Performance

With an efficient yet powerful burner, a 50-gallon Friedrich® H-Series™ Gas Water Heater produces up to 2.5X the hot water of a standard tank. So homeowners will never worry about running out of hot water while they do the dishes, wash the laundry or even run continuous back-to-back showers.
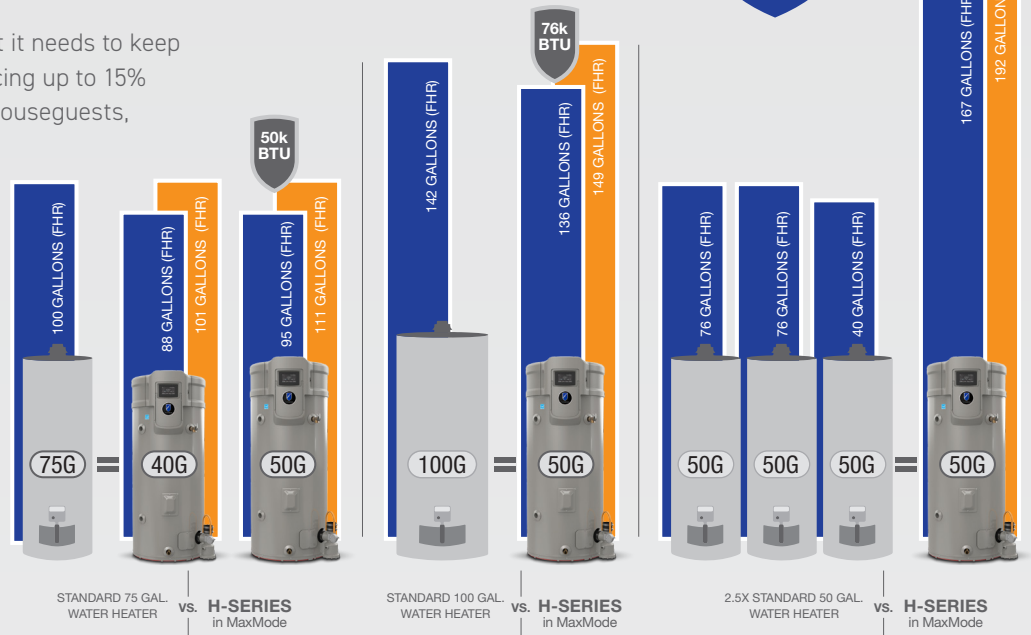
Enjoy More Hot Water With the H-Series
In MaxMode, the H-Series provides up to 15% more hot water

MaxMode™

Gives the water heater the boost it needs to keep up when demand is high, producing up to 15% more hot water.[10] So even with houseguests, homeowners are covered.

Hot Water Performance

■ STANDARD FHR
■ MAXMODE FHR

50k BTU — 100 GALLONS (FHR) | 88 GALLONS (FHR) | 101 GALLONS (FHR) | 95 GALLONS (FHR) | 111 GALLONS (FHR)

75G = 40G | 50G

STANDARD 75 GAL. WATER HEATER **vs. H-SERIES** in MaxMode

76k BTU — 142 GALLONS (FHR) | 136 GALLONS (FHR) | 149 GALLONS (FHR)

100G = 50G

STANDARD 100 GAL. WATER HEATER **vs. H-SERIES** in MaxMode

100k BTU — 76 GALLONS (FHR) | 76 GALLONS (FHR) | 40 GALLONS (FHR) | 167 GALLONS (FHR) | 192 GALLONS (FHR)

50G | 50G | 50G = 50G

2.5X STANDARD 50 GAL. WATER HEATER **vs. H-SERIES** in MaxMode

First Hour Rating (FHR):
Gallons of hot water produced per hour, starting with a full tank.

Fast Recovery

Replenishes hot water up to 2X faster than a standard gas tank to provide continuous hot water, up to 3.8 Gallons Per Minute[11], so you can take as many showers back-to-back as you need. With the tank capacity added to the fast recovery, Friedrich H-Series Gas Water Heaters are capable of providing hot water for up to seven simultaneous showers.[5]

Continuous Hot Water Volume

Models:	Inlet Temperature 45°	Inlet Temperature 58°	Inlet Temperature 70°
40G-50K	faucet	faucet	faucet
50G-50K	faucet	faucet	faucet
50G-76K	faucet	shower	shower
50G-100K	shower	shower, faucet	shower, faucet

Total simultaneous hot water flow for a continuous duration.

