BBC BIRCHER Smart Access

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FutureSense

Smart activation sensor for automatic doors

Compact, multidimensional FMCW radar sensor for intelligent automatic opening of swing and revolving doors, featuring advanced human behavior recognition and reliable cross-traffic suppression.

Smart Sensing Solutions

Next-gen smart sensing

FutureSense marks the next generation of smart sensing solutions. The multidimensional radar sensor redefines automatic door control for swing and revolving doors. It maximizes comfort and energy savings by tracking the movement and behavior of an object, only opening when necessary.



FutureSense black



Your benefits

Sustainability is driving the shift toward dynamic activation of automatic doors, improving energy efficiency by only activating doors upon verified demand. Digital tools and intuitive interfaces support faster and safer installations, while modern designs combine style and performance to create more attractive door solutions.

State-of-the-art sensing solutions

The FutureSense radar sensor uses 60 GHz FMCW (frequency-modulated continuous wave) technology with advanced tracking to detect objects with high precision. It effectively suppresses cross traffic, improving energy efficiency and extending the door's lifespan.

Human behavior recognition

The sensor recognizes human behavior, including approach patterns and intent to access, in order to determine exactly when to initiate door opening. This intelligence helps prevent unnecessary opening and ensures more efficient, reliable door operation.

Easy installation & setup

Installation and setup are effortless with the FutureSense app. Thanks to its intuitive design and user guidance, configuration and testing are quick and straightforward. The newly developed antenna design minimizes the need for adjustments, saving time and effort.

Compact design meets functionality

To meet current demands for architectural appeal, the FutureSense housing was specifically developed to be compact while combining industrial design with functionality.



FutureSense silver



FutureSense white

State-of-the-art sensing solutions

FutureSense is a multidimensional radar sensor for swing and revolving doors. Its latest door activation technology based on FMCW (frequency-modulated continuous wave) enables human behavior analytics. This cutting-edge software continuously tracks key human movement parameters, such as approach, direction, and velocity to determine genuine intent to enter.

By distinguishing between casual proximity and purposeful movement, FutureSense ensures that the door opens only when necessary, enhancing energy efficiency and ensuring seamless access through the automatic door.

The FutureSense app makes installation a breeze: All door situation and sensor settings can be modified in real time to optimize activation and use of energy.



Human behavior recognition



Adaptive door behavior

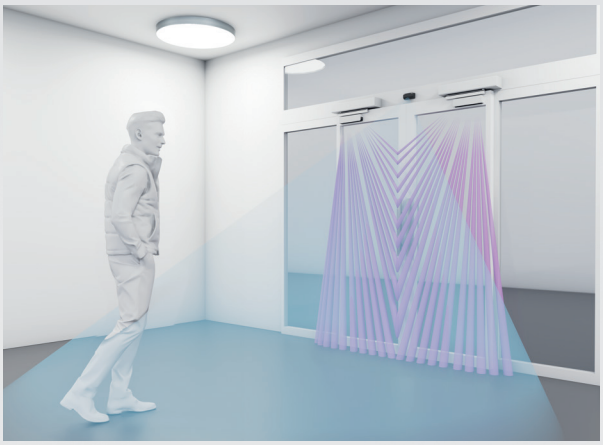
Object tracking
Unlike traditional door activation sensor technology, which relies on interpreting signals and movement of target objects, FutureSense is one step ahead. With real-time object tracking, the sensor uses information based on object behavior, such as position, speed, and direction.

Human behavior analytics
This data is then used to identify approach and true intent to access. In combination with multiple configurable parameters, the sensor determines if and when to activate the door opening.

Advanced cross-traffic suppression
The technology suppresses cross traffic more effectively. All other disturbances not involving movement toward the door are ignored.

Complete solution with SolidSense

Combining FutureSense as the activation sensor with the SolidSense safety sensor creates a complete solution for efficient activation and reliable protection of automatic doors in accordance with EN 16005.



Easy installation and setup

Digitalization and enhanced user experience are essential, enabling smoother workflows and greater efficiency while reducing the installation time to a minimum.

Intuitive setup

The FutureSense app guides installers and service technicians through the basic application settings, enabling them to configure the sensor quickly and easily. The app securely connects to the FutureSense sensor and any changes are stored in real time. The LEDs on the sensor light up to indicate that the connection is active.

