



# Air-Fi® Wireless System

Get comfortable, with industry-leading reliability and performance



# Cut the wires — and get comfortable with Trane Air-Fi wireless.



**Trane® Air-Fi® wireless communication is a reliable, flexible solution that frees you from the hassles associated with traditional wired systems for your building controls.**

With Trane Air-Fi wireless, you get easy problem solving, efficient performance and cost savings over the life of the equipment.

Trane Air-Fi wireless provides worry-free operation. The system offers twice the signal range and four times the potential paths compared to other wireless systems on the market to help prevent communication failures. Additionally, the lifetime\* battery eliminates the need to replace batteries over the life of the system and saves time and money.

Building controls projects are greatly simplified by reducing the engineering, estimating and project management tasks associated with wired communication systems. The result is fast and easy installation with less risk.

Since you're not tied down by wires, Trane Air-Fi wireless lets you easily expand or change your space whenever or wherever you need — while also minimizing occupant disruption. And because the secure system is built on a platform that supports open standards, adding or moving unit controllers, zone sensors and other devices down the road can be easy and affordable.

So get comfortable with Trane Air-Fi wireless — cut the wires and get peace of mind with a reliable, flexible solution.



# The advantages of wireless. The reliability of Trane.

You want a system that will work as expected from day one and continue to provide reliable performance for years down the road. Trane gets that.

## Redundancy reduces risk

Redundant, self-repairing mesh technology helps prevent communication failures by maintaining wireless communication, even when signals are obstructed. Disrupted signals automatically and immediately reroute around obstacles. This can eliminate the risks of traditional wired systems, which simply fail when wires are cut or damaged. There is no longer concern about a single point of failure for your entire network.

## Stability through greater range

Trane offers a typical 200-foot indoor signal range, with up to four times the number of potential paths, extending up to a half mile when unobstructed. With double the range and greater signal strength compared to other typical wireless systems on the market, Trane Air-Fi wireless spreads a strong signal throughout your building for improved reliability and performance.

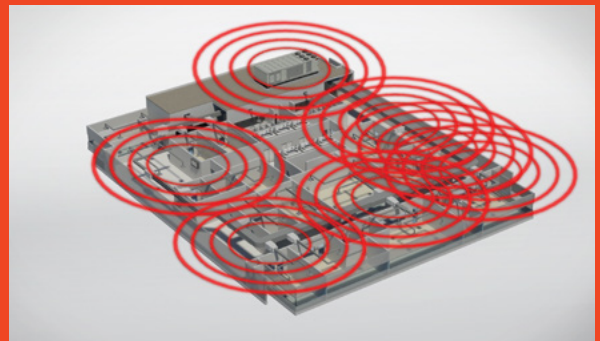
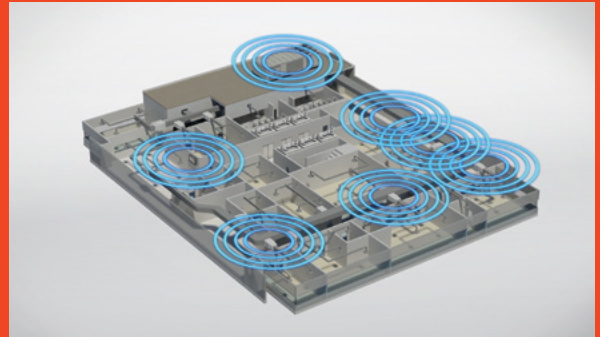
## Multiple sensing options with lifetime\* batteries

Air-Fi wireless sensors are able to measure temperature, relative humidity, CO2 and occupancy status. With a battery life that's up to three times what competitors offer, Trane Air-Fi wireless gives you a maintenance-free solution, so you won't have to replace batteries for the life of the system in most installations.

## Factory-installed and addressed

The Trane Air-Fi interface is available factory-installed and addressed, which means the work is done in a controlled environment that makes it more repeatable and consistent. This ensures higher installation quality that results in better building performance for you.

\* Based on typical indoor operating conditions.



Trane Air-Fi wireless creates a system with twice the range of other typical systems.

## Reliable performance

Built on BACnet/ZigBee® wireless mesh enables secure and reliable wireless monitoring and control over commercial building systems. Trane Air-Fi wireless also conforms to the IEEE 802.15.4 standard, so your wireless BAS communication system will seamlessly coexist with other wireless systems — including Bluetooth® and Wi-Fi® — without interference.





