AIR2

CE EN 50131-1
EN 50131-5-3
EN 50130-4
EN 50130-5

Air2

Wireless devices

Installation and programming manual

GameOver

inim® ELECTRONICS

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Chapter 1

GENERAL INFORMATION

About this manual 1-1

DCMIINE0A2BS200E **MANUAL CODE**

1.00 **REVISION**

Manufacturer's details 1-2

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The persons authorized by the manufacturer to repair or replace the parts of this system, hold authorization to work on INIM Electronics brand devices only.

System Description 1-3

The advanced Air2 two-way wireless intrusion protection system (868MHz frequency) integrates directly with all models in INIM intrusion control panel range.

Table 1: Technical specifications of Air2 system

Operating frequency	**range**	868.0 - 868.6MHz
	selectable channels	868.1, 868.3, 868.5MHz
Communication type		Two-way
Modulation		GFSK
Device supervision		From 12 to 250 minutes
Security grade		2
Environmental class		II

Air2 system devices:

- **Air2–BS200/50** transceiver module, 50 terminals
- **Air2–BS200/30** transceiver module, 30 terminals
- **Air2–BS200/10** transceiver module, 10 terminals
- **Air2–IR100** passive infrared detector, 12m
- **Air2–IR100/C** passive infrared detector, 20m
- **Air2–MC100** magnetic contact with two I/O terminals, in white or brown
- **Air2–MC200** magnetic contact with shock and tilt sensor in white or brown
- **Air2–KF100** 4 button remote-control key
- **Air2–FD100** smoke detector
- **Air2-Aria** keypad with graphic display
- **Air2-Hedera** outdoor sounder, in white or chrome effect
- **Air2-DT200T** dual technology curtain detector, in white or brown
- **Air2-XIR200W** PIR detector, 12m
- **Air2-XDT200W** dual technology curtain detector
- **Air2-UT100** universal transceiver
- **Air2-ODI100W** outdoor wireless dual-infrared detector
- **Air2-OTT100W** outdoor wireless triple-technology detector

Each SmartLiving control panel supports more than one Air2-BS100 module, connected via I-BUS, in accordance with the contents of the table:

Table 2: Number of Air2-BS100 managed by the control panel

Control panel FW	SmartLiving control panel				Notes
	505	515	1050	10100	
≤ 6.00	10		20	30	Does not manage Air2-Aria and Air2-Hedera
≥ 6.01	10		20	30	Manages all Air2 devices

For optimal performance of the wireless system the Air2-BS100 transceiver module must be located at the core of the wireless network devices and area of use of remote-control keys, in a placement which allows easy connection of the I-BUS cable to the control panel.

All wireless protection devices should be installed in elevated positions in order to increase detection capabilities and prevent inadvertent blinding caused by large objects or building occupants.

The signal strength (transmitted/received by the Air2-BS200 transceiver module) of each wireless device can be viewed on the keypads and via SmartLeague software, this information can be used to optimize the installation process.

Note

A level 3 signal strenght it is recommended for a good installation.

As an integral part of the system, the Air2 provides 3 inter-module transmission channels. This feature allows you to select the channel in such way as to avoid over-the-air interference between two close-proximity wireless systems (for example, in two adjoining apartments).

For secure deployment and operations of the Air2 wireless intrusion protection system, it is necessary to refer to the Installation and programming guide of the hardwired intrusion control panel in use.

Notes from the Manufacturer 1-4

Note

The Air2-MC100 device is certified by IMQ-Sistemi di sicurezza (Italian certification body).
The notified body N°0051, intervened in the R&TTE Directive conformity assessment procedure for all the devices of the Air2 system, with the exception of the Air2-FD100 and Air2-MC200.

The information relating to the power-supply batteries required by Air2 devices is shown in the Technical Specification table that follows.

The manufacturer cannot guarantee the declared battery life.

ATTENTION!

Do not use batteries other than those indicated by the manufacturer as they may explode.
Used batteries must be disposed in accordance with local regulations.

For the technical description and installation instructions of any Air2 devices not described in this manual, refer to the respective manuals included in the packaging of the various devices.

Chapter 2

DESCRIPTION OF PRODUCTS

Air2-BS200 Transceiver 2-1

EN 50131-1
EN 50131-5-3
EN 50130-4
EN 50130-5

The Air2-BS200 wireless module allows the integration and management of wireless detectors, keypads, sounders in the hardwired environments of all models of INIM intrusion control panels.

The module simulates:

- a reader, at a programmed address (ADD), which allows you to configure the keyfobs
- up to 10 expansion boards, at addresses ADD, ADD+1, ... ADD+9, capable of managing the terminals.

Additionally, each Air2-BS200 allows the SmartLiving control panel to manage up to 4 Aria wireless keypads and 4 Hedera wireless sounders.

Table 3: Technical specifications of the Air2-BS200

Models	BS200/50	BS200/30	BS200/10
Power Supply Voltage	10.5 - 16 V⎓		
Maximum current draw	30 - 50 mA		
Bus type	I-BUS / BUS RS485		
Antenna connector	SMA female		
Antenna impedance	50 Ohm		
Security grade	2		
Environmental class	II		
Operating temperature and humidity	-10°C +40°C, ≤93%		
Dimensions (W x H x D)	80 x 170 x 25 mm		
Weight	135 g		
Terminals	50	30	10
Keyfobs	100	50	30
Aria keypad	4		
Hedera Sounder	4		

I

Table 4: Description of the Air2-BS200 parts

A	Bus connection terminals (I-BUS and BUS RS485)
B	Connectors for the selection of the BUS type
C	Connectors for the EOL position (BUS RS485)
D	Tamper microswitch: Open cover
E	Tamper microswitch: Dislodgement
F	Button P1
G	Button P2
H	LED DL1 - red
I	LED DL2 - blue
J	LED DL3 - green
K	LED DL4 - yellow
L	PRG LED - red
M	Antenna connector

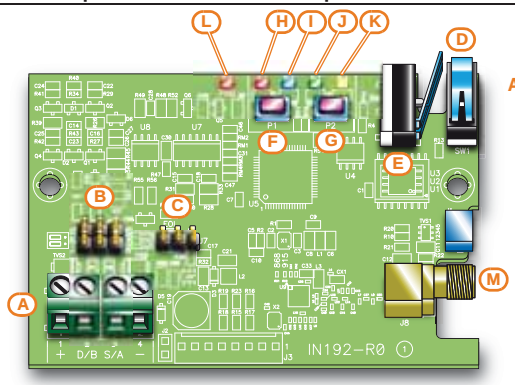


Table 4: Description of the Air2-BS200 parts

N	Mounting screw location
O	Tamper screw hole
P	Cable entry
Q	Enclosure screw hole

