



## Merkur 2

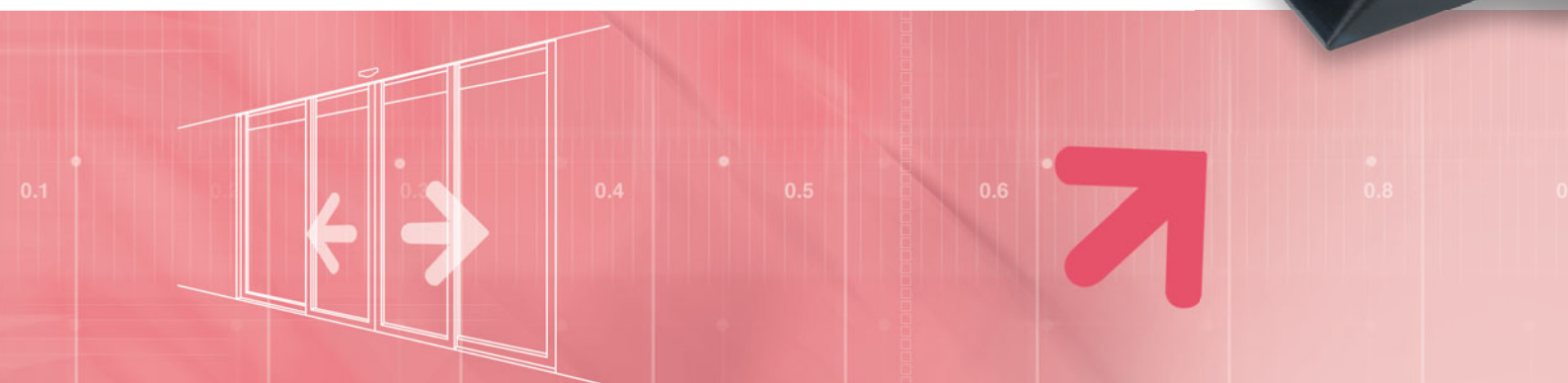
### Microwave motion detector for automatic doors

#### The innovative all-rounder

Thanks to its extremely high versatility, Merkur 2 leads the way and can be used on virtually any type of automatic door. With its totally reliable detection, Merkur 2 provides a smooth flow of people and also ensures savings on energy and costs! The intelligent sensor system has an optional direction recognition and thereby makes sure that the door only opens when people are approaching or leaving. The door closes again immediately afterwards.

#### Hi-tech 'wonder' with dual field planar module

The second generation of Merkur is available with a radar field that is more symmetric and more sharply differentiated than before. Switching between wide or narrow field can be done fully electronically by remote control or by push-buttons on the sensor. Thus, Merkur 2 is adjusted and ready to operate extremely quickly.



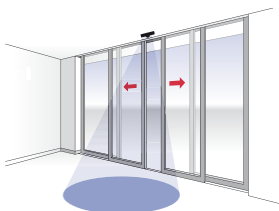
### Your benefits

#### Versatile usable for every situation

- Pre-programmed comfort settings for a rapid commissioning
- The most reliable detection with a clearly differentiated radar field
- Energy-saving by direction recognition
- Avoidance of involuntary door openings by blanking-out of cross
- Electronically switching between a wide and a narrow field
- SMD+ as a new detection field for movements of < 5 cm/s

#### Field characteristics

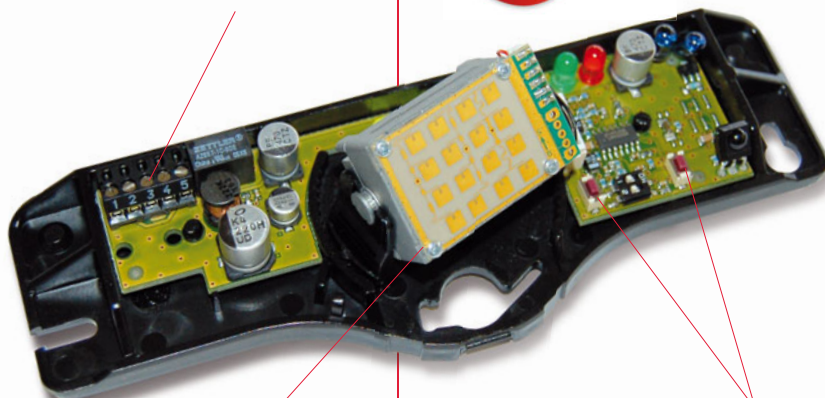
- Electronic field geometry settings options for a wide and narrow field (via remote control or via buttons at the detector)
- Can even be used with wide passage dimensions and high-level lights
- Mounting height up to 4 m



