

Integration Solutions from the Experts in HVAC Control





About Airzone

Since 1997, the most demanding HVAC design engineers and installers have relied on Airzone solutions for **residential and commercial projects, where exceeding the set standards for energy efficiency and comfort is essential.**

In 2005, Airzone launched Innobus, its first solution enabling smart home integration of both air conditioning and heating systems.

Today, Airzone collaborates with **leading HVAC manufacturers and major Smart Home and BMS standards** to ensure fast and reliable integration across more than 180 HVAC brands.

Airzone's expertise in managing Heating, Ventilation, and Air Conditioning (HVAC) systems, which are often the highest energy expenditure in a building, coupled with extensive experience in developing integration solutions, has allowed for ambitious R&D projects. These initiatives include **creating demand response solutions and developing intelligent integrations to connect to Distributed Energy Resource Management Systems (DERMS)**, an essential component of electrification and new energy management models.

Airzone operates in 68 countries, **with a team of 500 professionals.** Airzone's professional network includes over 80 distributors and 3,000 top-tier HVAC installation companies worldwide.

Integrating with Airzone

Airzone solutions enable streamlined management for **Inverter/VRF HVAC installations** through the integration with leading integration protocols, Smart Home platforms, and building/property management systems.

Airzone has a unique library of communication gateways, which **include manufacturer-specific communication protocols, allowing for bidirectional communication between the HVAC unit and management system.** Our integration solutions are developed and tested in collaboration with these manufacturers.



AIDOO

climate econnection



ONE-TO-ONE, PLUG&PLAY INTEGRATION

Aidoo devices provide comprehensive control over a building's HVAC systems, including Inverter/VRF units, fan coil units, Air-to-Water heat pumps, and ventilation units. The Aidoo range supports major communication protocols such as **BACnet, Modbus, API, KNX, Z-Wave, and Zigbee**, allowing for fast and reliable integration with Smart Home and BMS platforms. For applications that do not use these standard protocols, Aidoo Pro also offers configurable integration with a library of downloadable drivers. Aidoo enables unified, multi-brand, and multiprotocol management across multiple sites, simplifying control for diverse HVAC setups.



**Product
documentation**



**Aidoo
Compatibility
Tool**



CONNECTIVITY AND BASIC INTEGRATION

Aidoo Wi-Fi responds to the most basic HVAC communication and integration needs.

Aidoo Wi-Fi Inverter/VRF

Acts as a **gateway for Inverter/VRF units control through the Airzone Cloud app** thanks to full two-way communication with the indoor unit. It can be installed and configured in minutes, offering advanced features for both new installations and retrofits.

- **Bluetooth** configuration.
- **Wi-Fi 2.4 GHz** communication.
- **Modbus RTU** integration port.
- **HVAC unit control**: on/off, fan speed, mode, scheduling, set point limits.
- **Indoor unit remote error** code readings.
- Control via:



Aidoo Wi-Fi 2.0

+ New!

Reduced size for better adaptability to all types of units.



STANDART PROTOCOL INTEGRATION

The Aidoo range supports most major closed communication protocols.

Aidoo KNX Inverter/VRF

Integration gateway with the KNX TP-1 closed communication protocol for bi-directional control for Inverter/VRF units.

- ETS configuration.
- Indoor unit remote error code readings.
- Power Supply through the KNX bus cable.
- 3 Configurable digital inputs.



Aidoo KNX Air-to-Water + New!

Aidoo KNX Air-to-Water is an integration gateway that enables two-way communication with Air-to-Water units through protocols developed in collaboration with manufacturers.

