



## AirMission

Wireless signal transmission system  
for pressure wave edges on roller,  
sectional and overhead doors

**Straightforward, safe, low-maintenance**

- **Fast and easy installation and short start-up time**
- **Varied applications**
- **Safety with performance level PLc, cat. 2 in accordance with EN ISO 13849-1**
- **Long service life and low operating costs thanks to wear-free signal transmission**

# AirMission 1 / AirMission 1.T / AirMission 2.W2

## Wireless signal transmission system for pneumatic safety edges on roller, sectional and overhead doors

### Safety in an instant

The AirMission system wirelessly transmits signals from the closing edge of the gate to the controller. Information regarding the status of a pressure-sensitive, pneumatic safety edge is transferred contact-free and therefore wear-free. The AirMission system is suitable for applications with performance level PLC, cat. 2 in accordance with EN ISO 13849-1. Program, fit, switch on and off you go!

### Two-channel

Depending on the application concerned and your exact needs, a pressure wave switch and an additional detector with integrated wicket door switch can be monitored and evaluated. Up to seven transmitters in parallel can be programmed to each channel.



## Benefits for you

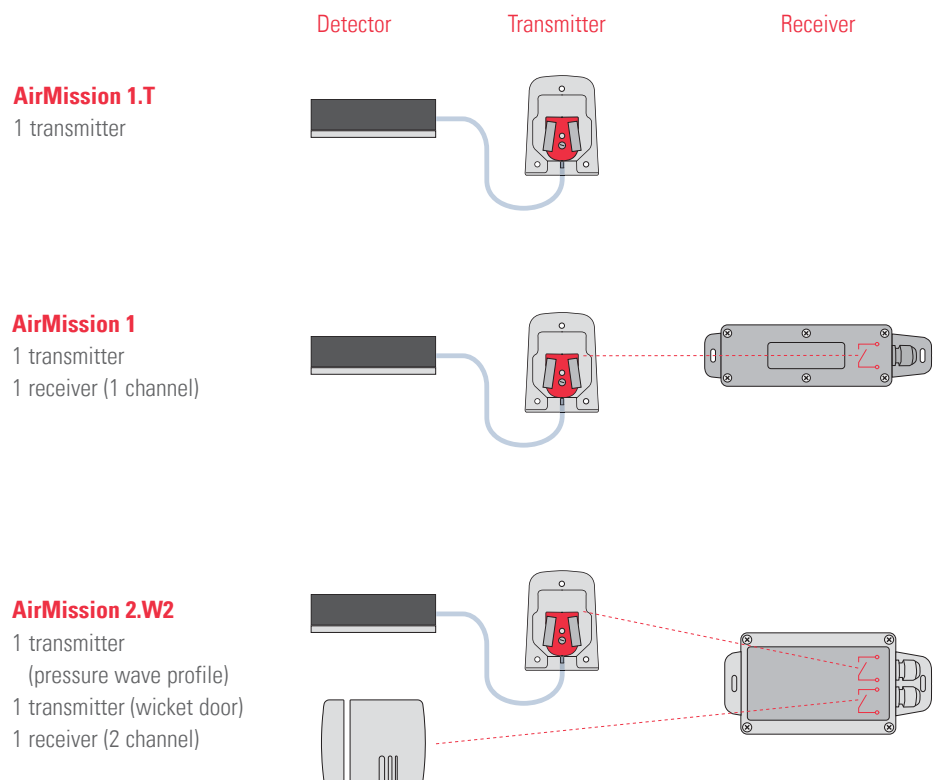
- Compatible with a wide range of pneumatic safety edges
- Two outputs to distinguish between closing direction and general stop, for example (AirMission 2.W2)
- Up to 7 transmitters can be evaluated in parallel per channel
- No test input wiring required thanks to final position testing
- Long battery life (> 1.2 years)

### Special housing

IP54 protection class  
Thanks to its rounded form, no objects can be placed on the housing. There is therefore no risk of tools falling down, for example.



## System overview





## Applications

### Situation

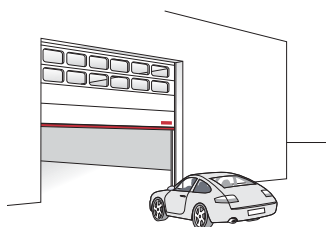
Roller door, sectional door, high-speed door

### Solution

- AirMission 1

### Benefit

- Wear-free signal transmission of highly sensitive pressure wave edge



### Situation

Sectional door with wicket door

### Solution

- AirMission 2.W2

### Benefit

- Separate evaluation of pneumatic safety edge and wicket door switch in the same receiver



