PROPANE

& THE ANESI GAS ABSORPTION HEAT PUMP

ANESI®

ANESICOMFORT.COM

AT A GLANCE
MODEL: HP80

GAS INPUT	54,500 BTU/h
HEATING OUTPUT	78,000 BTU/h
REFRIGERANT	R717
CoP	1.4
AFUE	140%

Performance at standard ANSI rating conditions of 47°F ambient, 95°F return

The Anesi® HP80 Gas Absorption Heat Pump (GAHP) is a high-efficiency, air-to-water heat pump. Designed for extreme climates, the unit operates at ambient temperatures as low as -40°F. It provides a nominal heating capacity of 78,000 BTU/hr at 47°F ambient, and a steady-state output of 51,500 BTU/hr at -20°F. The monobloc design is fully self-contained, with combustion and refrigeration isolated outdoors, ensuring safe and efficient operation. The system utilizes a 100% natural refrigerant with zero Global Warming Potential (GWP), zero Ozone Depletion Potential (ODP), and no PFAS content, aligning with the highest environmental standards.

For every $1.00 spent on propane, you get about $1.40 worth of heat

Unlike conventional propane systems that rely solely on combustion for heat generation, GAHPs utilize the thermal energy from propane combustion to drive a thermodynamic process that extracts additional heat from ambient air. This yields a coefficient of performance (CoP) of 1.43, resulting in an effective AFUE of 140%.

For many, propane is not a preference but a necessity. Remote locations often lack access to natural gas infrastructure, and in regions with unreliable or expensive electricity—especially during extreme winter conditions—propane remains the most practical and resilient energy source. Unlike other appliances that require additional components or conversions, the Anesi GAHP simplifies installation—contractors can calibrate combustion settings during setup, reducing service complexity and parts inventory.

The Anesi System is engineered for straightforward retrofitting into buildings currently heated by gas or oil. Whether replacing a traditional furnace, boiler, or water heater, the system is designed to integrate with most existing infrastructure—including ductwork, plumbing, and electrical service. The custom air handler (AH1400) is compatible with standard forced-air systems, making it an ideal solution for upgrading older heating equipment to a high-efficiency alternative. This retrofit-friendly design minimizes installation time and expense.



AVAILABLE AT:

SAVE MORE: Oil to Propane

A 2024 study by the Propane Education & Research Council found that switching from heating oil to propane can reduce CO_2 emissions by 1.4 tons per year.

July 2025 prices—$3.54/gallon for heating oil vs. $2.62/gallon for propane (US Energy Information Administration)

RENEWABLE PROPANE & DECARBONIZATION

According to the California Air Resources Board (2024) renewable propane can achieve a carbon intensity as low as 20.5 gCO_2e/MJ, compared to the U.S. electric grid average of 130 gCO_2e/MJ

Stone Mountain Technologies manufactures Anesi innovative gas absorption heat pumps for residential and commercial use.

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