More comfortable spaces for people, less impact on the planet.

Climate change, national emissions targets and energy codes demand better HVAC solutions, but basic heating and cooling technology hasn't really changed much since 1902.

Why not leverage machine learning to build a better system for projects, people and the planet?

Heating and cooling spaces and people accounts for:

15%

15% of greenhouse emissions globally.*

55%

55% of annual household energy use.**

2X+

More than twice as much energy usage than the average car.**

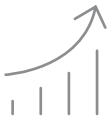
* https://www.wsj.com/articles/the-race-to-build-a-better-air-conditioner-601b28fc

** https://www.anthropocenemagazine.org/2020/07/the-race-is-on-to-build-an-ac-unit-that-doesnt-cook-the-planet/

Introducing AIIR Intelligent HVAC, the only residential solution leveraging machine learning and advanced AI to lower energy use and create greater comfort.

Through embedded machine learning, AIIR uses behavioral, environmental and occupant inputs to adapt, personalize and maximize comfort in each unique living environment. The user becomes part of an algorithm that feeds the functionality of the unit.

Perfect for hospitality, multifamily, student housing, and single-family environments.



30% more efficient than conventional systems

Integrated design means no intrusion on the interior and better air delivery

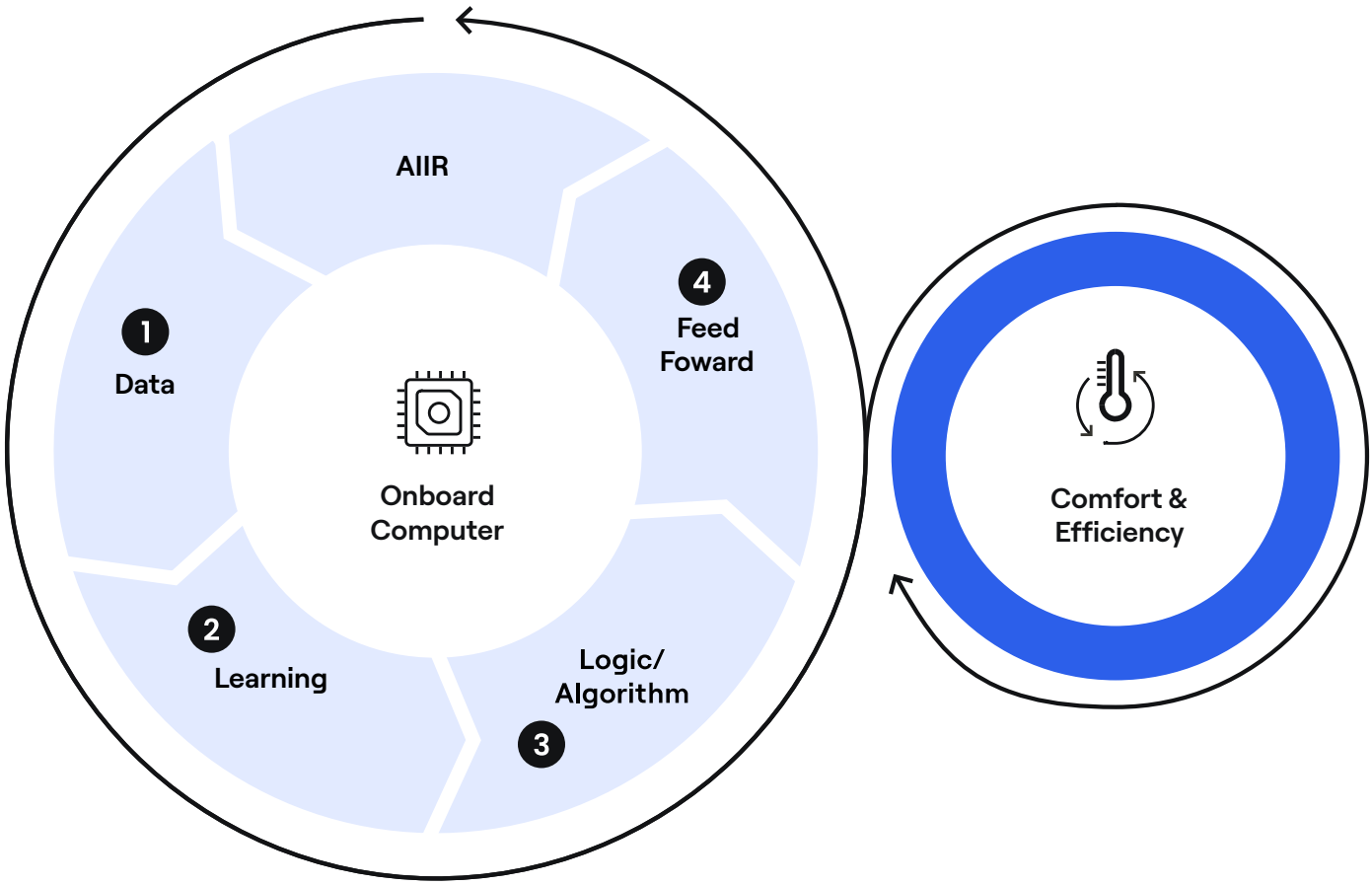
Easy to install, saves time and labor in the field