Table 5: LED Signals

LED DL1 red	LED DL2 blue	LED DL3 green	LED DL4 yellow	PRG LED red	Signal
Off	Discontinuous flashing	Off	Off	Off	Wireless data reception
Off	Off	Discontinuous flashing	Off	Off	Programming phase running (from 1 to 5)
Off	Off	Off	solid/ blinking	Off	Parameter/Value undergoing programming
Off	Off	Continuous flashing	Off	Off	Enrollment of wireless device in progress (requested at the control panel)
Off	Off	Continuous flashing	Continuous flashing	Off	Erroneous programming (for example, two devices on the same terminal)
1 flash	1 flash	1 flash	1 flash	Off	Reset factory default settings
solid/off/blinking				solid	Address Programming (phase 6)

Air2-IR100 and Air2-IR100/C PIR detectors

2-2

CE 0051
EN 50131-1
EN 50131-5-3
EN 50131-2-2
EN 50130-4
EN 50130-5

INCERT
CEB T014

Air2-IR100 is a two-way communication PIR detector with 12m coverage. The device is protected against dislodgement and open-cover tamper. You can adjust the device sensitivity (accepted value between 1 and 4) from the keypad or through the SmartLeague software application.

The Air2-IR100/C PIR detector has the same features as the Air2-IR100 but covers a greater distance (20m) with a minor angle.

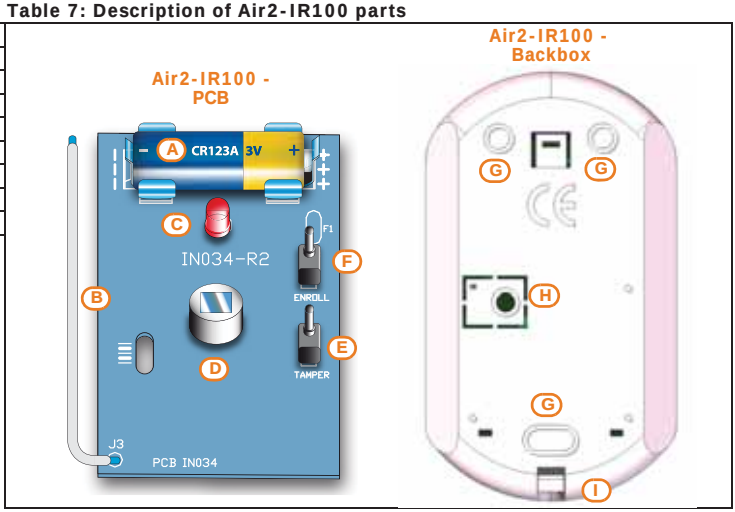
Table 6: Technical specifications of the Air2-IR100

Models	IR100	IR100/C
Battery	Lithium CR123A 3V	
Battery life	3 years	
"Low battery" fault voltage	Less than 2.4V	
Stand-by current draw	51µA	
Maximum current draw	30mA	
PIR range	12 m	20 m
Lens angle	80°	80° to 6m 7° to 20m
Operating temperature and humidity	-10°C +40°C, ≤93%	
Dimensions (W x H x D)	58 x 100 x 44 mm	
Weight	80g	
Security grade	2	
Environmental class	II	

I

Table 7: Description of Air2-IR100 parts

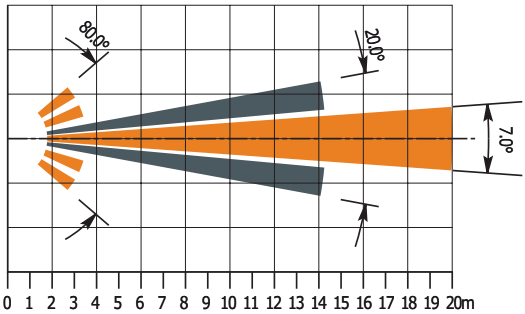
A	Battery
B	Antenna
C	Signalling LED - red
D	PIR detector
E	Open-tamper microswitch
F	ENROLL microswitch
G	Mounting screw hole
H	Tamper screw hole
I	Enclosure screw hole



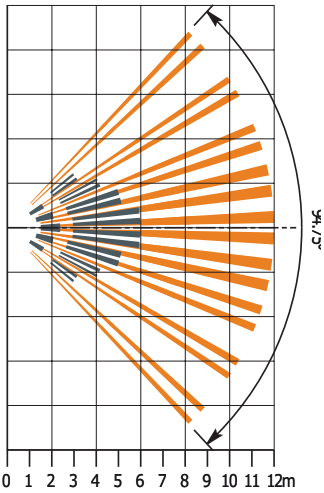
The following volumetric-coverage diagrams refer to detectors whose sensitivity is set by the control panel at maximum sensitivity.

VOLUMETRIC COVERAGE

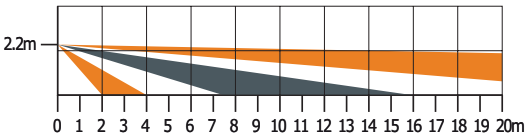
Air2-IR100/C Top view



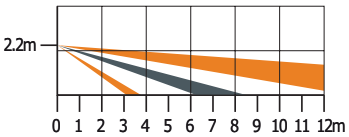
Air2-IR100 Top view



Air2-IR100/C Side view



Air2-IR100 Side view



Air2-MC100 magnetic contact 2-3

The Air2-MC100 magnetic contact has two screw-in positions for placement optimization of the device magnet, 90° one from the other.

It also provides Alarms two terminals which can be configured as inputs or open-collector outputs. Configuring the terminals as inputs provides standard zone management (NO, NC, Single Balancing, Double Balancing) and allows direct connection to rollerblind sensors.

Alarms deriving from magnetic contacts and distinctly from the two terminals are signalled separately on the control panel.

The device is protected against dislodgement and open-cover tamper.

