

# intelbras

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User manual

**XAS Smart**  
**XAS Smart Black**



## **XAS Smart and XAS Smart Black**

### **Sensor**

Congratulations, you have just purchased a product with Intelbras quality and safety.

The XAS Smart/XAS Smart Black wireless aperture sensor was developed by Intelbras with 100% digital technology. The sensor is mounted on SMD components and can be installed in most products that work at the same frequency and modulation available on the market. Works on FSK or OOK modulation and has low battery sensor.

# Precautions and Safety

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- » Follow all instructions in the manual for assembly and installation of the product.
  - » Confirm that the installation site is stable and that it is not subject to tremors.
  - » Wireless communication technology, when exposed to environments with high power radiation, can suffer interference and have its performance impaired. Example: locations near TV towers, AM/FM radio stations, amateur radio stations etc.
  - » Avoid installing the sensor directly under metal surfaces so that there are no changes in its operating characteristics.
  - » For your safety, test the product and systems at least once a week. This is necessary due to changes in environmental conditions, low battery. Take all necessary precautions for the safety and security of your property.
  - » To protect a door or window, it is recommended to use only one XAS Smart / XAS Smart Black sensor, thus making the installation more economical and freer of interference during the transmission of the signal.
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## Attention!



It is important to note that this product has the function of transmitting information to the alarm center every time an event occurs on the device (opening or closing a door, window etc.), therefore, its use should be recommended for environments with medium circulation of people or medium daily transmissions. If you use in environments with large circulation and consequently large number of transmissions your battery may be compromised. Below is some information for proper guidance for use.

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Daily transmission numbers	OOK - months of operation (unsupervised)	FSK - months of operation (supervised)
20	92	21
50	44	15
100	23	10
200	12	6
300	8	4
400	6	3
500	5	3

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**Note:** for the best performance of the XAS Smart and XAS Smart Black product, Intelbras recommends the use of good quality batteries.

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# 1. Technical specifications

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Power Supply	3 VDC, lithium battery included
Operating temperature	-10 to +50 °C
Detection	SMD Magnetic Field Sensor
Trigger indication	Yellow LED
Transmission frequency	433.92 MHz
OOK / FSK transmission rate	2 KBps (open source)
Modulation	OOK/FSK
RF Range	100 meters in barrier-free area
Opening GAP ( $\pm$ 20%)	37 mm
Closing GAP ( $\pm$ 20%)	27 mm
Gross weight (kg)	0.06
Net weight (kg)	0.04
Dimensions (W $\times$ H $\times$ D)	37 $\times$ 46 $\times$ 11 mm
Anti-jamming	Immunity against interference from malicious signals.

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## 2. Characteristics

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- » 2 types of modulation (OOK and FSK)
- » Low battery indication
- » Long-life lithium battery
- » Magnetic Field Sensor
- » Transmission frequency 433.92 MHz

## 3. Modulation configuration

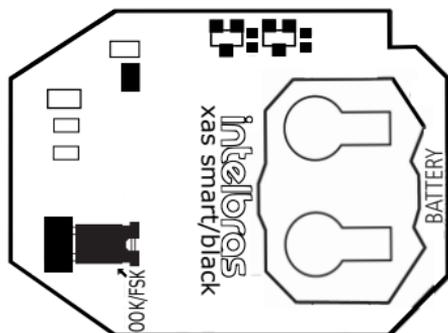
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The XAS Smart / XAS Smart Black sensor leaves the factory with the OOK modulation. To change the modulation from OOK to FSK, simply remove the battery from the sensor, open the OOK/FSK jumper indicated on the board (figure A) and then return the battery to its original position. Once this is done, the sensor will operate in FSK mode.

Changing from FSK to OOK mode (factory default) is also simple, just remove the battery from the sensor, close the OOK/FSK jumper terminals again and reset the

battery to the original position. Once this is done, the sensor will resume operation in OOK mode.