Easy to repair and replace, less downtime and disruption.

More comfort for people, less impact on the planet.

How It Works

AIIR Intelligent HVAC is designed around a powerful onboard processor to create the first system with the ability to capture, analyze, learn and optimize comfort and performance over time.



1 Data Inputs

- Temperature
- Humidity
- Real-Time Occupancy
- Habits and usage

2 Comfort Models

- Adaptive Comfort
- Occupancy Model
- Environmental Model
- Cooperative Control

3 Turning learning into algorithm—independent of input

4 Putting machine learning into practice to create comfort & efficiency

Healthier Climate Control

Fresh air intake
Dehumidification

Comes standard with AIIR-configured thermostat featuring BMS integration

Pair with AIIR User App to control on site or remotely.

Choose classic controls or Intelligent mode that learns and adapts to user preference, sensor data and occupancy.

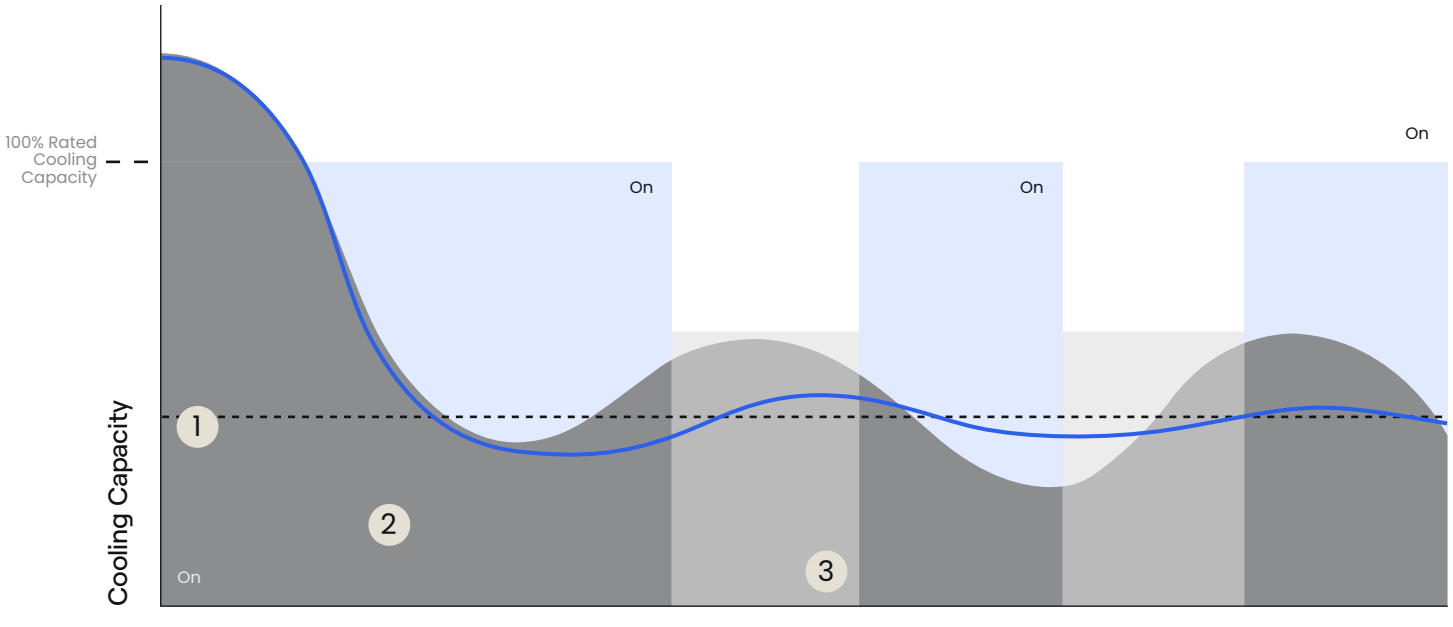
Control single HVAC or orchestrate control across an entire living space.