Optional plug-in screw terminal or RJ12 socket



Remote control for rapid commissioning and full range of settings



Radar module that is horizontally and vertically tiltable



Basic programming by using push-buttons on the sensor



## Further accessories

High-quality accessories make the innovative Merkur 2 so versatile that it can be used in the most widely differing applications.



### RegloBeam 2 remote control

Using this, the sensor can be rapidly configured and parameters can be individually adjusted for the respective situation



### MIS ceiling installation kit

Using the MIS ceiling installation kit, the sensor can be discretely and almost invisibly built-in to the ceiling



### MCAP rain and snow cover

The MCAP cover for external use protects the sensor against rain and snow



### MCL semicircular adapter

The MCL adapter with its concave back provides a flat surface to mount the sensor on revolving and curved doors



## Reliable in every application

### Situation

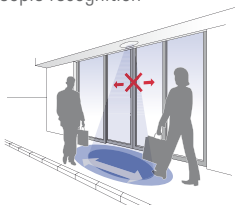
Activation of sliding doors, pedestrians on the pavement

### Solution

- Ensures an optimal flow of people with reliable activation
- Intelligent movement detection: only activated when people directly come towards the door. Ideal for access in passages/on pavements

### Benefits

- No unnecessarily opening/prolonged opening time of the door thanks to direction recognition
- The depth of the field can be reduced to a minimum and still the sensor ensures an optimal flow of people
- Field size up to a width of 5.0 m
- No involuntary opening of the door due to blanking-out of cross traffic/people recognition



### Situation

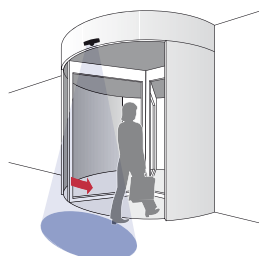
Activation of revolving doors

### Solution

- With a special semicircular adapter, Merkur 2 can also be installed on revolving doors

### Benefits

- Efficient blanking-out of cross traffic
- Small and precisely selectable detection field



### Situation

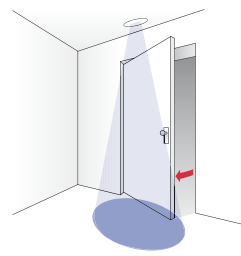
Activation of swing doors

### Solution

- The sensor for automatic doors even in the most confined spaces

### Benefits

- Thanks to the blanking-out of cross traffic, the door leaf is not detected and so the door is not triggered
- Especially suitable for ceiling installation



### Situation

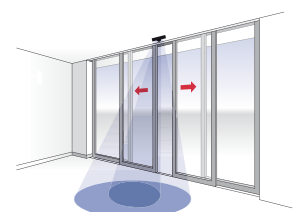
Installation in elderly and disabled homes

### Solution

- Merkur 2 with a specially pre-programmed comfort setting

### Benefits

- Even the very slowest-moving persons (< 5 cm/s) and those in wheelchairs are safely detected with the new SMD+ field
- Almost stationary objects are recognised in the detection field. The door stays open until the person has safely passed through



## Order details

Item no.	Description	
<b>Merkur 2 Standard</b>		
<b>219184</b>	<b>Merkur 2</b> Without direction recognition Changeover contact, Plug-in screw terminal	
<b>219190</b>	<b>Merkur 2 ES</b> With direction recognition Changeover contact, Plug-in screw terminal	
<b>219193</b>	<b>Merkur 2 ES.C</b> With direction recognition Changeover contact, RJ12 socket	
<b>Accessories</b>		
<b>292393</b>	Bi-directional remote control RegloBeam 2	
<b>213459</b>	Cover Merkur black	
<b>213462</b>	Cover Merkur white	
<b>247438</b>	Cover Merkur silver	
<b>212840</b>	MIS – ceiling installation kit	
<b>212837</b>	MCAP – rain and snow cover	
<b>212527</b>	MCL 1.0 – semicircular adapter for Merkur 2 TRL 687 black Door diameter 2.0–3.6 m 175 × 40 × 5.4 mm (W × H × T)	
<b>212528</b>	MCL 2.0 – semicircular adapter for Merkur 2 TRL 687 black Door diameter 3.6–6.0 m 175 × 40 × 3.7 mm (W × H × T)	