Figure A



## 4. Installation

Open the sensor by removing the rear cover and place the battery, then choose the location where the sensor will be installed. Once chosen, use double-sided tape or screws for its fixation. If using the double-sided tape, stick it to the rear cover of the sensor. Once this is done, fix the two parts in the place where it is intended to protect, observing the correct position of the sensor (Figure 2/ Figure 3). If using screws, just open the two parts of the sensor, and the screw location will be indicated (Figure 1).

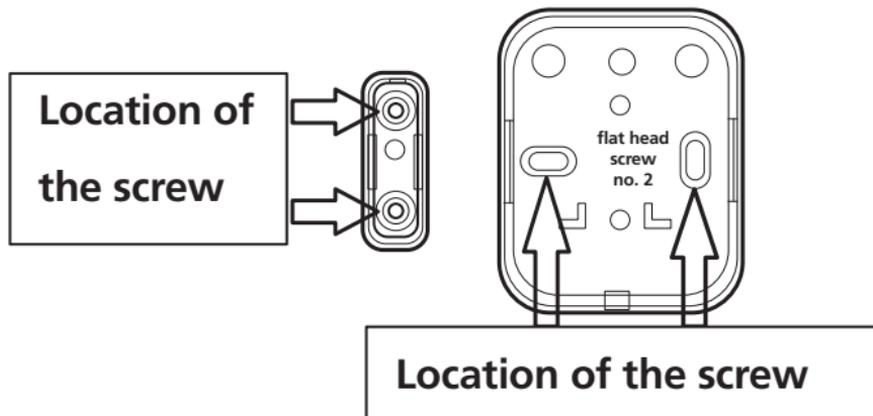


Figure 1

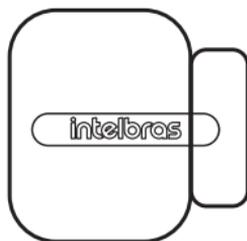


Figure 2

The sensor must be positioned according to figures 2 and 3, with the magnet aligned with the sensor body and with the minimum distance between them possible, so that the magnet is in contact with the *magnetic field sensor*.

**Note:** For the closing and opening of the magnetic field sensor, some average distances must be respected.

- » **Magnetic field sensor opening:** move the magnet away to an average distance of 37 mm ( $\pm 20\%$ ).
- » **Magnetic field sensor closure:** brings the magnet closer to an average distance of 27 mm ( $\pm 20\%$ ).

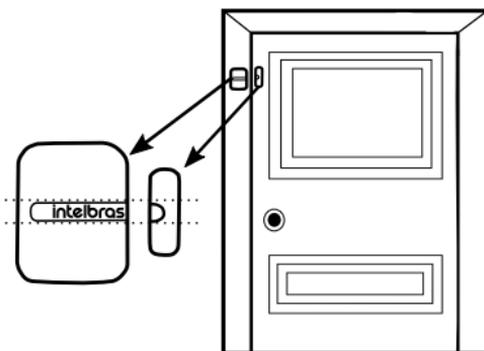


Figure 3

## 5. Configuration

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Register the sensor code in the alarm center or device that will be used (check the procedure in the manual or device in which the sensor will be registered). In order for the sensor to transmit its code, trigger it by moving the magnet away from the sensor, if the sensor is in a door for example, just open it and note if the yellow LED lights up. If the LED lights up, it indicates that there was a trip (transmission occurred), if it does not activate, check the battery and the distance between the magnet and the sensor body.

Low battery sensor: the XAS Smart / XAS Smart Black has a battery level meter, the voltage is less than 2.55 volts, it will send the information to the center and its LED will flash quickly in the opening indicating a low level of battery of the sensor. If the alarm center is from Intelbras, the low battery level warning will be indicated on the panel.

The sensor transmits the battery level in the two modulations, OOK and FSK. In FSK, the sensor transmits opening, closing and also supervising of the sensor (open or closed) every 15 minutes.

## 6. Approval

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02982-19-00160

This equipment is not intended to protect against harmful interference and may not cause interference to duly authorized systems.