Built-in sensors to optimize operations, comfort and performance.

Intuitive Controls & System Interface

Superior Performance & Comfort

System Operations



1. System engages when occupancy sensors indicate to quickly heat or cool the space
2. When comfort level is reached, system load backs off to maintenance
3. AI-model feeds forward to predict necessary loads

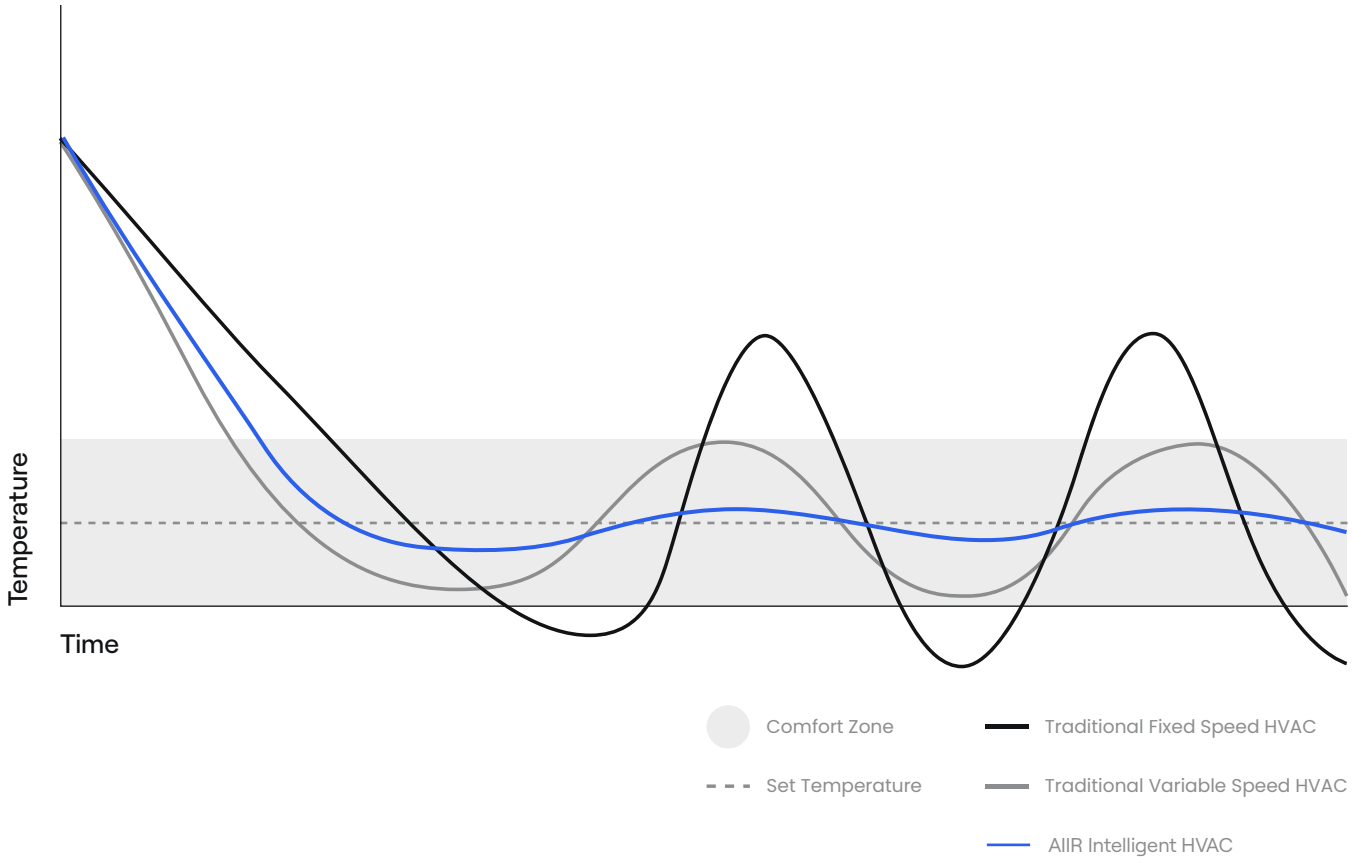
- Comfort Zone
- Set Temperature
- Traditional Fixed Speed HVAC
- Traditional Variable Speed HVAC
- AIIR Intelligent HVAC

Flexible to operate as an individual unit or engage with multiple units, AIIR Intelligent HVAC leverages machine learning and the use of advanced variable speed technologies for superior performance and efficiency.