## Additional products

### UniScan

Infrared presence detector for automatic swing doors and revolving doors in accordance with EN 16005 and DIN 18650



### PrimeFamily A

The complete solution for activating and protecting sliding doors in accordance with EN 16005 and DIN 18650



## Technical specifications

### Technological specifications

<b>Technology</b>	Double field radar module (24.125 GHz)
<b>Transmitter power</b>	< 20 dBm
<b>Size of narrow field (at 2.2 m)</b>	Min. 0.7 × 0.6 m (W × D) Max. 2.7 × 1.9 m (W × D)
<b>Size of wide field (at 2.2 m)</b>	Min. 1.1 × 0.6 m (W × D) Max. 4.7 × 1.7 m (W × D)

### Mechanical specifications

<b>Material</b>	Cover: PC Base plate: ABS
<b>Dimensions</b>	176 × 62 × 54 mm (W × H × D)
<b>Weight (without cable)</b>	150 g
<b>Types of connections</b>	Plug-in screw terminal or RJ12 plug

### General electrical specifications

<b>Voltage</b>	12–36 VDC 12–28 VAC
<b>Operating current</b>	Approx. 50 mA at 24 VDC, 24 °C

### Environmental conditions

<b>Mounting height</b>	Max. 4.0 m
<b>Type of protection</b>	IP54
<b>Operating temperature</b>	–20 °C up to +60 °C
<b>Humidity</b>	0 – 90 % rel., non-condensing

### Standards

<b>Immissions</b>	EN 61000-6-1 EN 61000-6-2
<b>Emissions</b>	EN 61000-6-3 EN 61000-6-4

### Specific specifications for Merkur 2 and Merkur 2 ES

<b>Output</b>	Potential-free changeover contact 48 VACDC 0.5 A AC / 1 A DC 60 VA / 30 W
---------------	------------------------------------------------------------------------------------

### Note

Technical details and recommendations on our products are based upon experience and represent guidelines for the user. Details in brochures and specification sheets do not guarantee any special product features, apart from those which we confirm in individual cases. We reserve the right to make changes as the result of technical developments.

### BBC Bircher Smart Access

Wiesengasse 20  
8222 Beringen  
Switzerland  
Phone +41 52 687 11 11  
info@bircher.com  
www.bircher.com



sensing the future



## UniScan



Infrared presence detector for automatic swing doors and revolving doors in accordance with EN 16005 and DIN 18650

### Practical, flexible, slender

- Fully automated starting up:  
quick and easy via keystroke
- Automatic mounting height detection:  
saves time and facilitates installation
- Top design:  
the smallest sensor in its category
- Individually adjustable AIR points:  
for perfect adaptation to the local situation

# UniScan

## Active infrared presence detector for automatic swing doors and revolving doors in accordance with EN 16005 and DIN 18650

### Highest level of safety for everyday operation

Safety for every entrance – UniScan provides safety wherever people enter and exit every day. UniScan's dense detection field offers the greatest possible protection, even for small children and people with impaired mobility.

### Quick and easy installation

UniScan will convince you not only due to its high level of safety, but it also reduces the installation and start up time. All it takes is one keystroke and the device is taught and set – fully automated. Thanks to its slender and elegant design with small dimensions, the sensor is unobtrusive and can also be used when space is at a premium.