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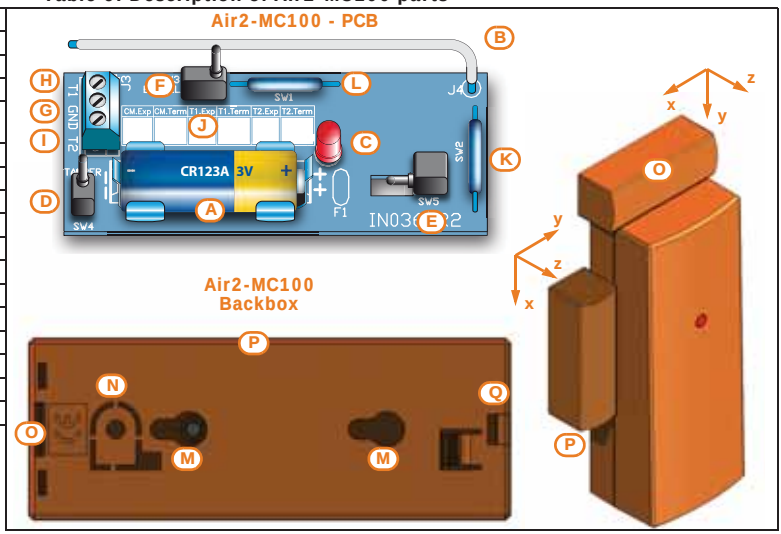
CEB T014

Table 8: Technical specifications of the Air2-MC100

Battery	Lithium CR123A 3V
Battery life	4 years
“Low battery” fault voltage	Less than 2.4V
Stand-by current draw	21µA
Maximum current draw	30mA
Open-collector output	Max 50 mA
Operating temperature and humidity	-10°C +40°C, ≤93%
Dimensions (W x H x D)	36 x 95 x 26 mm
Weight	130 g
Magnet dimensions	13 x 40 x 14 mm
Colours	White, Brown
Security grade	2
Environmental class	II

Table 9: Description of Air2-MC100 parts

A	Battery
B	Antenna
C	Signalling LED - red
D	Open-tamper microswitch
E	Dislodgement-tamper microswitch
F	ENROLL microswitch
G	GND terminal
H	Terminal T1
I	Terminal T2
J	Map of terminals
K	Reed contact: short side
L	Reed contact: long side
M	Mounting screw hole
N	Tamper screw hole
O	Magnet - short side
P	Magnet - long side
Q	Enclosure screw hole



The following table indicates the distance in millimetres of the operating capacity of the magnet depending on the side in use and the axes illustrated in the figure (values starting from a nominal distance of 10mm, except for axis y-):

Table 10: Distance between magnet and contact (mm)

Axis	Contact long side		Contact short side	
	Withdrawn	Near	Withdrawn	Near
x + / -	21	15	25	20
y -	21	15	19	15
z + / -	11	9	11	9

In order to comply with the EN 50131 series of standards, double balancing is required when either terminal T1 or T2 is configured as an input.

ATTENTION!

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.

Air2-MC200 magnetic contact

2-4

EN 50131-1
EN 50131-5-3
EN 50131-2-6
EN 50130-4
EN 50130-5

The Air2-MC200 is supplied with a magnet which is to be secured (by means of two screws) to the side of the contact, in the position indicated by the two notches.

The Air2-MC200 integrates a shock and tilt sensor that allows its use without the need of the magnet.

The Air2-MC200 is equipped with open and dislodgement tamper protection.

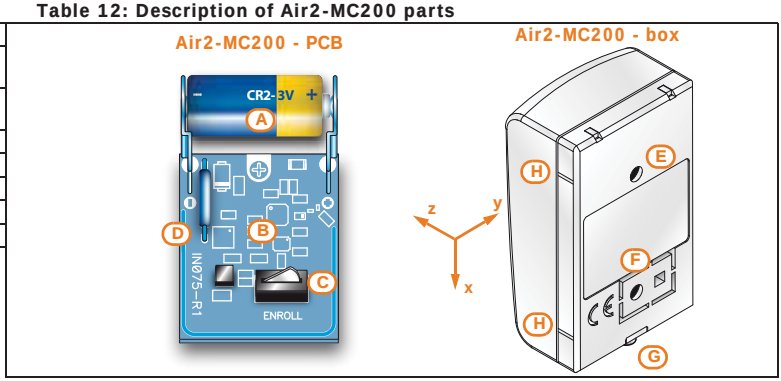
The device uses separate channels for the different types of signalling,, thus allowing precise identification of the alarm source.

Table 11: Air2-MC200 technical specifications

Battery	Lithium CR2 3V
Battery life	4 years
"Low battery" fault voltage	Less than 2.4V
Stand-by current draw	10µA
Maximum current draw	30mA
Operating temperature and humidity	-10°C +40°C, ≤93%
Dimensions (W x H x D)	35 x 58 x 23 mm
Weight	30 g
Magnet dimensions	13 x 40 x 14 mm
Colours	White, Brown
Security grade	2
Environmental class	II

Table 12: Description of Air2-MC200 parts

A	Battery
B	Signalling LED - red (on rear)
C	Microswitch: open/ dislodgement/ENROLL
D	Reed contact
E	Mounting screw hole
F	Tamper screw hole
G	Securing screws
H	Magnet position notches



MAGNET DETECTION RANGE

The following table indicates the distance in millimeters of the operating capacity of the magnet depending on the side in use and the axes illustrated in the figure (values starting from a nominal distance of 10mm, except for axis y-):

Table 13: Distance between magnet and contact (mm)

Axis	Contact long side	
	Withdrawn	Near
x +/-	18	14
y -	18	14
z +/-	22	18

SHOCK DETECTION

Signalling of shock waves is achieved through a tri-axial vibration sensor. The vibration sensibility can be set either from a keypad or via the SmartLeague software application.

TILT DETECTION

Signalling of tilting (angle change) is achieved through tri-axial tilt sensing. The tilt-variation value (angle) can be set in relation to the standby position, which is saved to the memory during the reset-after -alarm phase.

If both shock and tilt sensing are activated, alarm signalling will occur as soon as one of the two conditions exceeds it respective alarm threshold.

ATTENTION!

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.

Air2-KF100 remote-control keyfob

2-5

CE 0051

EN 50131-1
EN 50131-5-3
EN 50130-4
EN 50130-5

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The Air2-KF100 keyfob has 4 button which can be programmed from the control panel.

