BIRCHER
Reglomat

sensing the future

RFGate 2

Wireless signal transmission system for industrial doors with safety edges and wicket doors

Simple, safe, low-maintenance

- Fast and easy installation and short start-up time
- Varied applications
- High safety standard through PLc, cat. 2 in accordance with EN ISO 13849-1
- Long service life and low operating costs thanks to the wear-free signal transmission

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RFGate 2

Wireless signal transmission system for safety edges on rolling, sectional and folding doors, sliding gates and telescopic gates

Safety in an instant
RFGate 2 systems securely transmit wirelessly the status of pressure-sensitive safety edges mounted on the mobile part of the gate to the switching device. Install, configure, switch on, quick program and it's ready to go.

One and two-channel
Depending on application and needs, select the one-channel (RFGate 2.1) or one of the two-channel variants (RFGate 2.2).

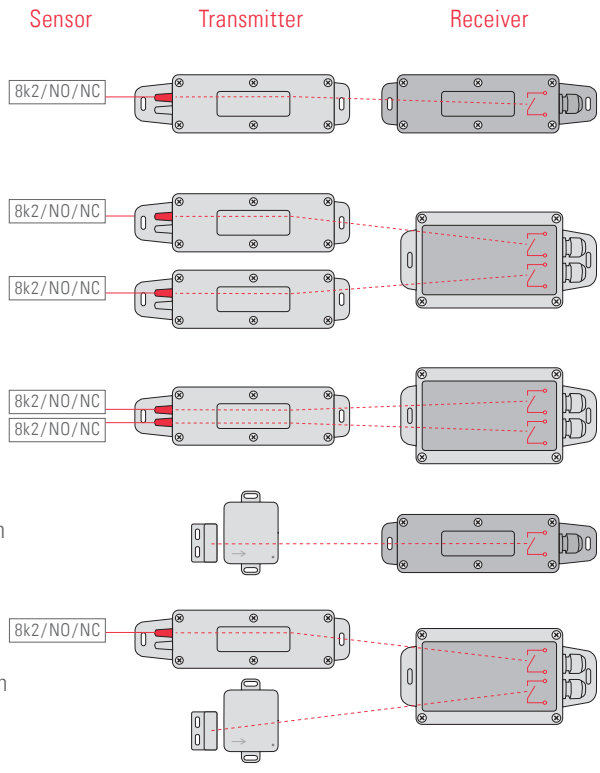
Also with wicket door switch
In addition, we also provide a complete solution for the parallel evaluation of wicket doors and safety edges with our compact wicket door transmitter RFGate 2.1.W.S.

Your benefits

- Up to seven transmitters can be evaluated in parallel per channel
- Long battery life (> 2 years)
- Compatible with safety edges with 8.2 kOhm (factory setting) or sensors with NC or NO switch
- Option of automatic frequency changeover in environments with high interferences
- RFGate 2.2: two outputs to distinguish between OPEN and CLOSED direction or between safety edge and wicket door
- A slim version of the transmitter is now available, perfect for tight spaces (RFGate 2.2.S.F)

Robust housing
The robust housing of the RFGate 2.2.R.A receiver satisfies IP65.