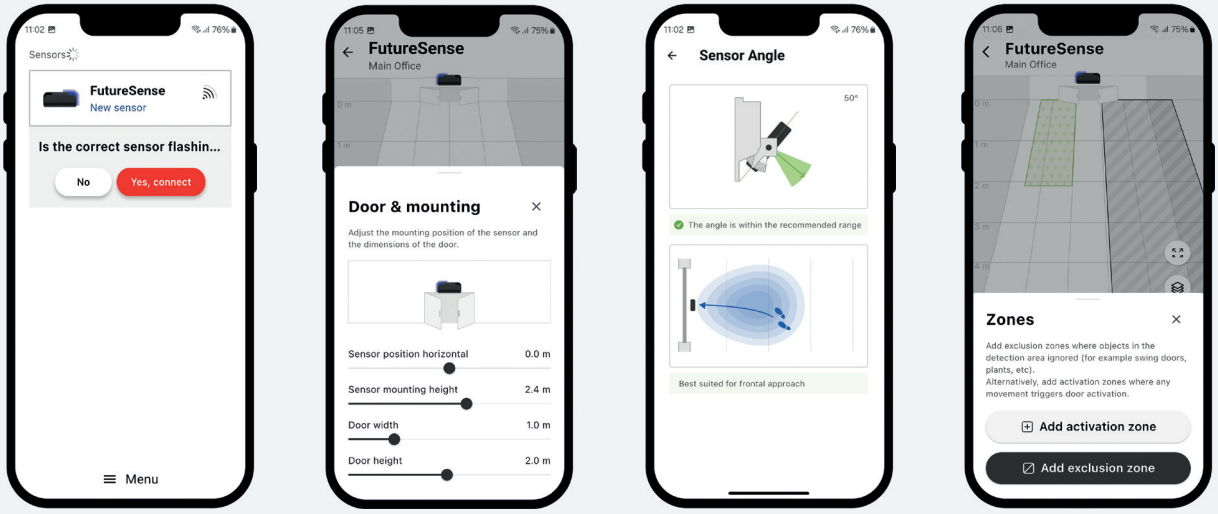
Door size, type, and mounting position are the only parameters necessary to set up the sensor. The algorithms then adjust the settings accordingly.

Thanks to the newly developed antenna design, the app supports mechanical adjustment and reduces it to a minimum to ensure optimal performance.



Live adjustments

Parameters such as mounting position, detection range, and exclusion/activation zones can be set directly in the app and updated simultaneously. Real-time status updates and notifications ensure that users are up to date and ready to react at all times. The app also allows you to update sensor firmware and access manuals directly for quick reference.



Compact design meets functionality

The compact, unobtrusive design seamlessly blends in with modern door designs.

Aesthetics meet practicality

Design matters more than ever, which is why the FutureSense seamlessly combines style and functionality. The housing is exceptionally compact and elegantly designed, enhancing architectural appeal. With a sleek, refined design that is smaller than a smartphone, it integrates seamlessly with modern door frames.

Flexible mounting with intelligent detection

Thanks to its intelligent sensor technology, the installation position for swing doors is not limited to the hinge side. The automatic suppression of door movement allows the FutureSense to be installed in any position above the door, from the hinge side to the main closing edge. This provides greater flexibility in planning and installation.

The integrated LEDs provide clear visual feedback, combining functional performance with modern design. They indicate the operating status of the sensor, as well as its detection and activation.



Areas of application

We use our extensive technological expertise to develop individual customer solutions. Thanks to the intelligent sensor technology for swing doors and revolving doors, BBC Bircher Smart Access offers reliable, application-specific products.



Swing doors

This innovative activation of swing doors is ideal for smart buildings, offices, and public facilities. It uses intelligent human behavior recognition to detect movement and intent to enter, initiating swing door opening.



Revolving doors

In environments that require precise human behavior recognition, such as high-traffic areas like public buildings and shopping centers, FutureSense reliably prevents unnecessary door opening. Its advanced cross-traffic suppression technology distinguishes between moving and stationary objects, triggering the revolving door only when it detects an intent to enter.