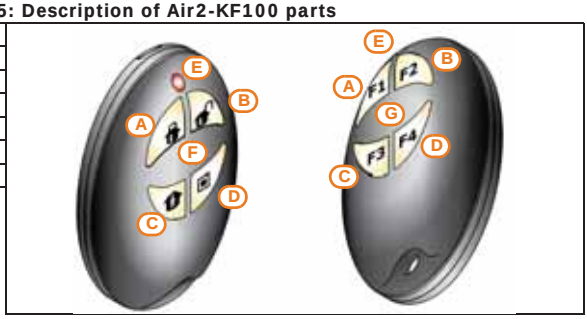
The graphic-choice feature allows you to identify the buttons by numbers or icons.

Table 14: Technical specifications of the Air2-KF100

Battery	Lithium CR2032 3V
“Low battery” fault voltage	Less than 2.4V
Stand-by current draw	0A
Maximum current draw	30mA
Buzzer	Multitone
Operating temperature and humidity	-10°C +40°C, ≤93%
Dimensions (W x H x D)	61 x 41 x 12 mm
Weight	15 g
Rubber push-buttons	• with icons • with numbers
Security grade	2
Environmental class	II
Number of available PIN code combinations	2^{24}

Table 15: Description of Air2-KF100 parts

A	Key1/F1, LED1-red
B	Key2/F2, LED2-red
C	Key3/F3, LED3-red
D	Key4/F4, LED4-red
E	Confirmation LED - red/green
F	Icon graphic keys
G	Keys with numbers



Thanks to the two-way supervision of the Air2-BS200, the Air2-KF100 keyfob imparts audible and visual feedback signals (beep and LED signals) which notify the user of the successful outcome of requested operations.

Table 16: Air2-KF100 Notifications

Push button	LED 1	LED 2	LED 3	LED 4	Buzzer signal	Operation
F1	1 flash				beep	Activates shortcut 1
F2		1 flash			beep	Activates shortcut 2
F3			1 flash		beep	Activates shortcut 3
F4				1 flash	beep	Activates shortcut 4
F2 + F3		1 flash	1 flash		beep	Block/Unblock remote-control device
F3 + F4			1 flash	1 flash	beep	Enrolling
Any		4 flashes	4 flashes			Keyfob locked signal

Failure of the LED to light, after pressing the corresponding button and the successful execution of the command, is an indication that the wireless battery is running low.

Table 17: Panel notifications

Panel response	Confirmation LED		Buzzer signal
	green	red	
Command not received		1 flash	
Operation not done		4 flashes	bop
Operation done	3 flashes		long beep

ROLLING-CODE AUTHENTICATION

A further guarantee of security for Air2-KF100 keyfob wireless transmissions are the over-the-air random codes. These random codes allow the Air2-BS200 to authenticate the validity of each wireless keyfob transmission.

In the event of irregular wireless activity, denial-of-request will be signalled by an audible error signal (“bop”).

To reset wireless transmissions and rolling code authentication, press and hold keys “F3” and “F4” simultaneously.

This feature is active at default but can be disabled during the programming phase of the Air2-BS200 module (details follow). If an Air2-KF100 wireless keyfob is used on several systems, it is impractical to leave this feature enabled.

Air2-FD100 smoke detector

2-6

EN 50131-1
EN 50131-5-3
EN 50130-4
EN 50130-5

The Air2-FD100 detector is capable of sensing the presence of smoke particles and thus detecting a fire in its early stages.

Air2-FD100 optical smoke detector is equipped with a sampling chamber (based on light scattering mass - Tyndall effect). In order to ensure the proper operating capacity of the device, it must be installed away from drafts and large objects which may alter the airflow to the sampling chamber.

ATTENTION!

The sole task of the Air2-FD100 smoke detector is to sense for smoke in the protected area. Therefore, in no way can the combination of a SmartLiving system and an Air2-FD100 smoke detector be considered a fire control system.

Table 18: Air2-FD100 technical specifications

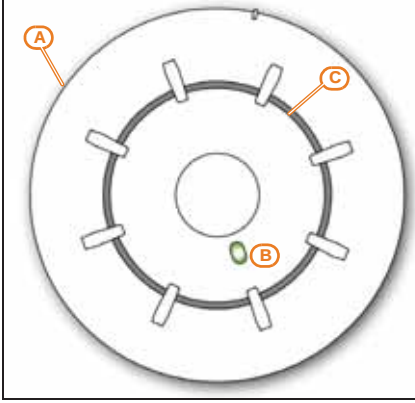
Battery	Lithium CR17450 3V
Battery life	3 years
“Low battery” fault voltage	Less than 2.4V
Current draw during standby	70µA
Current draw during alarm	Max 40mA
Operating temperature and humidity	-5°C +40°C, ≤95%
Height (base included)	60mm
Diameter (base included)	114mm
Weight (base and battery included)	182 gr

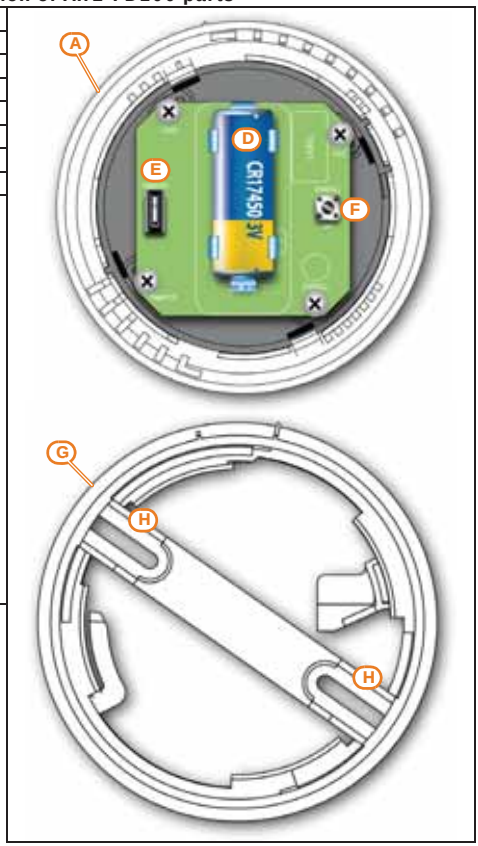
The operating parameters can be changed and adapted to the environmental conditions, either from the control panel or through the SmartLeague software application. The detector signals alarm status when the level of smoke in the protected environment reaches the following levels:

- 0.08 dB/m (pre-set mode)
- 0.10 dB/m
- 0.12 dB/m
- 0.15 dB/m

Table 19: Description of Air2-FD100 parts

A	Detector
B	LED red/yellow/green
C	Optical chamber
D	Battery
E	Tamper microswitch
F	ENROLL microswitch
G	Base
H	Mounting screw hole





The tricolour LED (360° visibility) indicates the detector status.