Maximum Simultaneous Hot Water Volume

Models:	Inlet Temperature 45°	Inlet Temperature 58°	Inlet Temperature 70°
40G-50K	showers + faucet	showers	showers + faucet
50G-50K	showers	showers	showers + faucet
50G-76K	showers + faucet	showers	showers
50G-100K	showers	showers + faucet	showers
TOTAL # OF SHOWERS | 140°F SET-POINT | 2 GPM SHOWER			

Total simultaneous hot water flow for an 8-minute duration.
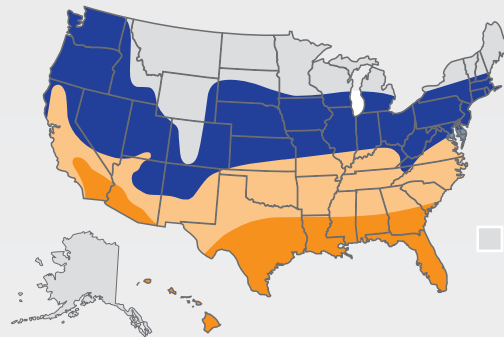
Flow rates are dependent on the inlet water temp. Gray zone flow rates will typically be less than other zones.

■ 45°F Inlet Temperature
■ 58°F Inlet Temperature
■ 70°F Inlet Temperature

Usage Key

Shower Flow rate of 2.0 GPM

Faucet Flow rate of 1.0 GPM

Inlet Temperature: The temperature of cold water before it enters your water heater.

Approximate Usage: Shower temperature of 105°F. Flow rates vary depending on temperature of incoming cold water and water heater set temperature.

Smart Control

Powered by EcoNet® Technology

With built-in Wi-Fi and the EcoNet® App, homeowners can enjoy complete control—like adjusting water temperature and setting Vacation / Away or MaxMode™—and know when their water heater needs service. It's all possible with the Friedrich® H-Series™ Gas Water Heater.
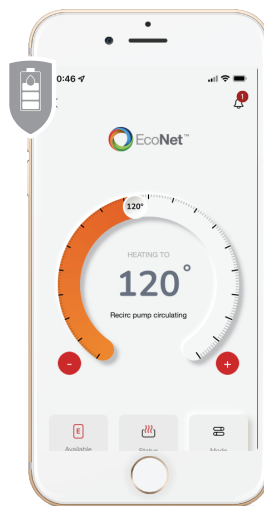
Hot Water Availability Indicator

This lets homeowners know how much hot water is available before jumping into the shower.

Scheduling

Homeowners can program the water heater to match household needs throughout the day.

Mobile Alerts

The unit notifies the homeowner immediately of leaks and service needs through the EcoNet App[3].

Total Control

The EcoNet App allows homeowners to check hot water availability, adjust the temperature or turn on a recirculation pump accessory.
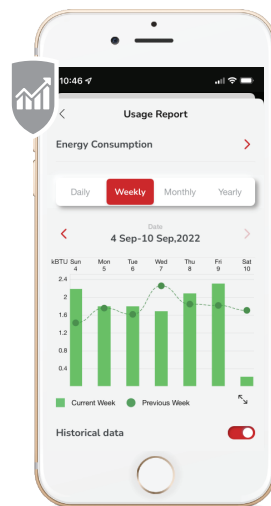
Energy Usage Tracking

The homeowner can view weekly, monthly and yearly energy usage reports to better manage consumption[3].

NOTE: *EcoNet App subject to change without notice.*

Smart Protection

PREMIUM MODELS

Leak Detection

The Friedrich H-Series Gas Water Heater was designed with homeowner comfort and safety in mind. It features LeakSense™ leak detection system that detects any leak—large or small, internal or external—in less than 15 seconds[6] and alerts the homeowner through the EcoNet App and on-unit display.

Add Leak Prevention

When you add a LeakGuard™ Auto Water Shut-off Valve Kit (Part SP21172), the unit can stop leaks before they become a problem. LeakGuard protects your homeowners' belongings by limiting leaks to no more than 20 ounces[12].

