



ExpertSystem XRF

Wireless signal transmission system for applications with high performance and design requirements



Quick, stable, safe

- Quick setup time – simply press the pressure-sensitive edge twice
- High interference immunity and long battery life of over 7 years
- Safety level cat. 2, PLC or cat. 3, PLd available

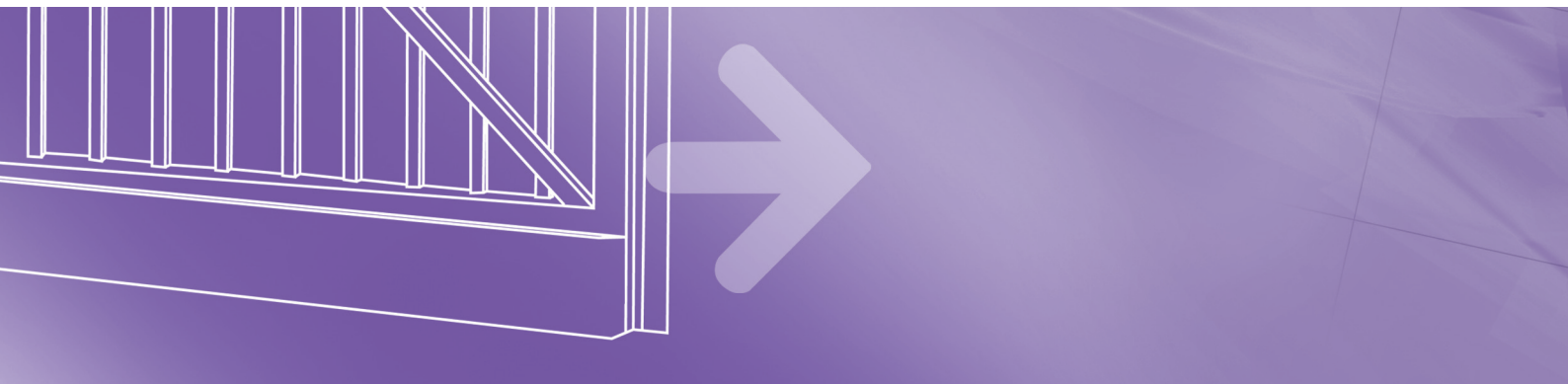
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Next level of safety

Ever faster gates paired with a high need for security are placing exacting requirements on the safety equipment for gates and also on the signal transmission of tactile sensors. To achieve the highest possible level of safety automatically and at all times, BBC Bircher Smart Access combines safety category 2 (with test signal from controller) and safety category 3 (no test signal) in one device.

If your controller features integrated testing, the test signal is applied by ExpertSystem and the system is monitored in accordance with safety category 2, PLc. If the controller does not have a test signal or if the test input is not connected, XRF monitors the safety system itself in accordance with safety category 3, PLd, providing the highest possible safety in every situation.



Benefits

Quick

The wireless signal transmission system can be set up in a matter of seconds by pressing the pressure-sensitive edge twice. ExpertSystem XRF also enables signals to be transmitted quickly between transmitter and receiver.

Stable

All devices comply with protection class IP65. Furthermore, individual components are installed in the pressure-sensitive edge or in the switch cabinet in order to provide protection from the weather. With a battery life of at least 7 years and high interference immunity (EMC), reliable wireless signal transmission is ensured at all times.

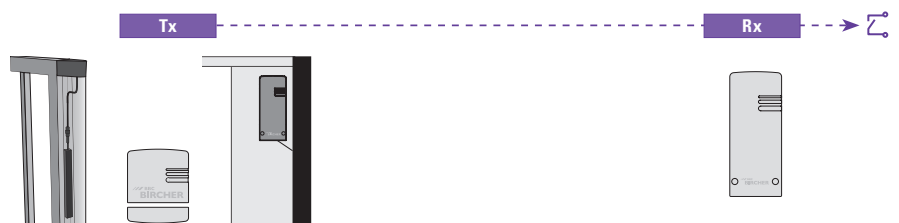
Safe

As a hybrid system, ExpertSystem XRF allows you to choose between safety level cat. 2, PLc and cat. 3, PLd. Compatibility with all standard controllers is guaranteed, and seamless integration into ExpertSystem XL results in an attractive appearance for the overall system.