30%+ energy savings

AI-driven optimization and a variable-speed compressor work together to use only the energy needed to meet heating or cooling loads. This creates less bouncing of power, greater comfort and less energy use throughout the day delivering up to 40% energy savings

Room Temperature



Product Detail

Unit Information

Input Power	Nominal	208/230/1/60
	Operating Range	187-253 V
Compressor	Type	Variable Speed Rotary
	Oil	POE
	Max Full Load Amps	3.3 A
Indoor Blower	Blower Type	Backward Curve Blower
	Motor Type	Constant Torque ECM
	Motor Power	0.18 HP
	Max Full Load Amps	0.61 A
Outdoor Fan	Fan Type	Axial Fan
	Motor Type	Constant Torque ECM
	Motor Power	0.19 HP
	Max Full Load Amps	0.41 A

*If equipped/installed

Electric Heat*	Power	1300 W
	Amps	7.6 A
Dimensions	Height	89 in
	Width	14.3 in
	Depth	11.75 in
Weight		110 lbs
Sound	Standard Cooling	58 dBA
Maximum Operating Elevation		3300 Feet (1000 M)

AHRI CERTIFIED® www.ahridirectory.org Unitary Small HP AHRI Standard 210/240 Certification applies only when the complete system is listed with AHRI.

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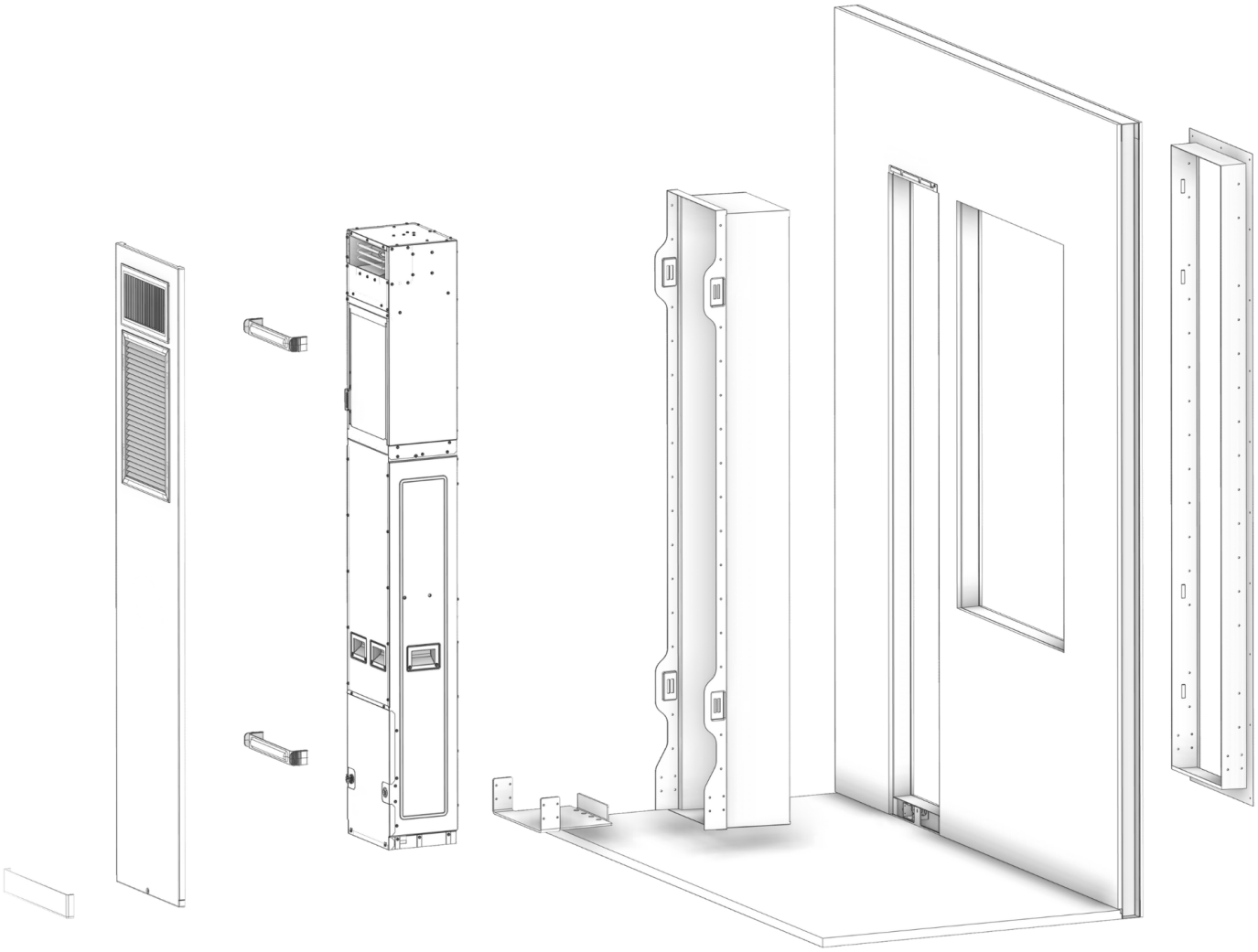


