

INFOAIR CLIMATE SOLUTIONS

REMOTE MONITORING FOR PORTABLE HEATING SOLUTIONS

REMOVE THE BLINDFOLDS

IN THE PAST

You did not know ...

- Where your portable heaters were
- If the burner was working properly
- How many hours the heater had been in operation and when
- What the temperature was in the room you were heating
- How much fuel there was left in the tank
- ... Unless you went onsite physically

TODAY

InfoAir gives you ...

- GPS location with 1m precision
- Burner status and error codes
- Day- and time-stamped hours of operation
- Actual room temperature
- Fuel level readings

... In real time no matter where you are



INFOAIR - REMOTE MONITORING FOR PORTABLE HEATERS

STAY INFORMED 24/7

InfoAir is a versatile remote monitoring system designed to enhance the use of portable heaters which have long been a versatile and cost-effective choice for various industrial and commercial applications. But without communication capabilities they require regular physical visits for status checks.

Flexibility and value for money have long been the hallmarks of portable heaters, which have been used for decades across the globe in various industrial and commercial settings, right from construction sites to farming sheds and events.

Until now, they have typically operated without communication tools and to check their operational status, physical onsite visits have been required. For companies owning and managing a large fleet

of units this is a time-consuming and expensive task that may result in equipment running idle in between the visits.

InfoAir addresses this issue and offers several other advantages. It simplifies fleet management, providing real-time data on performance and operational status to anywhere. Remote alerts in case of downtime, low fuel, upcoming service/maintenance requirements or similarly minimises downtime and offers peace of mind.



THE BENEFITS

Get more done faster - for less

• Simplified fleet management:

Monitor and control an entire fleet of heaters from a distance

• Better safety and compliance:

Real-time monitoring of critical parameters detects safety risks promptly and automates data collection

Preventive maintenance and minimised downtime:

Monitoring usage patterns and error codes helps you schedule maintenance and repairs in advance thus minimising unexpected downtime

• Optimal resource allocation:

real-time visibility of heating demands and remote adjustments across different locations and events.

• Cost savings and customer satisfaction:

Optimised energy consumption, predictive maintenance and other benefits give reliable heating solutions that enhance customer satisfaction

Remote troubleshooting and technical support:

Service technicians can remotely access the monitoring system, diagnose problems, and guide on-site staff to resolve issues efficiently

InfoAir offers remote access to the following functionality and features in real time

- Possibility to remotely lock and unlock the heater
- Detection of the availability of electricity and monitoring of voltage level
- Detection of the operational status of the portable heater
- Fuel level control (optional – fuel level sensor required)
- Room temperature and humidity control (optional – bluetooth temperature/humidity sensor required)
- GPS tracker enable to track the location of the portable heater
- Set up of:
 Preheating time
 Maximum temperature threshold
 Cooling time
 Cooling temperature threshold
- Alarm notifications
- Report and chart generation

Application areas:

- Rental companies
- Events and festivals
- Construction sites

- General industry and production
- Warehouses and storage rooms
- Camps and field hospitals

HOW INFOAIR WORKS

The InfoAir system is based on three-part architecture designed for efficient remote monitoring of portable heaters. Let's break down each component to grasp how it works:

Electronic board

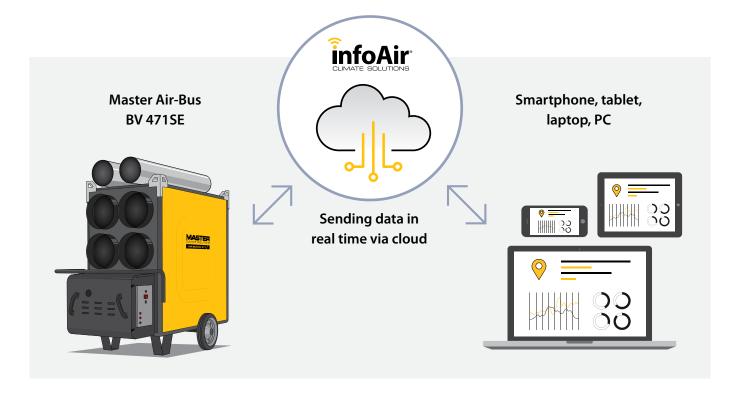
At the heart of the InfoAir system lies the electronic board, a central control unit overseeing various components of the portable heater. These include the burner, fan, control keyboard, NTC probe, and remote thermostat. The electronic board determines the heater's operational logic, offering a crucial function by making all relevant parameters accessible to the InfoAir system. This also means that heaters without an electronic board are not compatible with the InfoAir system.

