EN 50130-4

Air2-SenseTH100/W

Wireless temperature sensor

Installation and programming manual

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1. Descriptions of sensors Air2-SenseTH100/W

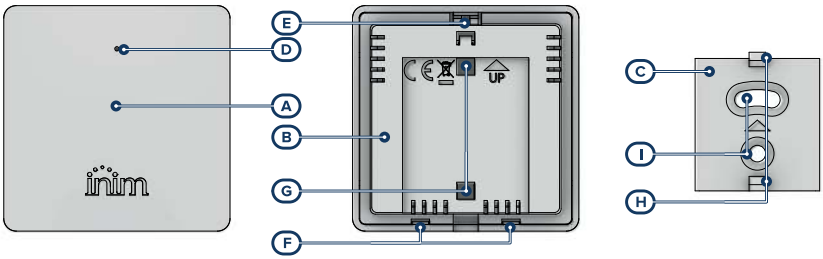
Air2-SenseTH100/W is an ambient temperature sensor.

Functioning of the sensor is determined by the following measurement accuracy based on actual ambient conditions:

temperature measurement range	from -10 to +60 °C
temperature accuracy	±0.3°C
humidity measurement range	from 10 to 90%
humidity accuracy	±3%RH

The reaction time of the sensor to the change in ambient temperature is approximately 2 minutes.

1.1 Description of parts



[A]	Temperature sensor – front	**[F]**	Pins to secure cover
[B]	Temperature sensor – back	**[G]**	Holes to secure base
[C]	Mounting bracket	**[H]**	Pins to secure base
[D]	Red LED (ongoing communication)	**[I]**	Mounting holes
[E]	Hook to secure cover ENROLL button		

Package contents

- Temperature sensor
- 2 wall plugs with screws for wall mounting
- Installation guide
- CR2032 battery to be inserted

1.2 Technical specifications of Air2-SenseTH100/W

Battery	
type	Lithium CR2032 3V
estimated life	4 years
'Low battery' fault voltage	< 2.12V
Current draw	
during standby	4,5µA
maximum	40mA
Operating environmental conditions	
Temperature	from -10 to +60 °C
Relative humidity	from 10 to 90 % without condensation
Environmental class	II
Dimensions (W x H x D)	55 x 55 x 13 mm
Weight	22 g

(EN IEC 62368-1)

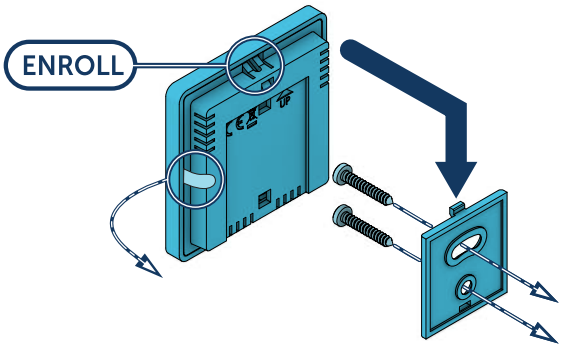
Terminal type	**BATTERY**	ES1, PS1

Technical specifications of Air2 system	
Operating frequency	
range	868.0 - 868.6 MHz
selectable channels	868.1, 868.3, 868.5 MHz
RF output power	25mW e.r.p.
Communication type	Two-way
Modulation	GFSK
Device monitoring	from 12 to 250 minutes

Note

In order to comply with the EN 50131-1 standards the alarm system supervision time must be below 120 minutes.

2. Installing the Air2-SenseTH100/W



1. Remove the bracket from the detector base.
2. Attach the bracket to the installation surface paying attention to the ‘UP’ direction indicated on the bracket itself and on the back of the detector.
3. Remove the protective plastic tab on the battery.
4. Check that the red LED lights up for a few moments.
5. Attach the detector base to the bracket using the appropriate pins.
6. Using a pointed object press the ‘ENROLL’ button located below the hole inside the cover retainer hook (*Description of parts, [E]*).

Attention!

Do not install on surfaces that are heated or cooled by air conditioning appliances. Do not install near air flow from air conditioning appliances.

Ferromagnetic materials which are located in the vicinity of the mounting position can influence the magnetic field and can result in the reduced operating capacity of the device.

The advisable installation height is 1.5m.

Once mounted onto the bracket, the detector casing must be stable.

In order to check if the device is functioning properly, it is advisable to touch it or breathe onto it in the vicinity of the logo on the cover and wait a few seconds. At this point the red LED only lights up if the device is properly configured and operating.

Battery replacement

For the replacement of the appliance power batteries, the installer must use only CR2032 type batteries.

1. Remove the cover by pressing on the retaining hook (*Description of parts, [E]*) and rotating it around the retaining pins (*Description of parts, [F]*).
2. Remove the PCB from its housing inside the detector. It is advisable at such times also to clean any dust from the circuit.
3. Insert the battery paying attention to the polarity (positive towards the outer side of the PCB).
4. Press the **ENROLL** button in order to be sure that the device is synchronized with the wireless transceiver.
5. Place the PCB back into its housing inside the base.
6. Replace the frontplate.