# Warranty

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It is expressly stated that this contractual guarantee is granted under the following conditions:

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Customer name:

Customer signature:

Invoice No.:

Purchase Date:

Model:

Serial No.:

Reseller:

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1. All parts, pieces and components of the product are guaranteed against any manufacturing defects, which may present, for a period of 1 (one) year, with this period covering 3 (three) months of legal warranty plus 9 (nine) months of contractual warranty - counted from the date of purchase of the product by the Consumer, as stated in the invoice for purchase of the product, which is an integral part of this Agreement throughout the national territory. This contractual warranty covers the express exchange of products that present manufacturing defects. If manufacturing defect are not found but there are defects from inappropriate use, the Consumer will bear these expenses.
2. The installation of the product must be made according to the Product Manual and/or Installation Guide. If your product requires installation and configuration by a qualified technician, seek a suitable and specialized professional. The costs of these services are not included in the value of the product.
3. Upon finding the defect, the Consumer must immediately inform the nearest Authorized Service listed in the list offered by the manufacturer – only they are authorized to examine and remedy the defect during the warranty period provided herein. If this is not respected, this guarantee will lose its validity, because it will characterize violation of the product.
4. In the event that the Consumer requests home service, they must refer to the nearest Authorized Service to find out the technical visit fee. If it is necessary to remove the product, the resulting expenses, such as transportation and security for the product, are under the responsibility of the Consumer.

5. The warranty will totally lose its validity in the event of any of the following cases:
  - a) if the defect is not a manufacturing one, but caused by the Consumer or by third parties outside the manufacturer;
  - b) if the damage to the product is due to accidents, claims, acts of nature (lightning, floods, landslides etc.), humidity, voltage in the electrical network (overvoltage caused by accidents or excessive fluctuations in the network), installation/use in disagreement with the user manual or arising from natural wear and tear of parts, parts and components;
  - c) if the product has been influenced by chemical, electromagnetic, electrical or animal nature (insects etc.);
  - d) if the serial number of the product has been tampered with or erased;
  - e) if the device has been violated.
6. This warranty does not cover data loss, therefore, it is recommended, if applicable, that the Consumer perform a regular backup of the data contained in the product.
7. Intelbras is not responsible for the installation of this product, and also for any attempts at fraud and/or sabotage in its products. Keep the updates of the software and applications used up to date, if applicable, as well as the network protections necessary to protect against hacking. The equipment is guaranteed against defects within its normal conditions of use, and it is important to be aware that, as it is an electronic equipment, it is not free from fraud and deceptions that may interfere with its correct operation.
8. After its useful life, the product must be delivered to an Intelbras authorized technical assistance or directly carry out the environmentally appropriate final disposal, avoiding environmental and health impacts. If you prefer, the battery as well as other electronics of the brand Intelbras unused, can be discarded at any collection point of Green Eletron (manager of electronic waste to which we are associated). If you have any questions about the reverse logistics process, please contact us at (48) 2106-0006 or 0800 704 2767 (Monday to Friday from 08:00 to 20: 00 and Saturdays from 08:00 to 18: 00) or via email [support@intelbras.com.br](mailto:support@intelbras.com.br).

As these are the conditions of this Supplementary Warranty, Intelbras S/A reserves the right to change the general, technical and aesthetic characteristics of its products without prior notice.

The production process of this product is not covered by the requirements of ISO 14001.

All images in this manual are illustrative.

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*talk to us*

**Customer Support:** (48) 2106 0006

**Forum:** [forum.intelbras.com.br](http://forum.intelbras.com.br)

**Support via chat:** [intelbras.com.br/suporte-tecnico](http://intelbras.com.br/suporte-tecnico)

**Support via e-mail:** [suporte@intelbras.com.br](mailto:suporte@intelbras.com.br)

**Customer Service:** 0800 7042767

**Where to buy? Who installs it?** 0800 7245115

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