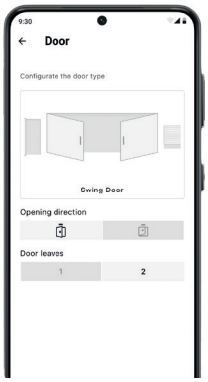
Features of the FutureSense app

To simplify tasks for installers and operators, the FutureSense application allows the installation, operation, and real-time management of multiple sensors.



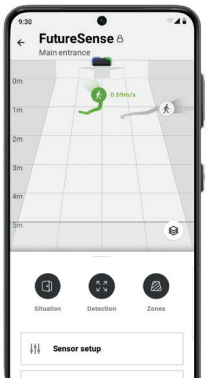
Simplified management of multiple devices

The app automatically searches for FutureSense sensors, and the selected sensor will flash to help you identify it. The application is protected according to the latest cybersecurity standards and enables the seamless management of multiple devices.



Various configuration options

A built-in wizard guides the installer through the initial setup process, ensuring a quick and easy start. Once configured, key parameters such as door dimensions, sensor position, detection range, and exclusion zones can easily be adjusted via the intuitive menu.



Real-time visualization

To adjust, test, and verify settings in real time, the FutureSense app visualizes objects and their movements as they are detected by the sensor. Numerous parameters are clearly visualized within the interface, making configuration and monitoring simple and intuitive.

FutureSense

Data sheet

Mechanical data

Housing material	ABS
Housing colors	Black, white, silver
Dimensions (L × W × D)	105 × 49 × 35 mm
Weight	55 g

Technical data

Technology	FMCW radar
Radar transmission frequency	60 Ghz
Field dimensions (W × L)	Max. 5.0 × 6.0 m Configurable via mobile app
Mounting height	Max. 4.0 m (typ. 2.0 m to 3.5 m)
Configuration interface	App (Android OS, Apple iOS)

Electrical data

Supply voltage	Min. 12 V DC, max. 36 V DC/ Min. 18 V AC, max. 28 V AC (50 Hz/60 Hz)
Operating current	Max. 120 mA at 24 V
Inrush current	Max. 1 A (max. 10 ms)
Radar output	Solid state relay, max. 36 V DC/24 V AC, max. 250 mA
Connection type	3 m cable with plug connector

Ambient conditions

Ambient temperature	Min. –20 °C, max. +60 °C
Protection class	IP54 (EN 60529)
Relative humidity	Max. 95 %, non-condensing

Conformity

According to	RED 2014/53/EU, RoHS 2011/65/EU

For further details, refer to the manual



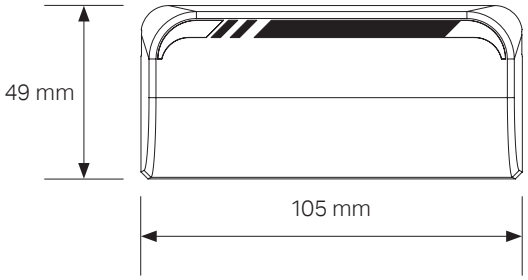
Sensor in housing, black
Product no. 486196

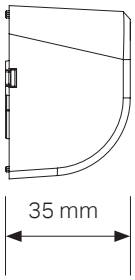


Sensor in housing, silver
Product no. 493602



Sensor in housing, white
Product no. 493644





FutureSense

Order details

Article no.	Designation	
486196	FutureSense, bk	●
493602	FutureSense, si	●
493644	FutureSense, wt	○

● black
○ white
● silver

Article no.	Designation	
493646	FutureSense Hood bk	●
493647	FutureSense Hood si	●
493648	FutureSense Hood wt	○
493651	FutureSense Raincover	
493652	FutureSense Ceiling Mounting Bracket	
480443	FutureSense connection cable, 3 m	

Mobile app

Configure your FutureSense sensor via Bluetooth to ensure a fully functional door system. Fine-tune mounting, adjust the detection range and exclusion zones, update sensor firmware or access manuals, all directly within the app.

Download on the App Store

GET IT ON Google Play



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We will find the right solution for your specific application and will help you ensure that your automatic access systems operate in a way that is energy efficient, secure and convenient.

Find out more about us: **bircher.com**

BBC Bircher Smart Access
Wiesengasse 20
8222 Beringen / Switzerland

T +41 52 687 11 11
info@bircher.com

Smart Sensing Solutions

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