2.1 Enrolling a wireless device

The enrolling process allows you to associate an INIM wireless device with the Air2-BS200 transceiver that connects to the anti-intrusion control panel.

This procedure varies depending on the control panel in use and the programming software or application:

1. Access the control-panel programming section.
2. Select the device to be enrolled in accordance with its type:
   - an input terminal, for a detector (motion detector, magnetic contact, etc.)
   - an output terminal, for an output device connected to a terminal of the Air2-MC300 magnetic contact
   - a keypad
   - a sounder/flasher
   - a key, for a remote control device, selecting as the associated reader the one simulated by the transceiver
   - a temperature sensor
3. Set the device as 'Wireless'.
4. Start the learning phase from the control panel.

Via Prime/STUDIO software application

Once the solution for the system to be designed has been opened, click on the **System Layout** button on the menu on the left. Then in the section on the right click on the **Add device on BUS** button.

A window opens where you can select the devices to be configured and add them to the configuration.

In the section on the left you can increase the number using the button corresponding to the selected device type.

To remove a device from the structure, work through the Add device procedure, but instead deselect the device you want to remove

Alternatively, you can access the programming section by clicking on the relevant button on the menu on the left, and from the list that appears click on the **Delete** button that corresponds to the line of the device to be removed.

Via keypad

Enrolling of wireless devices is possible by enabling the menu options in the installer menu section:

`Type in code` (Installer), `PROGRAMMING TemperatureProbe, Enable/disable`

In this section it is possible to add the device to the configuration or delete it, by means of keys "■" and "□".

As soon as the device is enabled it must be configured as 'Wireless':

`PROGRAMMING TemperatureProbe, ChoosePeripheral, "probe", Wireless`

Once the **OK** button has been pressed, it is necessary to work through the menu options in order to enroll it.

3. Programming of Air2-SenseTH100/W

The programming of Air2-SenseTH100/W devices, as peripherals of the Inim Electronics control panel, can be carried out either via software or from a keypad.

3.1 Programming thermostats

Via software

Click on the **Thermostats** button on the menu on the left, the section on the right will provide the list of all the configured thermostats.

Selecting one of the options will allow you to configure the parameters of the single thermostat by clicking on the button.

Via keypad

From the installer menu, the parameters relating to the thermostats can be reached in accordance with the type of associated device.

- In the case of stand-alone module connected to the BUS or connected via wireless connection:

  `Type in Code (Installer), PROGRAMMING TemperatureSens., ChoosePeripheral`

- In the case of a thermal probe integrated in a keypad:

  `Type in code (Installer), PROGRAMMING Keypads, ChoosePeripheral`

- In the case of a thermal probe connected to an expansion:

  `Type in Code (Installer), PROGRAMMING Terminals, "thermal probe terminal"`

- If the terminal is associated with a thermostat, this can be reached via:

  `Type in Code (Installer), PROGRAMMING TemperatureSens., ChoosePeripheral`

3.1.1 Chronothermostats parameters

Parameter			Software section	Installer menu section
Description	String that describes the temperature sensor, customizable by the installer		 Configured thermostats, selected thermostat	`TemperatureProbe, ChoosePeripheral, "sensor", Description`
Activatable outputs	In this section you can select the outputs that can be activated by the thermostat function relating to the probe being programmed. There are 4 outputs that can be activated when the thermostat is in “summer” mode and 4 when it is in “winter” mode.			✓
Temperature hysteresis	Enter the value of the hysteresis of the sensor.	The entered value must be		`Hysteresis`

Parameter			Software section	Installer menu section
		expressed in °C decimals (from a minimum of 0 to a maximum of 4).		
Programming the chronothermostat	Section relative to the programming of chronothermostat. You can program the thermostat and also adjust its temperature setting and operating times. The adjustment of the temperature (manual or operating time mode) is allowed by indicators on level bars. The **Read** button allows you to read the thermostat schedule and ambient temperature detected by the provided thermometer. The **Write** button allows you to set the schedule.			
Enroll	Button to start the procedure for enrolling wireless devices (*Enrolling wireless devices*).		 Configured thermostats, wireless thermostat	Wireless
Use detector LED	The red LED indicates a communication in progress between the device and the control panel.			Terminals, "terminal",Options, Use sensor LED
Disable wireless monitoring	Enabling this option (disabled by default), disables monitoring on the wireless detector. In the event of the loss of the specific detector, no event will be generated and no fault signal will be signalled on the keypad.			No superv. WLS
Monitoring wireless	This software section starts a monitoring phase on the variation of the signal transmitted by the device and background noise detected over time.			