- **Green - one flash every 15 seconds**: detector not operating properly.
- **Green - one flash every 40 seconds**: low battery.
- **Yellow - On solid**: fault present.
- **Yellow - flashing**: sampling chamber contaminated (with dust, etc.).
- **Red - On solid**: detector in alarm status.

Chapter 3

OPERATING PRINCIPLES

Air2-BS200 address 3-1

In order to configure the Air2-BS200 in the control panel it is necessary to assign an address between 1 and 30 (to set the address follow the instructions in *paragraph 4-6 Addressing the Air2-BS200*).

The selected address will be assigned to the simulated reader (which processes and manages wireless transmissions in the same way as keys) and to the first 10 expansion boards, also simulated, with successive addresses "ADD", "ADD"+1, ..., "ADD"+9.

Conditions for secure deployment and operations:

- there must be no other transceivers at the selected address
- the simulated reader must be enrolled on the control panel
- there must be no other readers (nBy/X, nBy/S, JOY/MAX or Alien) at the selected address
- the simulated reader need not be associated with any partitions
- the simulated expansion boards must be enrolled on the control panel
- an expansion board will be considered part of the wireless network only when one of its terminals is configured as "wireless"
- a simulated expansion board cannot share its assigned address with other hardwired FLEX5 expansion boards.

Wireless terminals 3-2

A terminal can be considered a "Wireless" terminal only under the following conditions:

- it must not be configured as a "Double" zone (D)
- if configured as a "Zone", it must not be configured as "Shock" in the detector type field
- it must be assigned to an expansion board (and not to the control panel or keypads)

Aria Keypad and Hedera sounder 3-3

The SmartLiving control panel can manage up to 4 Aria keypads and 4 Hedera sounders for each Air2-BS200 installed. However, each control panel model supports a maximum number of keypads and sounders which must be respected.

During the addressing phase it is necessary to use free addresses only and to ensure that no other keypads (Joy, Concept, NCode or Alien) are present at the address of the Aria keypads, or other sounderflashers (Ivy) at the address of the Hedera sounderflashers to be included in the configuration.

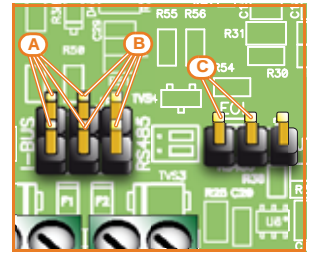
For the addressing procedure and the programming of these devices, refer to the respective manuals.

Chapter 4

INSTALLATION

Installing the Air2-BS200 4-1

1. Choose a suitable mounting placement.
2. Using a flat-bladed screwdriver in the enclosure screw location, push open the enclosure and separate the two parts.
3. Hold the base to the chosen mounting placement and mark the screw holes and tamper protection position.
4. Pull the wires through the cable entry and wire up the Air2-BS200.
5. Using the screws, secure the base and the tamper protection in position.
6. Set the selection jumpers for the Bus type (position *A* for I-BUS or position *B* for RS485).
   If necessary, in the case of the RS485 BUS, set the jumper for the EOL position (position *C* for EOL).
7. Enroll the device.
8. Re-attach the cover to the base and replace the enclosure screw.



Installing the IR100 and IR100/C 4-2

1. Choose a suitable mounting placement.
2. Using a flat-bladed screwdriver in the enclosure screw location, push open the enclosure and separate the two parts.
3. Push the board grip to release and remove the PCB.
4. Open the anchor-screw holes.
5. Hold the base to the chosen mounting placement and mark the screw holes and tamper protection position.
6. Using the screws, secure the base and the tamper protection in position.
7. Replace the PCB.
8. Insert the battery, ensure you respect the proper polarity.
9. Enroll the device.
10. Re-attach the cover to the base and replace the enclosure screw.

NOTES

- The recommended installation height is 2.2m.
- Be careful not to drill in the vicinity of electrical wiring or plumbing/gas pipes, etc.
- Avoid installing the detector close to the following sources of interference: reflective surfaces, direct air flow from vents, drafts, fans, windows, sources of steam, sources of oil vapour, sources of infrared rays, and objects which can cause temperature changes such as heaters, refrigerators and ovens.
- Do not place large objects (machinery or furniture) in front of the detector.
- The alarm LED must be above the lens.

Installing the Air2-MC100

1. Choose a suitable mounting placement.
2. Using a flat-bladed screwdriver in the enclosure screw location, push open the enclosure and separate the two parts.
3. Push the board grip to release and remove the PCB.
4. If you use terminal T1 or T2, open the respective wire entry and pull the wires through.
5. Hold the base to the chosen mounting placement and mark the screw holes and tamper protection position.

6. Using the screws, secure the base and the tamper protection in position.
7. Replace the PCB.
8. Insert the battery, ensure you respect the proper polarity.
9. Enroll the device.
10. If you wish to fit the magnet by means of the screws (included), remove the magnet base by means of a flat-bladed screwdriver.
11. Locate the magnet (long or short side in the required position) on the contact, at a distance of about 2 mm from the magnetic reed contact. If you are using the long side, use the notches on the base in order to position it correctly.
12. Using the screws or the adhesive tape, attach the magnet.
13. Re-attach the cover to the base of the contact and replace the enclosure screw.

Installing the Air2-MC200 4-3

1. Choose a suitable mounting placement.
2. Using a flat-bladed screwdriver in the enclosure screw location, push open the enclosure and separate the two parts.
3. Hold the base to the chosen mounting placement and mark the screw holes and tamper protection position.
4. Using the screws, secure the base and the tamper protection in position.
5. Insert the battery, ensure you respect the proper polarity.
6. Enroll the device.
7. If you wish to fit the magnet, work through the steps described in the previous paragraph.
8. Re-attach the cover to the base of the contact and replace the enclosure screw.

Installing the Air2-KF100 4-4

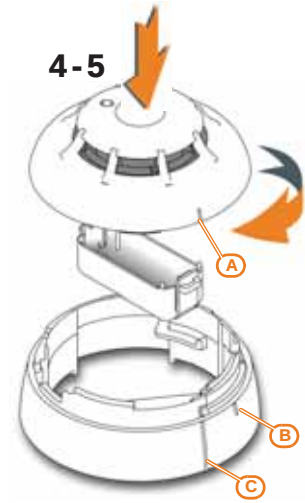
The Air2-KF100 requires enrolling only.