System overview



RFGate 2.1 (one-channel)
1 transmitter
1 receiver

RFGate 2.2 (two-channel)
2 transmitter
1 receiver

RFGate 2.2.NG (two-channel)
1 transmitter
1 receiver

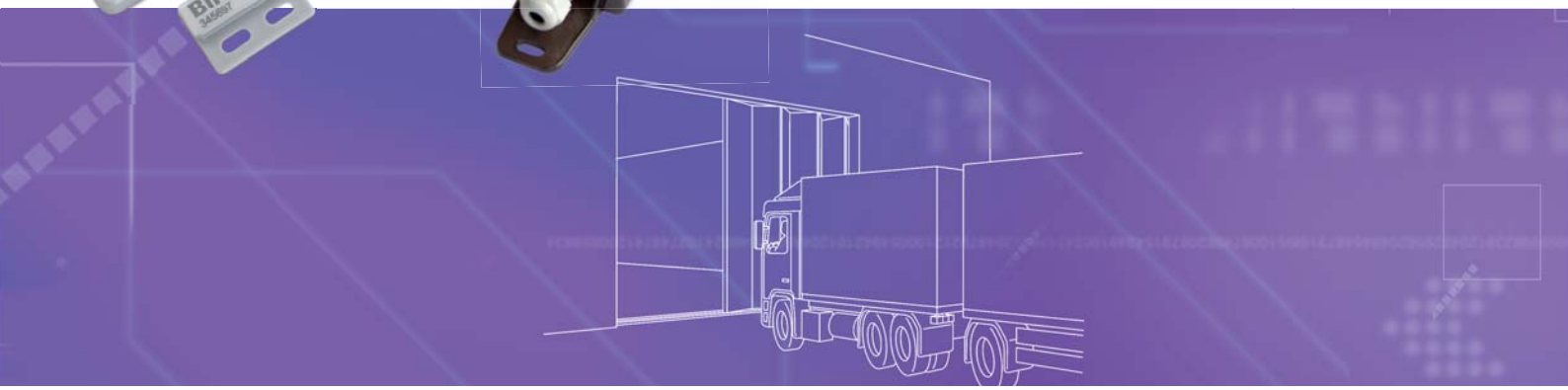
RFGate 2.1.W (one-channel)
1 transmitter with wicket door switch
1 receiver

RFGate 2.2.W.F.A (two-channel)
1 transmitter
1 transmitter with wicket door switch
1 receiver

Note: Up to seven transmitters (RFGate 2.1: up to ten transmitters) per channel can communicate with one receiver.

Approvals

Combined with Bircher Reglomat safety edges such as CoverLine, ClickLine, etc., the RFGate signal transmission systems are type tested.

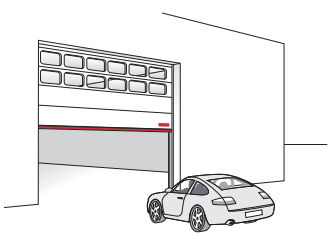


Safe in every application

Situation
Rolling door, sectional door

Solution
- RFGate 2.1.F

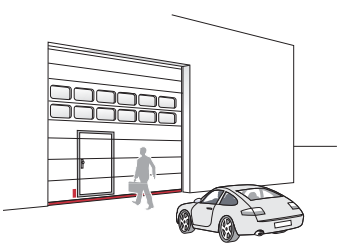
Advantage
- Wear-free signal transmission even with high use gates or doors
- Slim transmitter can be easily mounted into the door construction



Situation
Sectional door with wicket door and safety edge

Solution
- RFGate 2.2.W.F.A / RFGate 2.2.NG

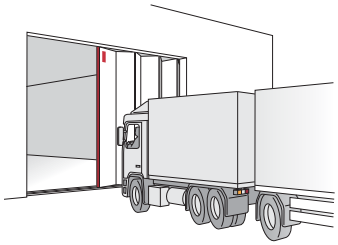
Advantage
- Receiver with two channels for parallel signal evaluation of safety edge and wicket door switch
- Slim transmitter can be easily mounted into the door construction



Situation
Folding door

Solution
- RFGate 2.1 / RFGate 2.2.A

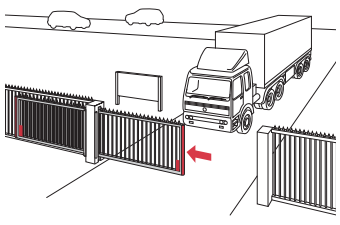
Advantage
- Wear-free signal transmission for all safety edges



Situation
Sliding gate at site entrance, telescopic gate

Solution
- RFGate 2.2.A

Advantage
- Wear-free signal transmission for all safety edges, even with large gates
- Distinction between OPEN and CLOSED direction