## Your advantages

### Quick installation and starting up

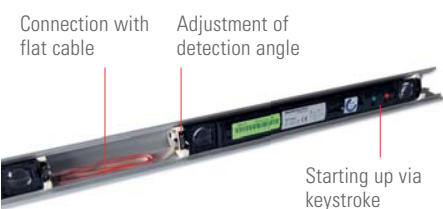
- Several sensors are simply connected by means of a flat cable



- No tools needed to adjust mechanical settings



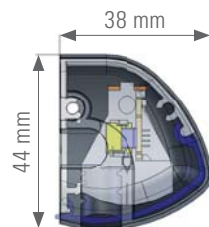
- Automatic startup at the push of a button, LED display



### Universal creation

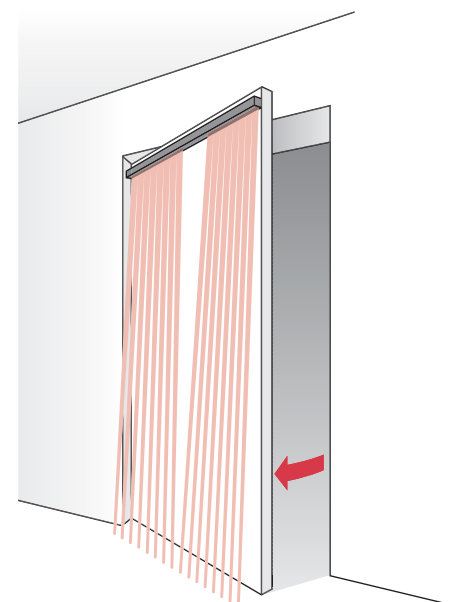
- Testing method can be selected in accordance with the respective drive types
- The detection height above ground can be adjusted between 10 cm and 100 cm
- No interference through synchronisation of the optics
- Individual turning off of single beams

### Compact dimensions



### Field characteristics for more safety

- Close array of beams (471 x 58 mm at 2.2 m mounting height) with 8 beams and very short reaction time (< 50 ms)
- Mounting height up to 3.0 m
- Power saving mode (DIN 18650-compliant)



## Extended accessories



Single components of the UniScan, such as the optical unit US beam and various profiles, are available at all times. An additional remote control enables sensors that have already been installed to be adjusted. The Y-Adapter offers a simple cabling solution with only one cable for two sensors on both sides of the door. The two door loop sets DLP 6 and Door Loop provide a clean connection to the wall.



US beam  
Optical unit



RegloBeam 2  
Remote control



Y-Adapter  
Connection of  
two UniScans



Flat cable  
Flat cable for  
the connection  
of US beams



DLP 6 Box  
Door loop  
set with wall  
box



Door Loop  
Door loop  
set with wall  
mounting piece



## UniScan door set

### Set for security

UniScan is also available as a user-friendly door set.

### User-friendly, complete and clear

All components are supplied in a single package: the individual parts are clearly arranged. This provides you with everything you need to secure a door at your fingertips.

### Quick installation and startup without tools

The Y-Adapter clips into profile. Thanks to its practical plug-in design, both sides of the door can be connected based on the plug-and-play principle. The profile end covers are also pluggable and can be assembled without tools.



## Safety for every application

### Situation

Access via a swing door

### Solution

- The main and secondary closing edges are monitored on both sides of the door for optimum protection of the entire door swing to avoid collisions
- Due to short reaction time, door movements remain smooth

### Advantages

- UniScan perfectly secures all edges
- The matching device for every door: Length and number of sensors can be chosen



### Situation

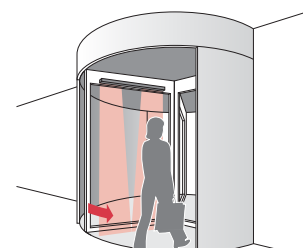
Access via a revolving door

### Solution





- An on-board collision protection for revolving doors provides smooth operation and minimises risk of accidents

### Advantages

- Persons and objects are detected easily and without contact
- Possible collisions and accidents involving people at the door are thus avoided