Built to be better for the
Homeowner—and You

Blower / Gas Valve Assembly

Coupling

Flame Sensor

Noise Suppressor

Igniter

Pressure Switch

Burner Assembly

Cold Inlet / Dip Tube

Power Connection

Side Panel

Control

Front Panel Display

Side Tap Plug

Hot Outlet / Anode

Relief Valve

Tank

Upper Thermostat

Lower Thermostat

Exhaust Tee

FV Sensor

Leak Sensor Access

Leak Sensor Rope

Drain Valve
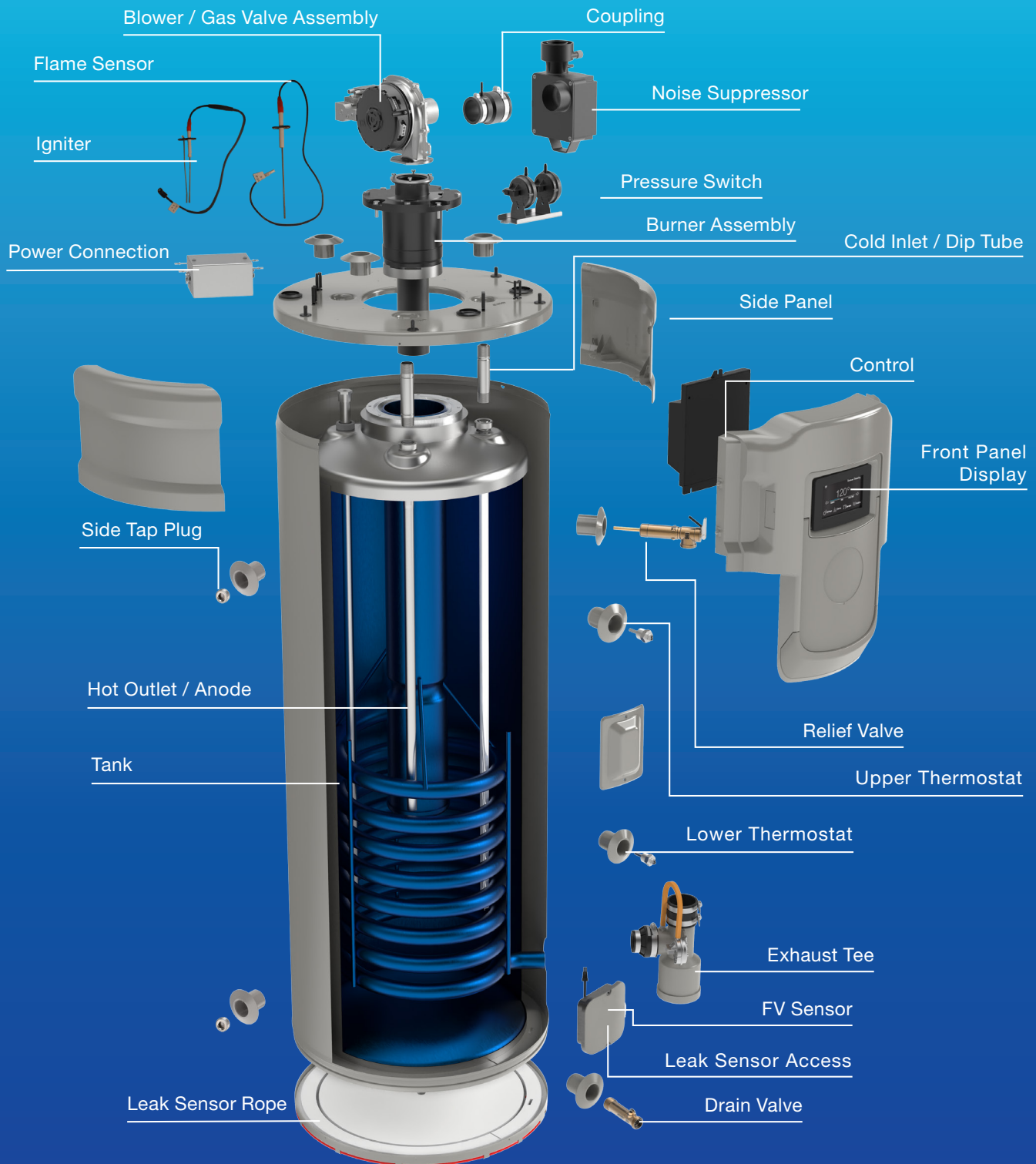
Friedrich® H-Series™ Super High Efficiency Gas Water Heater with LeakSense™ Specifications

