

# MICROHEAD ONE & TWO

The smallest  
microwave  
opening sensor  
for automatic  
doors



## Appearance

- Optimized design with a miniature and translucent housing
- **Vandal proof with PC housing**

## Technology

- **Same K-band planar antenna** as the one developed for the Eagle range
- Digital electronics
- **Unidirectional** (for energy savings on heating and air conditioning) **or bidirectional**
- **MTF function** : adjustment that switches the unidirectional mode to the bidirectional one automatically in case the motion direction is inverted, which increases the safety for hesitating movement of some people

## Detection

- **Wide or narrow** sensing field
- Mounting height **up to 4 m**

## Adjustments for universal use

- **Fully controlled** by a coded infrared remote control unit, which enables you to adjust every BEA product
- **3D antenna's** adjustments  
front : from 0° to 90°  
lateral : from -30° to +30°
- Ceiling mounting without accessory

## Planar antenna and adjustments with the BEA universal remote control unit

A single control box in the door controller, two heads on the door controller... All the BEA Eagle experience in the smallest sensor ever. The MicroHead especially adapts to compact door controllers.

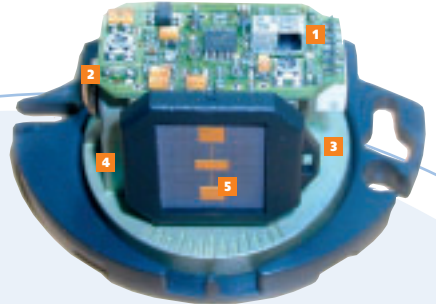
- **MICROHEAD ONE** : unidirectional sensor
- **MICROHEAD TWO** : bidirectional sensor



## Description



- 1 2 sensing heads
- 2 2 cables sensing heads-control box
- 3 Control box
- 4 Power supply cable



## Internal view

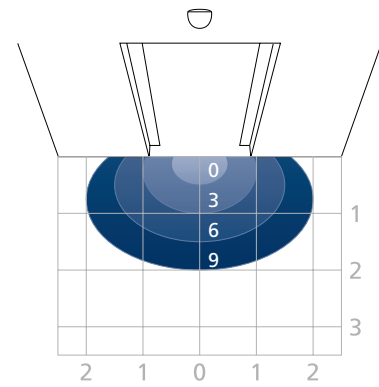
- 1 Infrared receiver
- 2 LED
- 3 Lateral position of the antenna adjustment
- 4 Vertical position of the antenna adjustment
- 5 Wide sensing field antenna (default)

Note:  
"Outdoor" and "indoor" terms are only used in order to ease the installation, as the 2 sensing head channels are electrically equivalent.

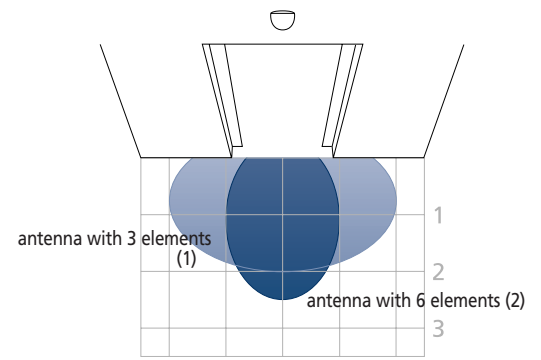
## Technical specifications

Technology	microwave and microprocessor
Transmitter frequency	24.175 GHz
Transmitter radiated power	20 dBm EIRP
Transmitter power density	< 5 m W/cm <sup>2</sup>
Mounting height	
• standard	from 1.8 m to 3 m
• high	from 3 m to 4 m
Tilt angles	0° to 90° vertical -30° to +30° lateral
Detection area (mounting height = 2.2 m)	
• wide sensing field	4 m (W) x 2 m (D)
• narrow sensing field	2 m (W) x 2.5 m (D)
Detection mode	motion
Minimum speed	5 cm/s (measured in the sensor axis)
Supply voltage	12 V to 24 V AC ±10% 12 V to 24 V DC +30% / -10%
Mains frequency	50 to 60 Hz
Power consumption	< 4 W (VA)
Output relay (free of potential change-over contact)	
• max contact voltage	42 V AC - 60 V DC
• max. contact current	1 A (resistive)
• max. switching power	30 W (DC) / 60 VA (AC)
Hold time	0.5 s to 9 s (adjustable)
Temperature range	-20°C to +55°C
Degree of protection	IP54
Immunity	R&TTE 1999/5/EC EMC 89/336/EEC
Material	ABS & Polycarbonate
Dimensions	
• sensing head	80 mm (W) x 60 mm (H) x 55 mm (D)
• control box	77 mm (W) x 50 mm (H) x 30 mm (D)
Weight	
• sensing head	140 g
• control box	60 g
Color of head housing	black smoked
Length of cable	
• sensing head cable	2 m
• power cable	2.5 m
Manual adjustments	
• sensitivity (by push buttons)	
• orientation of sensing field (mechanically)	
• shape of the sensing field (by choice of antenna)	
Remote control adjustments	
• sensitivity	ten levels
• hold time	from 0.5 s to 9 s in 10 steps
• detection mode	uni- or bidirectional, MTF (MicroHead ONE only)
• immunity	quasi-presence, normal, increased immunity
• output configuration	active/passive
• door control	automatic, permanently open/closed
• security	4-digit access code

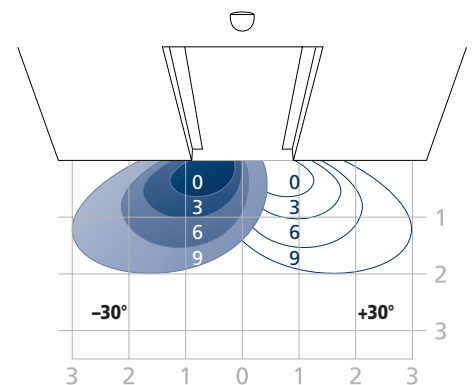
## Sensing fields



Sensing fields in accordance with sensitivity setting  
mounting height : 2.2 m



Sensings fields in accordance with type of antenna  
mounting height : 2.2 m



Sensing fields in accordance with lateral position of antenna  
mounting height : 2.2 m

## Application



Subject to modifications



We open up New Horizons

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