3.2 Real-time

For each configured device the software provides a direct software-to-device connection which allows visualization of the real-time values of the following features:

Signal reception level	This series of notches represents the reception level of the wireless signal of the device as received by the Air2-BS200 transceiver.
Battery charge level	Percentage of the device battery charge.
RF analysis	Function to monitor the variation of the signal transmitted by the device and the background noise detected through time.

Such data can be reached through the ‘Real time’ section relating to the programming of each wireless device or through the ‘Monitoring’ section which provides an overview of all the devices connected to the control panel.

4. General information

4.1 About this manual

Manual code: DCMIINE0A2SENSETH100W8E

Revision: 110

4.2 Manufacturer's details

Manufacturer: Inim Electronics S.r.l.
Production plant: Centobuchi, via Dei Lavoratori 10
63076 Monteprandone (AP), Italy
Tel.: +39 0735 705007
Fax: +39 0735 734912
E-mail info@inim.it
Web: www.inim.it

The persons authorized by the manufacturer to repair or replace the parts of this system have authorization to work only on devices marketed under the brand Inim Electronics.

4.3 Warranty

Inim Electronics S.r.l.. (Seller, Our, Us) warrants the original purchaser that this product shall be free from defects in materials and workmanship under normal use for a period of 24 months.

As Inim Electronics does not install this product directly, and due to the possibility that it may be used with other equipment not approved by Us;Inim Electronics does not warrant against loss of quality, degradation of performance of this product or actual damage that results from the use of products, parts or other replaceable items (such as consumables) that are neither made nor recommended by Inim Electronics. Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any product not meeting the specifications. In no event shall Inim Electronics be liable to the purchaser or any other person for any loss or damage whether direct of indirect or consequential or incidental, including without limitation, any damages for lost profits, stolen goods, or claims by any other party caused by defective products or otherwise arising from the incorrect or otherwise improper installation or use of this product.

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover damage arising from improper maintenance or negligence, damage caused by fire, flood, wind or lightning, vandalism, fair wear and tear.

Inim Electronics S.r.l. shall, at its option, repair or replace any defective products. Improper use, that is, use for purposes other than those mentioned in this manual will void the warranty. Contact Our authorized dealer, or visit our website for further information regarding this warranty.

4.4 Limited warranty

Inim Electronics S.r.l. shall not be liable to the purchaser or any other person for damage arising from improper storage, handling or use of this product.

Installation of this Product must be carried out by qualified persons appointed by Inim Electronics. Installation of this Product must be carried out in accordance with Our instructions in the product manual.

4.5 Simplified EU Declaration of Conformity

Hereby, Inim Electronics S.r.l. declares that the radio equipment type Air2-SenseTH100/W is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.inim.it.

4.6 Documents for the users

Declarations of Performance, Declarations of Conformity and Certificates concerning to Inim Electronics S.r.l. products may be downloaded free of charge from the web address www.inim.it, getting access to Extended Access and then selecting "Certifications" or requested to the e-mail address info@inim.it or requested by ordinary mail to the address shown in this document.

Manuals may be downloaded free of charge from the web address www.inim.it, getting access to the reserved area, after the login, and then to the section of each product.

4.7 Disposal of the product

Informative notice regarding the disposal of electrical and electronic equipment (applicable in countries with differentiated waste collection systems)

The crossed-out bin symbol on the equipment or on its packaging indicates that the product must be disposed of correctly at the end of its working life and should never be disposed of together with general household waste. The user, therefore, must take the equipment that has reached the end of its working life to the appropriate civic amenities site designated to the differentiated collection of electrical and electronic waste. As an alternative to the autonomous-management of electrical and electronic waste, you can hand over the equipment you wish to dispose of to a dealer when purchasing new equipment of the same type. You are also entitled to convey for disposal small electronic-waste products with dimensions of less than 25cm to the premises of electronic retail outlets with sales areas of at least 400m2, free of charge and without any obligation to buy. Appropriate differentiated waste collection for the subsequent recycling of the discarded equipment, its treatment and its environmentally compatible disposal helps to avoid possible negative effects on the environment and on health and favours the re-use and/or recycling of the materials it is made of.

Information about disposal of batteries and accumulators (applicable in Countries with separate collection systems)

This marking on batteries and/or their manual and/or their packaging, indicates that batteries of this products, at the end of their working life, should not be disposed of as unsorted municipal waste, but must be object of a separate collection. Where marked, the chemical symbols Hg, Cd o Pb indicate that the battery contains mercury, cadmium or lead above the reference levels of the directive 2006/66/EC. If batteries are not properly disposed of, these substances, together with other ones contained, can cause harm to human health and to the environment. To protect human health and the environment, to facilitate treatment and recycling of materials, separate batteries from other kind of waste and use the collection scheme stated in your area, in accordance to current laws. Before disposing of the above, it's appropriate to remove them from their holders avoiding to damage them or causing short circuits.

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