If it becomes necessary to replace the device cover or battery, work through the following steps.

1. Remove the enclosure screw on the back of the keyfob and open the device.
2. Remove the cover.
3. Replace the cover/battery as required.
4. Close the device and replace the enclosure screw.
5. Enroll the key.

Installing the Air2-FD100 4-5

1. Choose a suitable mounting placement.
2. Hold the base to the chosen mounting placement and mark the screw locations.
3. Insert the battery, ensure you respect the proper polarity.
4. Attach the battery cover.
5. Position the detector over the base and, with minimum force, turn it clockwise until notch "A" aligns with notch "B" (in order to attach the detector to the base); turn it still further until notch "A" aligns with notch "C" (in order to allow the base to close the tamper microswitch).
6. Enroll the device.



Addressing the Air2-BS200 4-6

The address ("ADD") to be assigned to the Air2-BS200 transceiver must be the same as the address of the simulated reader.

The address assignment phase takes place during programming phase 6 of the module (refer to *paragraph 5-2 Programming via the Air2-BS200 module*). During this phase the address is indicated by LEDs DL 1-4 in accordance with the following sequence:

Table 20: Panel notifications

Reader address	LED DL1 - red	LED DL2 - blue	LED DL3 - green	LED DL4 - yellow
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1
16	0	0	0	L
17	0	0	L	0
18	0	0	L	L
19	0	L	0	0
20	0	L	0	L
21	0	L	L	0
22	0	L	L	L
23	L	0	0	0
24	L	0	0	L
25	L	0	L	0
26	L	0	L	L
27	L	L	0	0
28	L	L	0	L
29	L	L	L	0
30	L	L	L	L

0	LED Off
1	LED On
L	Flashing LED

1. Place the SmartLiving control panel in maintenance mode.
2. Use the P1 button to access the address setting menu (phase 6 of the programming session). During this phase the PRG LED will switch On and the LEDs will show the current address.
3. Use the P2 to reach the address to be assigned.
4. Use the P1 button to assign the address and exit the menu (phase 0).
5. Include the wireless expansion boards in the control panel configuration, starting from the "ADD" address (maximum "ADD" +9).
6. Enroll the wireless reader at the "ADD" address.

Pressing and holding the P2 button during normal operating status of the Air2-BS200 will allow you to view (but not change) the transceiver address indicated on its LEDs.

Enrolling the devices 4-7

1. Select the expansion board at the "ADD" address and then select the terminal in question.
2. Configuring the terminal as "Wireless":
   Via keypad: press key 6 mno; the word "Wireless" will appear on the last line on the display
   Via SmartLeague: using the right button on the mouse, select "Wireless".

ATTENTION!

If any terminal on the expansion board is configured as "wireless", all the remaining terminals must be configured as "wireless" terminals.

3. Configuring the type of terminal:
   INPUT - for Air2-IR100 and Air2-MC100 devices
   DOUBLE ZONE - for Air2-MC200 devices
4. Enrolling the wireless terminals.
   From keypad: access the zone programming section by pressing the OK key.
   Go to the "Wireless" section and enroll the terminal by selecting one of the following:
   - Shock sensor, allows you to enroll an Air2-IR100 detector
   - Magnetic contact, allows you to enroll Air2-MC100 magnetic reed contact
   - Terminal T1 M.C., allows you to enroll the "T1" terminal of an Air2-MC100
   - Terminal T2 M.C., allows you to enroll the "T2" terminal of an Air2-MC100
   - Smoke detector, allows you to enroll an Air2-FD100 smoke detector
   - Magn.Cont.MC200, allows you to enroll an Air2-MC200 device.
   - Curtain sensor, allows you to enroll an Air2-DT200T curtain detector
   - Curtain direction, allows you to set the direction of an Air2-DT200T
   - Double T. sensor, allows you to enroll an Air2-XDT200W dual technology detector
   - Single T. sensor, allows you to enroll an Air2-XIR200W passive infrared detector
   - OutdoorDetector, allows you to enroll an Air2-OTT100W outdoor triple technology detector, an Air2-ODI100W outdoor double technology detector or an Air2-UT100 universal wireless transceiver

   From SmartLeague: double-clicking on the configured terminal will open a window where you can programme the zone.
   The lower part of the window shows the "Wireless section", right-click and select the "Wireless" option.
   Select the type of device, by means of the "Type" field, then start the guided enrolling process by pressing the "Enroll" button.
5. For Air2 devices press the "ENROLL" key.
6. If you are enrolling and output device that is connected to a terminal of the Air2-MC100, you must enable the "Broadcast RF" zone option in this section.
   Once done, you must step back to the configuration of the terminal and configure it as an "OUTPUT".
7. Enroll all the Air2-KF100 wireless keyfobs in the same way as you would enroll ordinary proximity keys, selecting the reader with the "ADD" address.
8. Set the parameters of the zones, outputs and keypads.

Chapter 5

PROGRAMMING

5-1 Programming via keypad

If you wish to carry out the programming process via keypad (parameter settings, enrolling, deleting wireless modules, etc.), refer to the Installation and Programming guide supplied with the intrusion control panel.

EXAMPLE

To program a SmartLiving 1050 control panel which requires:

- 12 hardwired zones of which 3 on the control panel, 2 on a keypad, 7 on 2 expansion boards
- 18 wireless zones
- 5 wireless keyfobs

Minimum requirements: 18/5=4 expansion boards; if the 2 expansion boards are for the hardwired zones assign them to addresses 1 and 2; set the Air2-BS200 DIP-microswitches to address 3 (LED DL1 Off, DL2 Off, DL3 On, DL4 On).

Enroll expansion boards 3, 4, 5 and 6 and reader 3 on the control panel.

In the "Terminals" programming section, select terminal T1 of expansion board 3 and enroll the detector. Enroll all the wireless devices consecutively.

In the "Keys-Enroll" programming section, select reader 3 then select the number of wireless keyfobs you wish to enroll.

5-2 Programming via the Air2-BS200 module

Although some programming can be done using this method, the manufacturer recommends that programming is carried out via the SmartLeague software or via keypad through the Installer menu.

The available programming phases correspond to the 6 different sections in the Programming menu. Use the buttons and LEDs on the PCB of the module to navigate through the 6 programming phases.