Optimized Installation

Engineered for easy installation

Uncomplicated product assembly and installation that produces positive implications for time on site, material use, and labor costs.

Pairs with large glazing units

Easy to access and service from the interior

Integrated architectural design

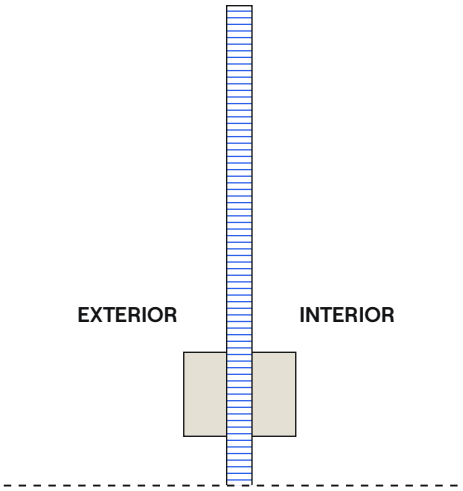
A modern aesthetic and slim profile provides a compact footprint that does not consume valuable interior space and allows for pairing with large glazing units.

Maximizes interior space compared to PTAC, VTAC, and Split systems.

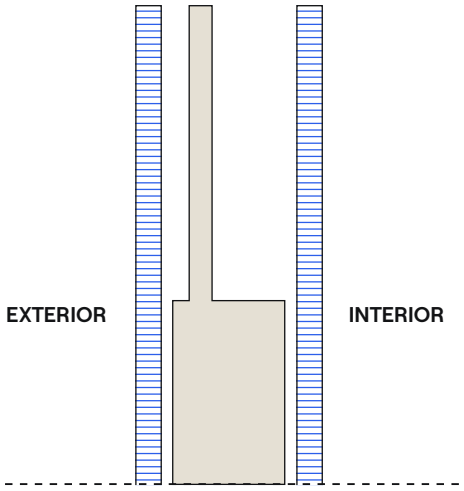
Maximizes Footprint & Lowers Construction Costs

PTAC

Other packaged units consume significant footprint.

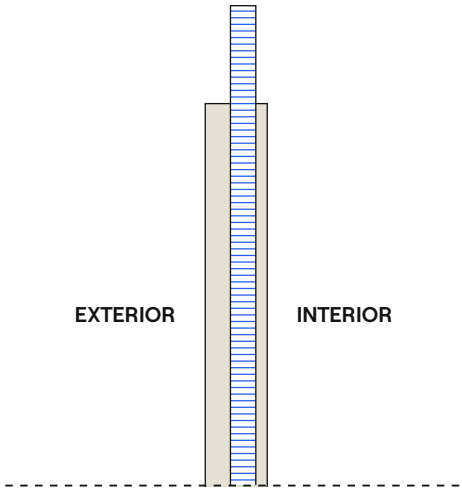


VTAC



AIIR Intelligent HVAC

AIIR's minimal footprint, inside and out.



	VTAC	Split	AIIR Intelligent HVAC
Installation Requirements	• Base platform • Plenum opening • Electrical installation	• Concrete base for the outdoor unit • Metal frame prep hanging indoor unit • Electrical installation	• Fits between 17" stud spacing. Compatiable with various stud and concrete wall constructions.
Installation Process	• Drain pan • VTAC installation on base platform • Water proofing	• Refrigerant lines • Fill refrigerant gas and seal • Indoor blower unit install • Outdoor unit install	• Trim and waterproofing occur in factory • Only requires electric installation and sleeve & support bracket installation
Finishing Requirements	• Ducting • Waterproofing & plumbing • Drywall work • Vent cover installation	• Ducting • Waterproofing & plumbing • Drywall work • Vent cover installation	• Minor drywall work • Interior panel installation

AIIR
Intelligent HVAC

aiirproducts.com