- Control of any unit connected in a KNX system.
- KNX control and standard KNX data.
- 3 configurable digital inputs.
- Detection of communication errors.
- Power supply from KNX bus cable.



eConfigure
Schneider
Electric

iddero

PEAK_{NX}

ABB

Aidoo Z-Wave Inverter/VRF

Integration gateway with the Z-Wave closed communication protocol for bi-directional control and communications **for Inverter/VRF units.**

- **Control Parameters:** On/Off, Operation Mode, Room Temperature, Set-Point Temperature, Fan Speed.
- **Acts as a Z-wave repeater**, improving network reliability.
- **Standard & Z-Wave SmartStart Configuration.**
- **Indoor unit remote error** code readings.
- **Power supply** through the indoor unit or external power source.
- **Standard thermostat command** classes defined by the Z-Wave Protocol.



Partners: SMART CONNECTIVE



Partners: POLYNHOME

Aidoo Zigbee Inverter/VRF

Integration gateway with the Zigbee closed communication protocol for bi-directional control and communications **for Inverter/VRF units.**

- **Control Parameters:** On/Off, Operation Mode, Room Temperature, Set-Point Temperature, Fan Speed.
- **Acts as a Zigbee repeater**, improving network reliability.
- **Wireless Zigbee configuration.**
- **Power supply** through the indoor unit or external power source.



PRO INTEGRATION

The Aidoo Pro line offers a fast and reliable solution for customizable, configurable integration, offering an array of options beyond closed communication protocols.

AIDOO PRO FEATURES

- **Dual W-Fi 2.4/ 5 Ghz** communications.
- **Airzone Cloud App** control & configuration.
- **Customizable Smart Home & Building Management System** integration through:



- **Downloadable drivers :**



- **API integration**



- The Aidoo Pro line has **options available for:**

- » **Inverter/VRF.**
- » **Air-to-Water.**
- » **Fan coil units.**
- » **Ventilation systems.**

- **Integration with third-party installations:**

- » **Digital inputs** for occupancy sensors & open window contact.
- » **12 VdC relay output** for supplemental heat.
- » Smart Thermostat integration



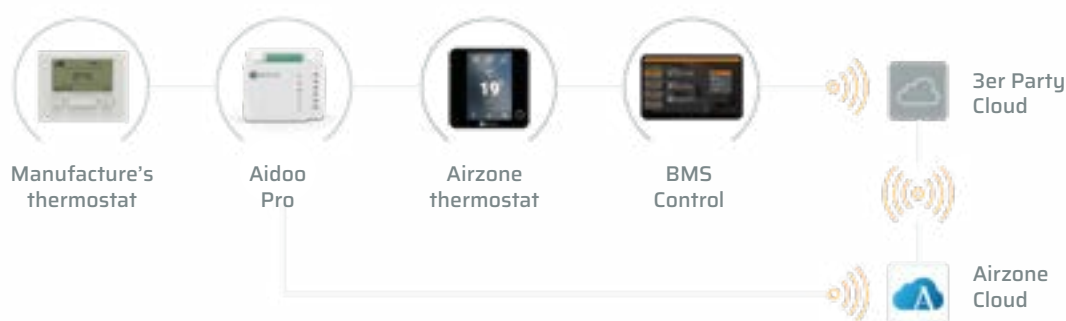
- » **Voice Control & IoT.**



Aidoo Pro Inverter/VRF

Integration gateway with an array of customizable integration options for bi-directional control for Inverter/VRF units.

- **Control Parameters:** On/Off,
- **Operation Mode, Room Temperature, Set-Point Temperature, Fan Speed.**
- **Indoor unit remote error** code readings.
- **Digital inputs** for occupancy sensors and open window contact.
- **12 VdC relay output** for supplemental heat.
- **Compatible with Blueface thermostat, AirQ Sensor, and AirQ Box.**
- **Dry contact** for Smart Thermostat integration.



Aidoo Pro HUB Inverter/VRF, Air-to-Water + New! and Ventilation

Aidoo Pro HUB is a robust solution for the remote management and integration of various unit types, combining wired (Ethernet) and **wireless connectivity via Dual Wi-Fi (2.4/5 GHz) with Cloud services.** It centrally controls a single AC unit through the Airzone Cloud app, available for iOS and Android.