### Situation

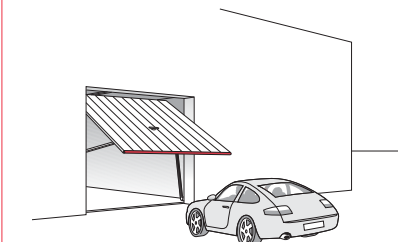
Overhead door

### Solution






- AirMission 1

### Benefit




- Wear-free signal transmission of highly sensitive pressure wave edge





# Ordering information

Article no.	Description	
<b>AirMission sets</b>		
<b>350233</b>	<b>AirMission 1</b> 1 transmitter and 1 one-channel receiver	
<b>365540</b>	<b>AirMission 2.W2</b> 2 transmitters and 1 two-channel receiver	
<b>Components</b>		
<b>344428</b>	<b>AirMission 1.T</b> Transmitter with integrated pressure wave switch	
<b>250951</b>	<b>RFGate 2.1.R</b> One-channel receiver	
<b>306923</b>	<b>RFGate 2.2.R.A</b> Two-channel receiver	



# Supplementary products

Article no.	Description	
<b>Profiles</b>		
<b>210154</b>	<b>DWS-D</b> Profile, PVC, black 14 x 20 mm	
<b>210152</b>	<b>DWS-C</b> Profile, PVC, black 25 x 29 mm	
<b>210147</b>	<b>DWS-B</b> Profile, PVC, black 25 x 39 mm	

For further profiles, see DW brochure

<b>Connection elements</b>		
<b>207495</b>	<b>Hose PVC 2/4</b> PVC, 100 m	
<b>207502</b>	<b>Hose Neoprene 2/4</b> Neoprene, 100 m	

<b>Transmitter for wicket doors</b>		
<b>361143</b>	<b>RFGate 2.1.W2.S</b> Transmitter with integrated wicket door switch	

<b>Sets for wicket doors</b>		
<b>365398</b>	<b>RFGate 2.1.W2</b> 1 transmitter for wicket door 1 receiver (one-channel)	
<b>365399</b>	<b>RFGate 2.2.W2.FA</b> 1 transmitter (slim), 1 transmitter for wicket door, 1 receiver (two-channel)	

### 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

<b>General data</b>	
<b>Frequency ranges</b>	868.95 MHz / 869.85 MHz
<b>Range</b>	100 m under optimum conditions
<b>Communication</b>	Bidirectional
<b>Radiated power</b>	< 5 dbm / 3 mW

<b>Mechanical data</b>	
<b>Transmitter</b>	<b>AirMission 1.T</b>
<b>Material (housing)</b>	ABS, grey
<b>Dimensions</b>	73 × 95 × 56 mm (W × H × D)
<b>Air hose connection</b>	Ø 3 mm for 2/4 mm hose
<b>Response pressure</b>	2 ± 0.5 mbar
<b>Max. pressure</b>	150 mbar
<b>Pressure equalisation</b>	110 ml/min at 2 mbar
<b>Mech. service life</b>	10 million switching operations
<b>Transmitter</b>	<b>RFGate 2.1.W2.S</b>
<b>Material (housing)</b>	ABS, light grey
<b>Dimensions</b>	65.7 × 57.6 × 15.5 mm (W × H × D)
<b>Receiver, switching device</b>	<b>RFGate 2.1.R</b>
<b>Material (housing)</b>	Polycarbonate, smoke colours
<b>Dimensions</b>	190 × 51 × 36 mm (W × H × D)
<b>Connection type</b>	7 screw terminals
<b>Receiver, switching device</b>	<b>RFGate 2.2.R.A</b>
<b>Material (housing)</b>	Polyamide, light grey
<b>Dimensions</b>	178 × 80 × 45 mm (W × H × D)
<b>Connection type</b>	12 screw terminals

<b>Electrical data</b>		
<b>Transmitter</b>	<b>AirMission 1.T</b>	<b>RFGate 2.1.W2.S</b>
<b>Supply voltage</b>	2	2
	Lithium batteries, 3V (CR2032)	
<b>Battery life</b>	Typ. 1.2 years	Typ. 2 years
<b>Current consumption</b>	Transmitting: 17 mA In sleep mode: 16 µA	
	Typ. 25 ms	Typ. 50 ms
<b>Codes available</b>	65,536	
<b>Receiver, switching device</b>	<b>RFGate 2.1.R</b>	<b>RFGate 2.2.R.A</b>
<b>Supply voltage</b>	12–24 V AC/DC -10% / +20%	
<b>Power consumption</b>	0.5 W at 12 V / 1.2 W at 24 V	
<b>Transmitter memory</b>	10	7 per channel
<b>Outputs</b>	1	2
<b>Displays: LED red</b> (status output)	1	2
<b>Relay</b>	24 V DC, 1 A, NO, with 8k2 parallel resistor as option	
<b>Low battery indication</b>	Acoustic and visual (LED)	

<b>Ambient conditions</b>	
<b>Receiver protection class</b>	IP55
<b>AirMission 1.T protec. class</b>	IP54
<b>RFGate 2.1.W2.S protec. class</b>	IP65
<b>Operating temperature</b>	-20°C to +55°C
<b>Storage temperature</b>	-40°C to +80°C
<b>Air humidity</b>	< 95% non-condensing
<b>Standards</b>	EN 300 220, EN 301 489 EN ISO 13849-1 (PLc, cat.2, MTTFD 28.8)

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