System overview

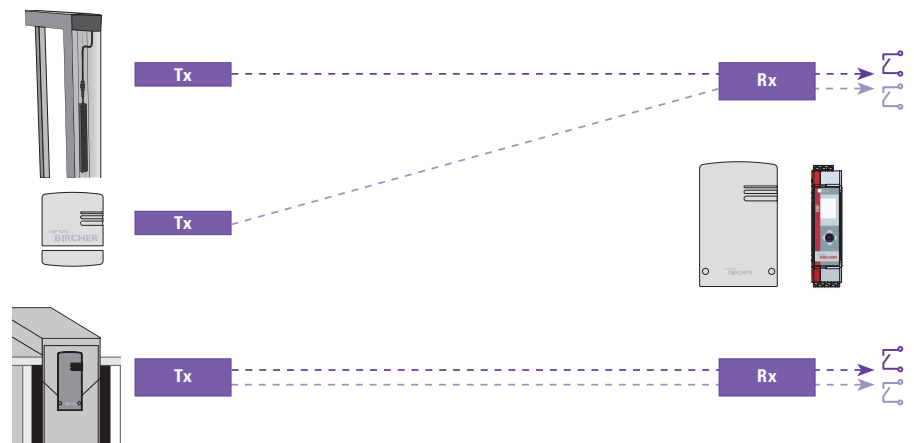
ExpertSystem XRF – one-channel

One-channel system: Receiver (Rx) with one output

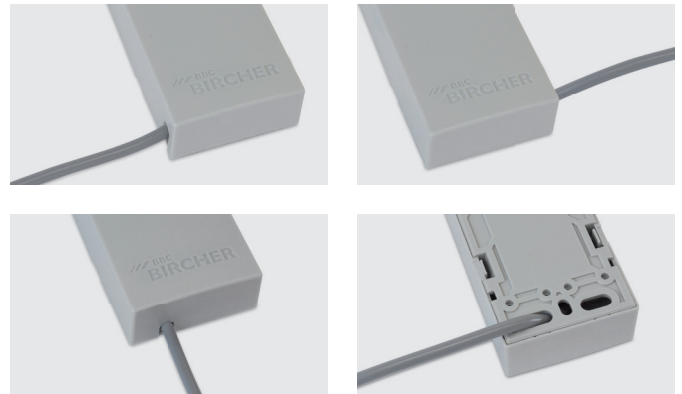


ExpertSystem XRF – two-channel

Two-channel system: Receiver (Rx) with two outputs



Cabling



Applications

Situation

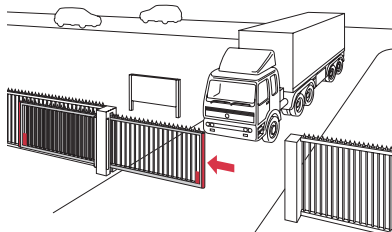
Sliding gate at site entrance, telescopic gate

Solution

XRF-RD, XRF-TI (2 x)

Benefits

- Wireless signal transmission for all pressure-sensitive edges
- Optional safety level: hybrid between cat. 2, PLc or cat. 3, PLd with a range of up to 100 m
- Up to 14 pressure-sensitive edges monitored by one receiver
- Stationary pressure-sensitive edges wired directly with receiver
- Range up to 100 m



Situation

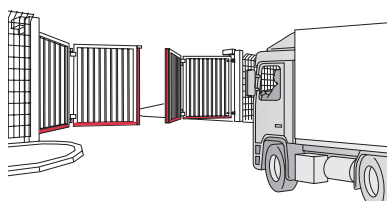
Swing gate at site entrance, fast folding door

Solution

XRF-R.2, XRF-TI (2 x)

Benefits

- Wear-free signal transmission for all pressure-sensitive edges
- Quick and simple pairing by pressing the pressure-sensitive edges twice
- Slim XRF-TI transmitters, harmonious appearance as they are integrated and concealed in the safety edge
- Distinction between OPEN and CLOSED direction thanks to two transmitters and two-channel receiver



Situation

Sectional or folding door

Solution

XRF-R.2, XRF-T.2, XRF-TW

Benefits

- Wear-free signal transmission for all pressure-sensitive edges
- Receiver with two channels for parallel monitoring of pressure-sensitive edge and wicket door
- Quick reaction time for entire sensor system with a battery life of up to 7 years



Technical data

Device dimensions (W × L × D)

XRF-T.2 (transmitter)	50 × 121 × 23 mm
XRF-TI (transmitter)	18 × 194 × 18 mm
XRF-R.1 (receiver)	50 × 121 × 23 mm
XRF-R.2 (receiver)	75 × 121 × 24 mm
XRF-RD (receiver)	22.5 × 94 × 91 mm
XRF-TW (transmitter)	66 × 58 × 16 mm
XRF-TW (magnet)	66 × 17 × 16 mm

Electrical data

Transmitter	XRF-T.2, XRF-TW
Operating voltage	Lithium battery 3 V (CR2450N)
Battery life	Typ. 1.7 years
Transmitter	XRF-TI
Operating voltage	Inorganic lithium battery 3.6 V
Battery life	Typ. 7 years
Receiver	XRF-R.1, XRF-R.2, XRF-RD
Operating voltage	12–36 V ACDC
Power consumption	0.6 W at 12 V / 1.0 W at 36 V
Outputs (redundant) as option	Relay 24 V ACDC, 1 A with 8.2 kOhm parallel resistor

General data









Range	100 m under optimum conditions
Protection class	IP65 (except XRF-RD)
Approvals	EN ISO 13849-1 (PLd, cat. 3) EN 300 220, EN 301 489

The ExpertSystem XRF signal transmission systems have been type-tested in combination with Bircher pressure-sensitive edges.

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.

Ordering information

Article no.	Description	
407666	XRF-T.2 Transmitter	
407680	XRF-T.2 bk Transmitter, anthracite	
407683	XRF-TI Transmitter, built-in version	
407688	XRF-R.1 Receiver, one-channel	
407692	XRF-R.2 Receiver, two-channel	
407684	XRF-RD Receiver, two-channel, DIN housing	
410957	XRF-RD.A Receiver, two-channel, DIN-housing, with antenna connector	
407690	XRF-TW Transmitter with integrated wicket door switch	
396572	Antenna Set (antenna, cable 1 m, ball joint, screws)	
420078	Spare battery 3.6 V for integrated transmitter XRF-TI	

BBC Bircher Smart Access

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