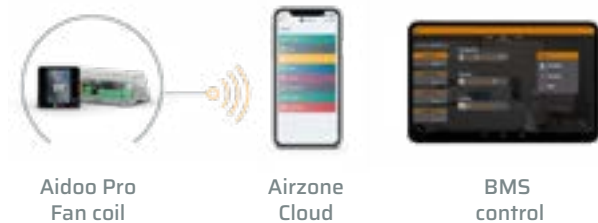
- Integration port for **Modbus RTU/TCP, BACnet MS-TP/IP, Lutron Palladiom thermostat.**
- **Compatible with Blueface thermostat, AirQ Sensor, and AirQ Box.**
- **Auxiliary heat management** and heat source locking.
- **Automatic mode switching** with the adjustment of two set-point temperatures.
- Integration via **local API and Cloud API, multicast mDNS.**



Aidoo Pro Fan coil

Integration gateway with an array of customizable integration options for bi-directional control and communications for 0-10V and 3-speed fan coil units.

- **All/nothing or 0-10 V** solenoid valves control.
- **Digital inputs** for occupancy sensors and open window contact.
- **12 VdC relay output** for supplemental heat.
- **Supply temperature detection** for the automatic mode change.
- **Blueface thermostat** or room temperature probe for temperature control.



Aidoo Pro Air-to-Water

Integration gateway with an array of customizable integration options for bi-directional control and communications for Air-to-Water units.

- **On/Off control** of up to 2 water circuits (if permitted by the unit).
- **Automatic mode change.**
- **Set-point temperature selection and limitation.**
- **Shutdown timer.**
- **Water temperature reading** and set point selection.



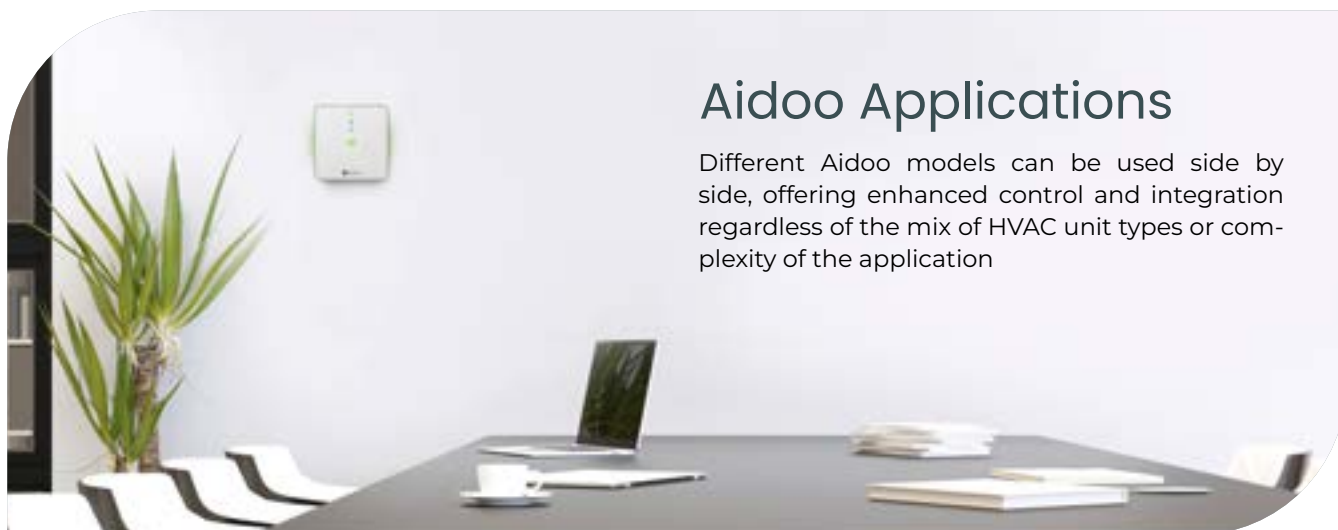
Aidoo Pro Ventilation

Integration gateway with an array of customizable integration options for bi-directional control and communications for ventilation systems, ensuring quality indoor air with ease.