	DESCRIPTION			FEATURES								ROUGHING IN DIMENSIONS (SHOWN IN INCHES)										ENERGY INFO.
TYPE	NOMINAL GALLON CAP.	RATED GALLON CAP.	MODEL NUMBER	GAS INPUT IN THOUS. BTU/H		RECOVERY IN G.P.H. 90° F RISE		FIRST HR. RATING (GALLONS)		MAXMODE™ DELIVERY (GALLONS)		HEIGHT TO INTAKE A	OVERALL UNIT HEIGHT B	DIAM. C	HT. TO GAS CONN. D	VENT SIZE E	WATER CONN. CENTER F	HT. TO SIDE TAP HOT G	HT. TO SIDE TAP COLD H	HT. TO EXHAUST J	WATER CONN. SIZE	SHIP WT. (LBS)	UNIFORM ENERGY FACTOR (UEF)
				NAT.	LP	NAT.	LP	NAT	LP	NAT	LP												
Tall	40	40	12PROG 40-50U FD HE EC3	50	–	64	–	88	–	101	–	54-1/4	54-1/2	21-3/4	50-1/4	2", 3", 4", 2" or 3" Flex	8	38	12	10	3/4	221	0.90
Tall	40	40	12PROG 40-50P FD HE EC3	–	50	–	64	–	88	–	101	54-1/4	54-1/2	21-3/4	50-1/4	2", 3", 4", 2" or 3" Flex	8	38	12	10	3/4	221	0.90
Tall	50	50	12PROG 50-50U FD HE EC3	50	–	64	–	95	–	109	–	64-1/4	65-1/2	21-3/4	61	2", 3", 4", 2" or 3" Flex	8	48	12	10	3/4	247	0.88
Tall	50	50	12PROG 50-50P FD HE EC3	–	50	–	64	–	95	–	109	64-1/4	65-1/2	21-3/4	61	2", 3", 4", 2" or 3" Flex	8	48	12	10	3/4	247	0.88
Tall	50	50	12PROG 50-76U FD HE EC3	76	–	97	–	136	–	156	–	64-1/4	65-1/2	21-3/4	61	2", 3", 4", 2" or 3" Flex	8	48	12	10	3/4	256	0.89
Tall	50	50	12PROG 50-76P FD HE EC3	–	76	–	97	–	136	–	156	64-1/4	65-1/2	21-3/4	61	2", 3", 4", 2" or 3" Flex	8	48	12	10	3/4	256	0.89
Tall	50	50	12PROG 50-100U FD HE EC3	100	–	128	–	167	–	192	–	64-1/4	65-1/2	21-3/4	61	2", 3", 4", 2" or 3" Flex	8	48	12	10	3/4	256	0.89
Tall	50	50	12PROG 50-100P FD HE EC3	–	100	–	128	–	167	–	192	64-1/4	65-1/2	21-3/4	61	2", 3", 4", 2" or 3" Flex	8	48	12	10	3/4	256	0.89
Tall	75	75	12PROG 75-100U FD HE EC3	100	–	129	–	167	–	198	–	62-5/8	64-1/2	26-1/4	60-1/8	2", 3", 4", 2" or 3" Flex	12	47	12	9	3/4	332	0.88
Tall	75	75	12PROG 75-100P FD HE EC3	–	100	–	129	–	167	–	198	62-5/8	64-1/2	26-1/4	60-1/8	2", 3", 4", 2" or 3" Flex	12	47	12	9	3/4	332	0.88

Uniform Energy Factor and rated gallon capacity based on Department of Energy (DOE) requirements.
All units have integrated Wi-Fi control board.

E
(2" PVC OUT-OF-BOX)

LEAK SENSOR

2.75"

Contact Us
Customer Service, Warranty and Parts: 800-621-5622
Technical Service: 800-HEATER3 (800-432-8373)
EcoNet® Support: 800-255-2388
Plumber Support Group: 866-339-2388

LEARN MORE
Friedrich.com/WaterHeating