## Worry-free operation

Trane Air-Fi wireless eliminates the headaches associated with troubleshooting wired networks.

- Wire-free communication extends throughout the entire network, for reduced troubleshooting compared to traditional wired systems.
- Self-healing mesh technology with redundant signal paths help prevent communication loss.
- Maximum signal range ensures reliable data transfer at longer range.
- Building automation networks are secured by the use of AES-128 encryption, keys and device authentication.
- Trane® Air-Fi® wireless uses a separate, secure network from those used by your IT systems.
- The system reliably coexists with other wireless systems and networks in your building, so you can have multiple wireless solutions that conform to IEEE 802.15.4 standards to best meet your needs.
- Temperature, humidity, CO2 and occupancy information from one sensor — with all the advantages of wireless — result in a streamlined process and ease of operation.

## Simplified installation

With fast and easy installation, Trane Air-Fi wireless contributes to on-time, on-budget project completion.



Since there is no need to run wire in your facility, not only is your installation time less, your project is less complex and the amount of work that must be done on-site is reduced. In existing buildings, the result is less disruption to your facility and its occupants.

### **Less risk**

Wireless technology helps you avoid disturbing existing structures and potentially hazardous materials. This decreases your cleanup costs and your risk involved with installation, especially in older or historical buildings. Also, unanticipated delays due to challenging installation conditions, such as concrete or brick walls, can be minimized or eliminated, saving time and money.

### **Comprehensive solution**

A single wireless solution is all that's required to connect the equipment level, system level and sensor level, for simplified installation. You also get a lower installation cost, since multiple solutions are not needed.

### **Fewer repeaters**

The maximum signal range and strength of Trane Air-Fi wireless — along with the self-repairing mesh technology — reduces the need to install additional repeaters or hardware to ensure a strong signal throughout the building. With Trane Air-Fi wireless technology, for most buildings, there is seldom a need to conduct a pre-installation site survey. This decreases your engineering time and installation time and cost.

### **Affordable**

Average installation costs of a Trane Air-Fi wireless system are competitive compared to traditional wired systems. And because a wireless system requires fewer parts and components during installation, it reduces the labor time and costs involved and the overall complexity of the project. Lowering installation costs with a less complex wireless system can mean that projects that weren't financially feasible in the past may now be within your reach — and your budget.



Trane Air-Fi wireless is a flexible, adaptable system that allows you to easily and affordably reconfigure your space as your building needs change.

## Flexibility today, tomorrow and beyond

### **Wireless communications sensors can be placed virtually anywhere.**

Spaces can be easily reconfigured, since moving a device is easy and requires little repair work. As a result, devices can be moved in minutes, so it's easy to optimize occupant comfort and place sensors where they won't detract from your building's historical accuracy or compromise architectural design.

### **Flexibility through signal range.**

With a typical 200-foot indoor signal range and maximized signal strength of Trane® Air-Fi® wireless, devices can be placed in the best location for performance, accuracy and aesthetics. This gives you more flexibility in building usage and spacing — to best meet occupant comfort needs.

### **Built on BACnet standards.**

Air-Fi wireless uses BACnet/ZigBee® wireless mesh. This allows customers to integrate devices in the future when the building expands or changes. Adding unit controllers, zone sensors and other devices down the road can be easy and affordable, which increases options and flexibility as technology and building needs evolve.





## Get comfortable with Trane Air-Fi wireless.

A Trane Air-Fi system will prove its value as a reliable, cost-effective solution over and over again. In addition, wireless offers less risk to you, minimized disruption for your building and its occupants, and greater flexibility for the future.

The self-repairing mesh technology, greater signal strength and lifetime\* battery ensure you will get worry-free system performance and comfort.

When reconfiguring spaces, the cost to relocate zone sensors is nearly eliminated — reducing your cost over the life of the system. And Trane Air-Fi is built on a platform that supports open standards to ensure easy, affordable integration of future devices and technology.

All that — and the unmatched reliability you get from Trane. So let's cut the wires and get comfortable with Trane Air-Fi wireless.



\* Based on typical indoor operating conditions.

Learn more at [trane.com](https://trane.com)



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.com](https://trane.com) or [tranetechnologies.com](https://tranetechnologies.com).

*All trademarks referenced in this document are the trademarks of their respective owners.*

© 2020 Trane. All Rights Reserved.

BAS-SLB064-EN  
07/28/2020