- Reading of **air quality sensors**.
- Reading of the **extraction and supply temperature**.
- **Humidity reading.**
- Control of **operation mode and speed.**
- **Heating recovery operation.**
- **Bypass operation.**
- **Filter status.**



¹Optional.

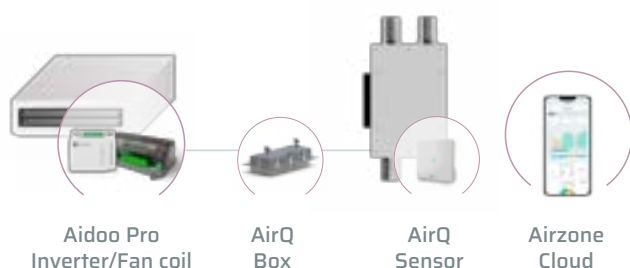


Aidoo Applications

Different Aidoo models can be used side by side, offering enhanced control and integration regardless of the mix of HVAC unit types or complexity of the application

Aidoo Pro Air-to-Water with Aidoo Pro Fan coil

Aidoo Pro Air-to-Water, **combined with Aidoo Pro Fan coil**, can manage systems that use an Air-to-Water unit for production and a fan coil unit for emission. They can both be controlled in conjunction through the Airzone Cloud app.



Aidoo Pro Inverter/Fan coil with AirQ Sensor and AirQ Box

Aidoo Pro Inverter, **combined with the AirQ Box from Airzone's dedicated air quality line**, provides an integrated solution for managing HVAC and air purification in systems with inverter units, all accessible through the Airzone Cloud app. This setup also **includes the AirQ Sensor, connected to a ventilation unit**, to monitor and manage indoor air quality. Designed for easy installation and configuration, this combination of devices streamlines control, **enhances air quality, and ensures a healthy, comfortable environment.**