1. Press the P1 button.
   The programming menu will open.
2. Press the button again until access to the required phase is achieved. LED DL3 will emit a number of blinks corresponding to the current phase.
3. Using the P2 button carry out any changes (where required). Where required, LED DL4 will show the current data.
4. Save any changes and exit the programming session.
   This can be done in two ways:
   - Use the P1 button to step back.
   - Press and hold the P2 button for at least 3 seconds. The 5 LEDs will light to confirm that the data has been saved.
     If this procedure is carried out during phase 2, the device will reset to factory default settings (*paragraph 5-3 Air2-BS200 module default settings*).

PHASE 0

Stand-by: normal operating phase of the Air2-BS200 and its LED.

During this phase it is possible to exit programming and save any changes.

PHASE 1

Enroll: LED DL3 will emit in series 1 blink followed by a pause. LEDs DL1, DL4 and PRG will remain off.

Press the "ENROLL" button on the device you wish to enroll. Press simultaneously keys F3 and F4 on the wireless keyfob. Within 4 seconds, LED DL2 should flash to indicate correct reception of the device and its enrollment.

Unenroll: LED DL3 will emit in series 2 blinks followed by a pause. LEDs DL1, DL4 and PRG will remain off. **PHASE 2**

Press the "ENROLL" button on the device you wish to unenroll (delete). Press simultaneously keys F3 and F4 on the wireless keyfob. Within 4 seconds, LED DL2 should flash to indicate that the device has been received and unenrolled.

Change transmission / reception channel: LED DL3 will emit in series 3 blinks followed by a pause. **PHASE 3**

LED DL4 emits a number of blinks equal to the number of the current channel. 3 channels are available. Press button P2 to activate the successive channel to the one currently operating on the Air2-BS200 module. At this point, press the "ENROLL" button on all the detectors and sounders, access the "ENROLL" menu on the Air keypad and press keys F3 and F4 simultaneously on all the keyfobs. This will synchronize the system wireless devices with the new channel.

Enable / Disable tamper Air2-BS200: LED DL3 will emit in series 4 blinks followed by a pause. **PHASE 4**

LED DL4 indicates the status of this option: OFF = Tamper enabled; ON = Tamper disabled. Press button P2 to toggle the status of this option. If the Tamper option is disabled, the status of both microswitches will be ignored.

Enable / Disable rolling-code authentication on Air2-KF100: LED DL3 will emit in series 5 blinks followed by a pause. **PHASE 5**

LED DL4 indicates the status of this option: OFF = Rolling code authentication enabled; ON = Rolling code authentication disabled. Press button P2 to toggle the status of this option.

Addressing: LED PRG will go On solid. LED DL1-4 indicates the current address. **PHASE 6**

Refer to *paragraph 4-6 Addressing the Air2-BS200*.

Air2-BS200 module default settings 5-3

To restore the factory default settings, press and hold the P2 button until the 4 LEDs (DL) come ON during **Phase 2 - Unenroll**, as previously described.

Options programmable at the control panel 5-4

During the programming phase of the SmartLiving control panel you can set the following options for the "wireless" zones:

Table 21: Wireless zones options

Option	If enabled	If disabled
TampReed / FollPir (Air2-IR100)	In order to increase battery life, the infrared sensor will deactivate when the partitions it belongs to are disarmed and will only activate when the partitions it belongs to arm. Disabled detectors cannot generate alarms. When the partitions arm, there may be a delay of up to 3 minutes before the detector receives the activation command.	The IR sensor is always active.
TampReed / FollPir (Air2-MC100 / MC200)	Tamper on the magnetic contact will be detected.	Tamper on the magnetic contact will not be detected.
Broadcast RF	This option must be enabled when the zone and one of the Air2-MC100 terminals ("T1" or "T2") is configured as an "output". Assures the activation/deactivation of the output within two seconds of the control panel command.	The activation/deactivation of the "wireless" output occurs within two minutes of the command from the control panel.
Use sensor LED	The red LED of Air2-IR100 and Air2-MC100/MC200 devices signal alarm or tamper on the device.	The red LED of Air2-IR100 and Air2-MC100/MC200 devices is always Off.
	ATTENTION! **In the case of an Air2-MC100 device, this option should be enabled on all its terminals.**	

During the control panel programming phase, the following options are available for each device (expansion terminal, keypad or sounder) configured as wireless:

- **NO Superv. WLS** - If enabled, this option inhibits fault signalling in the event of loss of wireless devices.
  This option is co-related to the control panel parameter "Wireless Superv."
  "Wireless Superv." determines the wireless-detector supervision time. When the set time expires any detectors which do not respond will be signalled as lost.
  Accepted values: 12 to 250 minutes (30 minutes at default).
- **Disable tamp. WLS** - If this option is disabled, open/dislodgement tamper on Air2 devices will not generate the respective events.

Appendix A

DECLARATION OF CONFORMITY OF THE AIR2-BS200

Deutsch: Hiermit erklärt INIM Electronics s.r.l., dass sich das Gerät Air2-BS200 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.

Български: С настоящето INIM Electronics s.r.l. декларира, че Air2-BS200 отговаря на съществените изисквания и другите приложими изисквания на Директива 1999/5/ЕС.

Ελληνικά: Ο εξοπλισμός αυτός συμμορφώνεται με την Ευρωπαική Οδηγία 1999/5/ΕΚ

Español: Por la presente, el INIM Electronics s.r.l declara que este "producto" cumple con la requisitos esenciales y otras disposiciones relevantes de la Directiva 1999/5/CE.

Français: Par la présente, INIM Electronics s.r.l. déclare que l'appareil Air2-BS200 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Dansk: Undertegnede INIM Electronics s.r.l. erklærer herved, at følgende udstyr Air2-BS200 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Magyar: Ez a berendezés megfelel az európai 1999/5/EC irányelvnek.

Malti: Hawnhekk, INIM Electronics s.r.l., jiddikjara li dan Air2-BS200 jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fi d-Dirrettiva 1999/5/EC.

Islenska: Hér með lýsir INIM Electronics yfi r því að Air2-BS200 er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.

Italiano: Con la presente, INIM Electronics s.r.l. dichiara che questo Air2-BS200 è con-forme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Lietuvių: Šiuo INIM Electronics s.r.l. deklaruoja, kad šis Air2-BS200 atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.

English: Hereby, INIM Electronics s.r.l., declares that this Air2-BS200 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Nederlands: Hierbij verklaart INIM Electronics s.r.l. dat het toestel Air2-BS200 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Norsk: INIM Electronics s.r.l. erklærer herved at utstyret Air2-BS200 er i samsvar med de grunnleggende krav og øvrige relevante krav I direktiv 1999/5/EF.