## Ordering information

Article No.	Description	Sensor / Dimensions	
260012	UniScan 1.350 silver	1	
259970	UniScan 1.350 black	1	
260013	UniScan 1.350 white	1	
256274	UniScan 2.750 silver	2	
256317	UniScan 2.750 black	2	
256296	UniScan 2.750 white	2	
256299	UniScan 2.900 silver	2	
256340	UniScan 2.900 black	2	
256341	UniScan 2.900 white	2	
256859	UniScan 2.1100 silver	2	
256596	UniScan 2.1100 black	2	
256881	UniScan 2.1100 white	2	
257182	UniScan 3.1600 silver	3	
257184	UniScan 3.1600 black	3	
257189	UniScan 3.1600 white	3	
290768	UniScan 2x2.1100 door set silver	2 x 2	
296971	UniScan 2x2.1100 door set black	2 x 2	
296972	UniScan 2x2.1100 door set white	2 x 2	
291030	UniScan 2x2.1200 door set silver	2 x 2	
296973	UniScan 2x2.1200 door set black	2 x 2	
296974	UniScan 2x2.1200 door set white	2 x 2	
256297	US beam Optical unit incl. mounting clips	1	
288879	Y-Adapter		
212354	DLP 6 Box, door loop set Box and door loop tube, length max. 600 mm, inner diameter max. 6 mm, material plastic, colour black		
220535	Door Loop, door loop set Wall adaptor and door loop tube, length max. 600 mm, inner diameter max. 6 mm, material plastic, colour black		
212356	Door Loop, door loop set Wall adaptor and door loop tube, length max. 600 mm, inner diameter max. 6 mm, material metal, colour black		
291082	UniScan cable set Contains Y-Adapter 288879 and door loop set 220535		
213096	Flat cable 500	500 mm	
213097	Flat cable 800	800 mm	
225452	Scan front cover	3350 mm	
219910	Scan silver aluminium profile	3350 mm	
247969	Scan black aluminium profile	3350 mm	
247966	Scan white aluminium profile	3350 mm	
297705	Scan Cap Set black End cover set, black		
297706	Scan Cap Set white End cover set, white		
218810	Holder Beam Universal Mounting clip		
243025	RPT rain cover 17 m roll		
292393	RegloBeam 2 Bidirectional remote control		

## Additional products

### Activates automatic doors

Microwave motion sensor Merkur 2 with electronically adjustable field



### Protects primary closing edges in revolving doors

Active infrared sensor SpotScan with detection altitude of up to 3 m



## Technical data

### Mechanical data

Housing material	Aluminium
Front cover	Plexiglass PMMA (black)
Weight (US beam)	90 g
Measurements (US beam)	300 x 31 x 20 mm
Weight (UniScan 2.1100)	910 g
Type of connection	Plug-in screw terminal

### Technological data

Technology	Infrared
Beams	8 per US beam
Power saving mode	5 beams per US beam activated (factory setting)
Mounting height	1.7 – 3.0 m
Field size (at 2.2 m)	471 x 58 mm
Mode of operation	on-board
Reaction time for detection	< 50 ms
Performance Level	PLd, Cat. 2
Max. number of sensors linked together	4 (with DC supply voltage only)

### Electrical data

Supply voltage	15–37 VDC ± 0% 15–26 VAC ± 0% AC only for single device
Making current	< 500 mA
Power consumption	3.3 Watt (138 mA with 24 V per unit)
Test input	High/Low active, Pull up/Pull down Response time to test signal High level < 30 ms (typical 3 ms) Min. 5 V DC – max. 24 V DC / I = < 6.5 mA
Output	Relay 40 VDC, 40 VAC, 1 A
Relay holding time	0–10 s (adjustable)

### Environment conditions

Protection category	Suitable for application IP54
Operating temperature	–20°C to +60°C
Atmospheric moisture	< 95%, non condensation

### Norms

Immission	EN 61000-6-1 EN 61000-6-2
Emission	EN 61000-6-3 EN 61000-6-4
EC type certificate in accordance with	EN 16005 DIN 18650 EN 12978 EN 13849-1 EN 61508

### Advice

Technical data and recommendations for our products are empirical values and serve as orientation guide for the user. Information given in brochures and data sheets do not guarantee special product characteristics. This does not include special characteristics which, in single cases, we confirm individually or in written form. We reserve the right to make modifications resulting from further technical development.

### Bircher Reglomat AG

Wiesengasse 20

CH-8222 Beringen

Phone +41 52 687 11 11

Fax +41 52 687 12 10

info@bircher.com

www.bircher-reglomat.com