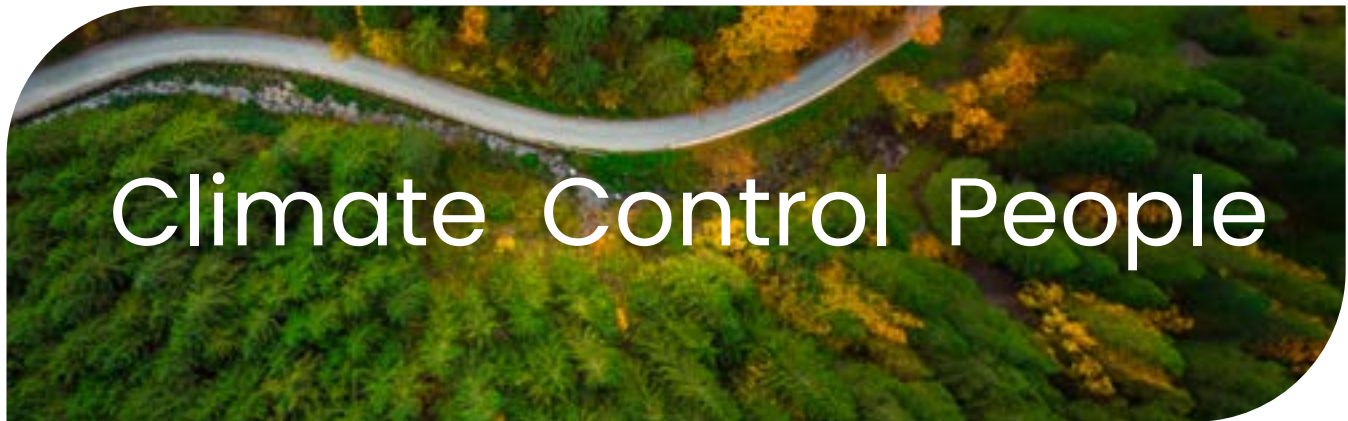
Comparison of Aidoo solutions

	AIDO WI-FI	AIDOO PRO	AIDOO KNX	AIDOO Z-WAVE	AIDOO ZIGBEE
AC Unit Type	Inverter/VRF and Wi-Fi 2.0	Inverter/VRF, Fan coil, Air-to-Water, Ventilation and Pro HUB	Inverter/VRF, Air-to-Water	Inverter/VRF	Inverter/VRF
Connectivity	Wi-Fi 2.4 GHz	Dual Wi-Fi 2.4-5 GHz	KNX	Z-Wave Plus	Zigbee
App Airzone Cloud	Yes	Yes	-	-	-
Voice Control	Yes	Yes	-	-	-
Modbus	-	Modbus RTU and TCP	-	Modbus RTU	Modbus RTU
Port Ethernet	-	Aidoo Pro HUB	-	-	-
BACnet MS/TP BACnet IP	-	Available for Inverter/VRF, Fan coil and Ventilation	-	-	-
GYW Input for Smart Thermostats	-	Available for Inverter/VRF and Pro HUB	-	-	-
Rest API & Integration Drivers	-	Yes	-	-	-
Cloud API	Yes	Yes	-	-	-
Airzone Thermostat	-	Available for Inverter/VRF and Fan coil	-	-	-
AirQ Air Quality	-	Yes	-	-	-
Digital Input	-	Presence and window sensors	3 configurable inputs	-	-
Auxiliary Heat Output	-	Available for Inverter/VRF, Fan coil and Pro HUB	-	-	-



climate econnection





ZONED AND HYBRID SYSTEMS INTEGRATION

When it comes to complex projects, requiring the combination of various HVAC technologies to maximize energy efficiency and optimize thermal comfort, **Airzone's multizone integration offers a reliable and scalable technical solution.** These solutions are designed to communicate and coordinate multiple systems, ensuring centralized management and

precise zoned control in each space. Thanks to their compatibility with major automation standards and modular architecture, they are ideal for adapting to diverse building typologies. With Airzone, **the integration of hybrid HVAC applications has the potential of becoming a sustainable competitive advantage.**

Airzone HUB

The Webserver Hub acts as a bidirectional communication gateway, connecting HVAC units to protocols such as BACnet and Modbus. However, the integration options go beyond standard protocols, **offering a library of integration drivers to connect HVAC systems into the leading Home Automation and BMS platforms**

Designed for multi-brand, multiprotocol environments, it enables centralized management of sophisticated HVAC systems, offering precise control across multiple zones and technologies.



Additionally, **the Hub integrates with the AirQ product line to manage Indoor Air Quality (IAQ),** improving both comfort and health within the building.

- Control up to **32 Airzone systems.**
- **Ethernet port.**
- RS485 port for **BACnet MS/TP, Modbus RTU.**
- **Dual Wi-Fi 2.4-5 GHz.**
- **Bluetooth Low Energy (BLE)** connectivity for configuration.
- **Firmware and system remote updates.**
- **Remote management of system errors.**
- Control via:



LOCAL API

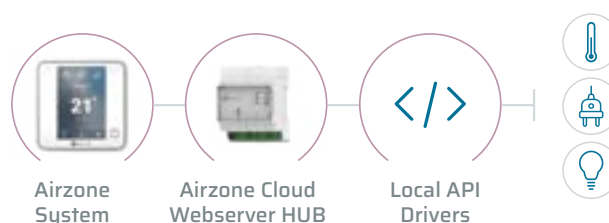
Direct IP communication with the local web server, Airzone Cloud Webserver HUB.

The local API is open to allow the integration of HVAC applications with home automation systems.