Polski: Niniejszym INIM Electronics s.r.l. deklaruje że Air2-BS200 jest zgodny z zasadniczymi wymaganiami i innymi właściwymi postanowieniami Dyrektywy 1999/5/EC.

Português: Eu, INIM Electronics s.r.l., declaro que o Air2-BS200 cumpre os requisitos essenciais e outras provisões relevantes da Directiva 1999/5/EC.

Româna: Prin prezenta, INIM Electronics s.r.l., declară că aparatul Air2-BS200 este în conformitate cu cerinţele esenţiale şi cu alte prevederi pertinente ale Directivei 1999/5/CE.

Svenska: Denna utrustning är i överensstämmelse med de väsentliga kraven och andra relevanta bestämmelser i Direktiv Försäkran om över 1999/5/EC.

Slovenski: INIM Electronics s.r.l. izjavlja, da je ta Air2-BS200 v skladu z bistvenimi zahtevami in drugimi relevantnimi določili direktive 1999/5/ES.

The declaration of conformity may be consulted at: www.inim.biz/dc.html

Appendix B

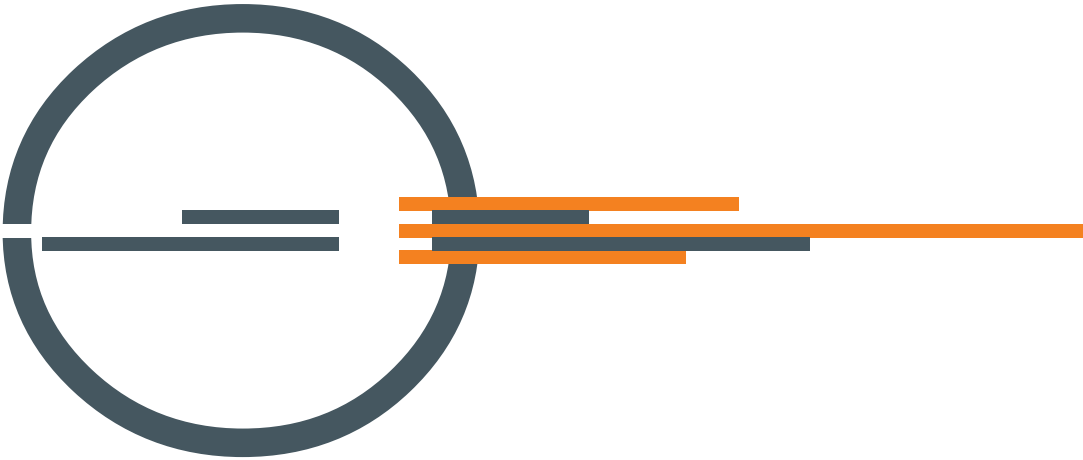
ORDER CODES

Please quote the following order codes when ordering items from the INIM Electronics product range:

Code	Product description
Air2-Aria	Wireless keypad with backlit graphic display
Air2-BS200/10	Wireless transceiver module, 10 terminals
Air2-BS200/30	Wireless transceiver module, 30 terminals
Air2-BS200/50	Wireless transceiver module, 50 terminals
Air2-DT200TB	Wireless dual-technology curtain detector, in white
Air2-DT200TM	Wireless dual-technology curtain detector, in brown
Air2-FD100	Wireless smoke detector
Air2-Hedera-F	Wireless outdoor sounder with anti-foam protection
Air2-Hedera-F#	Wireless outdoor sounder with anti-foam protection, batteries not included
Air2-Hedera-FM	Wireless outdoor sounder with anti-foam protection, in metal effect enclosure
Air2-Hedera-FM#	Wireless outdoor sounder with anti-foam protection, in metal effect enclosure, batteries not included
Air2-IR100	Two-way wireless PIR with 12m coverage
Air2-IR100/C	Two-way wireless PIR with 20m coverage
Air2-KF100	4 button remote-control keyfob
Air2-MC100B	Wireless magnetic contact with 2 inputs/outputs, in white
Air2-MC100M	Wireless magnetic contact with 2 inputs/outputs, in brown
Air2-MC200B	Two-way wireless magnetic contact, in white
Air2-MC200M	Two-way wireless magnetic contact, in brown
Air2-ODI100W	Wireless outdoor double infrared detector
Air2-OTT100W	Wireless outdoor triple-technology detector
Air2-UT100	Universal wireless transceiver
Air2-XDT200W	Wireless dual-technology detector - 8m
Air2-XIR200W	Wireless dual-technology PIR detector - 12m
DCMIINE0A2BS200E	Air2 devices installation manual
SmartLiving10100L	Intrusion control panel: manages 10 to 100 terminals, 15 partitions, switching power supply @5A, optional TCP/IP connectivity, comes in metal enclosure with housing for 1 battery @17Ah
SmartLiving10100L/G3	Intrusion control panel: manages 10 to 100 terminals, 15 partitions, switching power supply @5A, optional TCP/IP connectivity, comes in metal enclosure with housing for 1 battery @17Ah. EN50131-6 grade 3 certified.
SmartLiving1050	Intrusion control panel: manages 10 to 50 terminals, 10 partitions, switching power supply @3A, comes in metal enclosure with housing for 1 battery @ 7 or 9Ah
SmartLiving1050/G3	Intrusion control panel: manages 10 to 50 terminals, 10 partitions, switching power supply @3A, comes in metal enclosure with housing for 1 battery @ 7 or 9Ah. EN50131-6 grade 3 certified.
SmartLiving1050L	Intrusion control panel: manages 10 to 50 terminals, 10 partitions, switching power supply @3A, optional TCP/IP connectivity, comes in metal enclosure with housing for 1 battery @17Ah
SmartLiving1050L/G3	Intrusion control panel: manages 10 to 50 terminals, 10 partitions, switching power supply @3A, optional TCP/IP connectivity, comes in metal enclosure with housing for 1 battery @17Ah. EN50131-6 grade 3 certified.
SmartLiving505	Intrusion control panel: manages 5 terminals, 5 partitions, switching power supply @ 1.2A, comes in metal enclosure with housing for 1 battery @7 or 9Ah
SmartLiving515	Intrusion control panel: manages 5 to 10 terminals, 5 partitions, switching power supply @ 1.2A, comes in metal enclosure with housing for 1 battery @7 or 9Ah

DCMIINE0A2BS200E-R100-20160428

Notes



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