Tracker-GPS

The second component, the tracker-GPS, interfaces with the electronic board to facilitate data transfer to and from the computer platform. Beyond this, it delivers real-time information concerning the heater's location and fuel level. An additional feature includes the capability to integrate a Bluetooth sensor, enabling the tracker-GPS to read ambient air temperature, effectively transforming it into a wireless remote thermostat.

Computer platform

The third and final piece of the InfoAir puzzle is the computer platform. The platform processes the data that is collected by the electronic board and transmitted via the tracker-GPS. Its primary role is to present this information in a comprehensible manner for users and operators. Not only does the InfoAir platform display vital data, it also makes it possible for operators to send specific commands to the electronic board, for instance setting parameters, activating functions, or inhibiting the heater's operation. In essence, the computer platform serves as the user-friendly interface that streamlines communication and control within the InfoAir system.



HEATER REQUIREMENTS

Unlike traditional portable heaters, the new range of Master AIR-BUS heaters uses a completely different operating principle where burner and fan are no longer regulated by a dynamic balance of thermostats but rather operate under the control of a microcontroller. This new configuration gives a great flexibility of the heater's use and streamlines its construction, while simplifying maintenance. It also makes the heaters compatible with InfoAir.

Microcontroller

The microcontroller makes it possible to accurately define the operation of the heater. The firmware designed for the new AIR-BUS is composed of 8 phases that define the operating cycle of the heater. The firmware uses 32 parameters that govern the 8 phases. Some of those parameters can be modified by the operator, who can decide how the heater should work. This approach makes it possible to adapt the new AIR-BUS to multiple needs in a very simple way.



Temperature sensor

At the core of the innovative AIR-BUS architecture lies a crucial component: the temperature sensor. This sensor is placed in the outgoing airflow. The collected data determines how the heater operates. The temperature sensor is of the NTC type, a very robust technology, and it is incorporated into a steel body, strengthening its construction and ensuring long-term reliability.



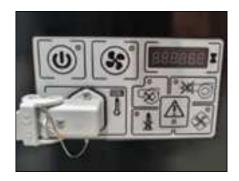
The control panel has been designed with clarity and operator usability in mind. When a button is pressed, the LED is activated – all alarm notifications will also activate the LED. The 6-digit display shows various information, including supply voltage, hour counter or dedicated graphics representing specific phases.

Dedicated graphics on the 6-digit display also convey:

- The heater has been remotely locked (InfoAir)
- The remote thermostat has tripped
- The heater is overheated
- More than three ignition attempts have been made

The range of portable heaters that are compatible with InfoAir is currently being expanded. Simply look for the InfoAir label on your unit or contact your nearest Dantherm Group representative for more information.







HOW TO GET STARTED

Getting started is simple and easy.

And the first month runs as a free trial after which you can either decide to continue or opt out. Just follow the below steps.

- 1. Simply scan the QR code on your InfoAircompatible heater or go to the InfoAir product on www.danthermgroup.com.
- 2. Complete the submission form and you will then receive the full agreement and payment details via email.

Registration link:

www.danthermgroup.com/uk/products/infoair-remote-monitoring

Your dashboard login page: Log In

- **3. Activate your subscription** login to your dashboard and start to set up your heater parameters
- 4. You're all set!

For further details please contact our local sales representatives. We would be happy to assist you to make sure you get the best possible performance of the InfoAir system.



Scan the QR code



Optional accessories



Remote Bluetooth temperature and humidity sensor -Range 500m 4260347



Fuel level sensor for external tanks VET 700, length 1m -4250542 VET 1000, length 1.4m -4250543



USB-RS232 Converter -4250539



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