- **Drivers téléchargeables :**



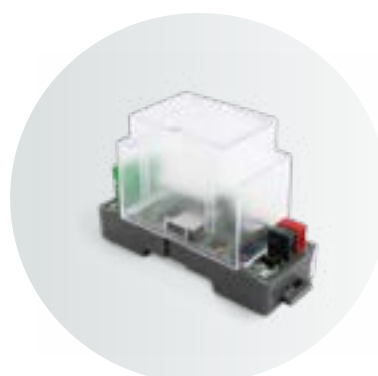
- **Intégration par API :**



KNX Gateway

The Airzone KNX Gateway provides efficient integration for zoned and hybrid HVAC systems within KNX Smart Home and BMS environments. Built to manage complex heating and cooling setups, the KNX Gateway enables **precise control of multi-zone DX units and hybrid systems** that incorporate both air conditioning and heating technologies. Fully compliant with KNX communication standards, it ensures reliable performance and centralized management of HVAC installations, **optimizing energy use and enhancing comfort across all zones.**

- Control for up to **14 individual zones.**
- **Control Parameters:** On/Off, Operation Mode, Room Temperature, Set-Point Temperature, Fan Speed.
- **KNX Certified Product.**
- **ETS Configuration.**
- **One KNX Integration Gateway** per Airzone Zoning System.
- **Compatible with KNX thermostats** and certified products.



Airzone Integration Solutions Map

	DIRECT EXPANSION		AIR-TO-WATER					VENTILATION
HVAC Control Communication Protocol	Individual Zone	Multizone	Individual Fan Coil Unit	Air-to-Water Heat Pump	Fan Coil Multizone	Underfloor Heating/Cooling Multizone	Water Radiators Multizone	Monozone
BACnet MS/TP	Aidoo Pro DX	Webserver HUB	Aidoo Pro Fan Coil	-	Webserver HUB	Webserver HUB	Webserver HUB	-
BACnet IP	Aidoo Pro DX	Webserver HUB	Aidoo Pro Fan Coil	-	Webserver HUB	Webserver HUB	Webserver HUB	-
Modbus RTU	Aidoo Zigbee Aidoo Z-Wave Aidoo Pro DX Aidoo Wi-Fi	Webserver HUB	Aidoo Pro Fan Coil	Aidoo Pro Air-to-Water Heat Pump	Webserver HUB	Webserver HUB	Webserver HUB	Aidoo Pro Ventilation
Modbus TCP	Aidoo Pro DX	Webserver HUB	Aidoo Pro Fan Coil	Aidoo Pro Air-to-Water Heat Pump	Webserver HUB	Webserver HUB	Webserver HUB	Aidoo Pro Ventilation
KNX	Aidoo KNX	Webserver HUB	-	Aidoo KNX	KNX Gateway	KNX Gateway	KNX Gateway	-
Cloud API	Aidoo Pro DX	Webserver HUB	Aidoo Pro Fan Coil	Aidoo Pro Air-to-Water Heat Pump	Webserver HUB	Webserver HUB	Webserver HUB	Aidoo Pro Ventilation
Rest API	Aidoo Pro DX	Webserver HUB	Aidoo Pro Fan Coil	Aidoo Pro Air-to-Water Heat Pump	Webserver HUB	Webserver HUB	Webserver HUB	Aidoo Pro Ventilation
Zigbee	Aidoo Zigbee	-	-	-	-	-	-	-
Z-Wave	Aidoo Z-Wave	-	-	-	-	-	-	-

+180 COMPATIBLE BRANDS

+40 INTEGRATION POSSIBILITIES

Heating, Ventilation, and Air Conditioning (HVAC)



Domestic Hot Water (DHW)



Building Management Systems & Home Automation Platforms



Standard protocols



IoT & Voice Control



Contact Airzone

.....

airzonecontrol.com

+34 681 327 408

HQ Andalusia Technology Park
Marie Curie, 21 · 29590 Málaga (Spain)