Order details

Article no.	Description	
Sets RFGate 2.1 (one-channel)		
299769	**RFGate 2.1.F** 1 transmitter (slim) and 1 receiver	
250948	**RFGate 2.1** 1 transmitter and 1 receiver	
355355	**RFGate 2.1.W** 1 transmitter for wicket door 1 receiver	
Sets RFGate 2.2.A (two-channel)		
306921	**RFGate 2.2.F.A** 2 transmitter (slim) and 1 receiver	
306920	**RFGate 2.2.A** 2 transmitter and 1 receiver	
336806	**RFGate 2.2.NG.F** 1 transmitter (slim) and 1 receiver	
336804	**RFGate 2.2.NG** 1 transmitter and 1 receiver	
349282	**RFGate 2.2.W.F.A** 1 transmitter (slim), 1 transmitter for wicket door, 1 receiver	
Components		
340871	**RFGate 2.2.S.F** Transmitter (slim) for RFGate 2.1.F, RFGate 2.2.F.A and RFGate 2.2.NG.F	
340870	**RFGate 2.2.S** Transmitter for RFGate 2.1, RFGate 2.2.A and RFGate 2.2.NG	
345691	**RFGate 2.1.W.S** Transmitter with integrated wicket door switch	
250951	**RFGate 2.1.R** Receiver for RFGate 2.1 or RFGate 2.1.F	
306923	**RFGate 2.2.R.A** Receiver for all RFGate 2.2	

Supplementary products

ClickLine
Electrical safety edge,
rubber profiles with click-foot

CoverLine
Electrical safety edge,
rubber profiles for sidewise clicking

EsGate 2/3
Cat. 2/3 switching devices for
sensors such as electrical safety edges

AirMission 1.T
Transmitter with integrated pressure wave switch

Note
Technical details and recommendations concerning our products are based on experience and are an aid for the orientation of the user. Details stated in our brochures and data sheets do not guarantee special properties of the products. This does not apply to special product properties confirmed by us in writing or individually.
Subject to technical alterations.

Technical data

Device dimensions (W x H x D)	
RFGate 2.2.S.F (Transmitter slim)	190 × 51 × 23 mm
RFGate 2.2.S (Transmitter)	190 × 51 × 36 mm
RFGate 2.1.W.S (Transmitter)	64 × 42 × 13 mm
RFGate 2.1.W.S (Magnet)	29 × 20 × 8 mm
RFGate 2.1.R (Receiver)	190 × 51 × 36 mm
RFGate 2.1.R.A (Receiver)	178 × 80 × 45 mm

Electrical data		
Transmitter	**RFGate 2.2.S.F / RFGate 2.2.S**	
Supply voltage	2 lithium batteries 3 V (CR2032)	
Battery life	Typ. 2 years	
Current consumption	Transmitting: 17 mA in "sleep mode": 16 µA	
Resistance values of the safety edges	8.2 kOhm or NC/NO switch	
Frequency bands	868.95 MHz / 869.85 MHz	
Wicket door switch	**RFGate 2.1.W.S**	
Supply voltage	1 lithium battery 3 V (CR2032)	
Battery life	Typ. 1 year	
Receiver, switching device	**RFGate 2.1.R**	**RFGate 2.2.R.A**
Supply voltage	12–24 VAC/DC –10% / +20%	
Power consumption	0.5 W at 12 V / 1.2 W at 24 V	
Transmitter memory	10	7 per channel
Outputs	1	2
Relay	24 VDC, 1 A, NO, with 8k2 parallel resistor as option	
Displays: LED red (safety edges not actuated)	1	2
Test input for RFGate 2.1.R	Non-electrically isolated NC or NO (adjustable with DIP switch)	
Test input for RFGate 2.2.R.A	Electrically isolated NC or NO (adjustable with DIP switch)	

Ambient conditions	
Protection category	IP55
Protection category (RFGate 2.1.W.S)	IP30
Operating temperature	–20 °C to +55 °C
Storage temperature	–40 °C to +80 °C
Air humidity	< 95%, non-condensing

General data	
Range	100 m under optimum conditions
Communication	Bidirectional
Radiated power	< 5 dbm / 3 mW
In environments with high interferences	Option of automatic frequency changeover (DIP switch)
Low battery indication	Acoustic and optical (LED)
Approvals	EN 300 220, EN 301 489 EN ISO 13849-1

Note
Additional technical data can be found on our data sheets.

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