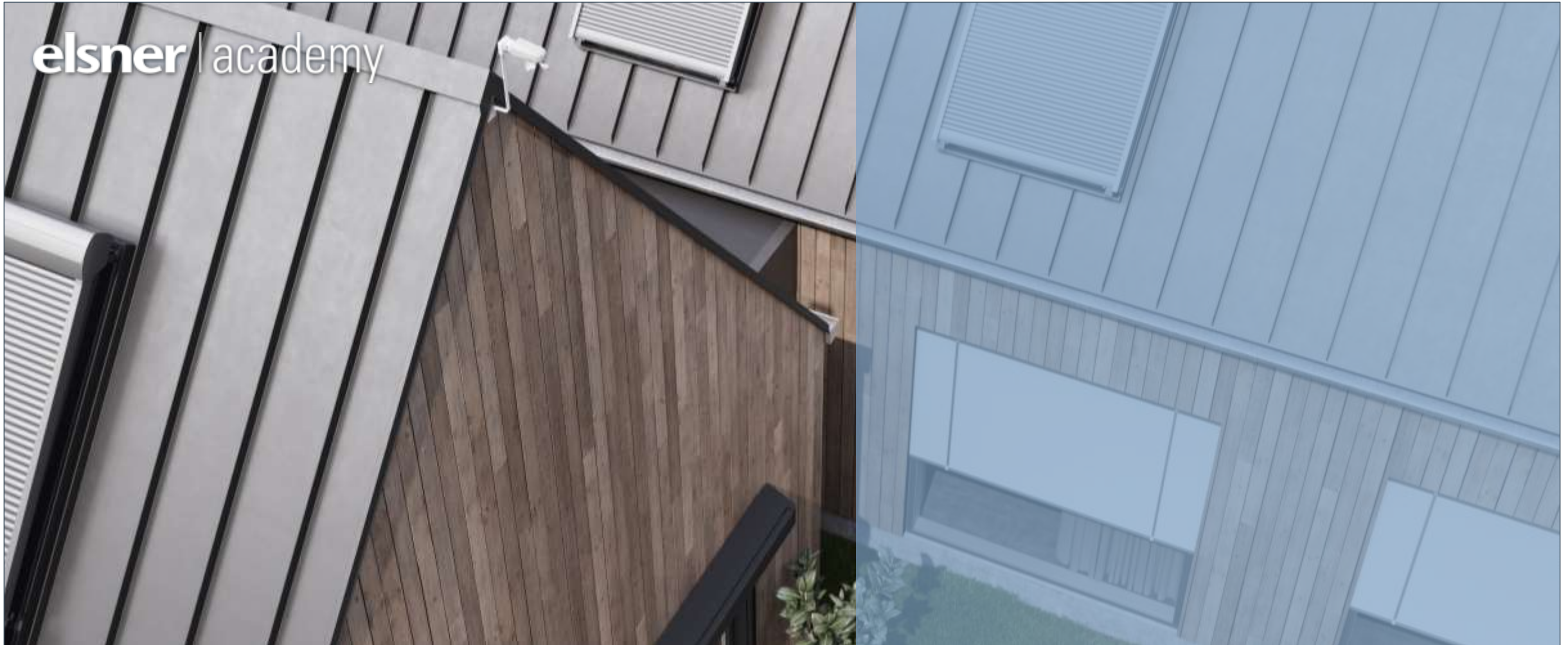




WINDANCER KNX

KNX Weather Stations for Smart Blind Control

Bastian Elsner | 04.06.2025

» I am your speaker today

Bastian Elsner

- Managing Partner at
Elsner Elektronik GmbH
- Responsibility: marketing, sales,
development, production,
purchasing, logistics, service



Windancer KNX

| Short video



Watch the Windancer KNX
video and many others on our
[YouTube channel!](#)

▶ [To the Windancer video](#)

AGENDA

1. Elsner Elektronik in profile
2. Weather stations in overview
3. Windancer – Sensors and functions
4. Installation & connection and accessories
5. KNX application, parameters
6. Application examples

01 | COMPANY PROFILE



Weather stations & outdoor sensors from the specialist!

| Company profile

- Products and solutions for intelligent buildings and a smart home
- Internationally recognised for weather stations and sensor technology
- Over 30 years of expertise in safe and comfortable living spaces of the future
- Focus on open standards: KNX, but also Modbus, RS485, DALI, Matter and conventional control technology
- Sustainable quality 'Made in Germany'
- Family-run with a partnership-based ecosystem



02 | WEATHER STATIONS OVERVIEW

KNX Weather Stations

| Overview



Suntracer KNX pro

- High performance
- Ultrasonic technology
- Automates up to 12 facades



Windancer KNX

- Mechanical wind sensor
- GPS optional
- Conventional applications
- Power supply via KNX bus possible



Suntracer KNX sl (light, basic)

- Broad spectrum
- Electronic wind measurement
- Design-orientated, 'invisible'



P04 KNX GPS

- Measuring sensor
- Without automatic and logic
- Efficient application

03 | WINDANCER – SENSORS & FUNCTION



Windancer weather station

| Item number: 71235 and 71236 (GPS)

Physikalische Messgrößen

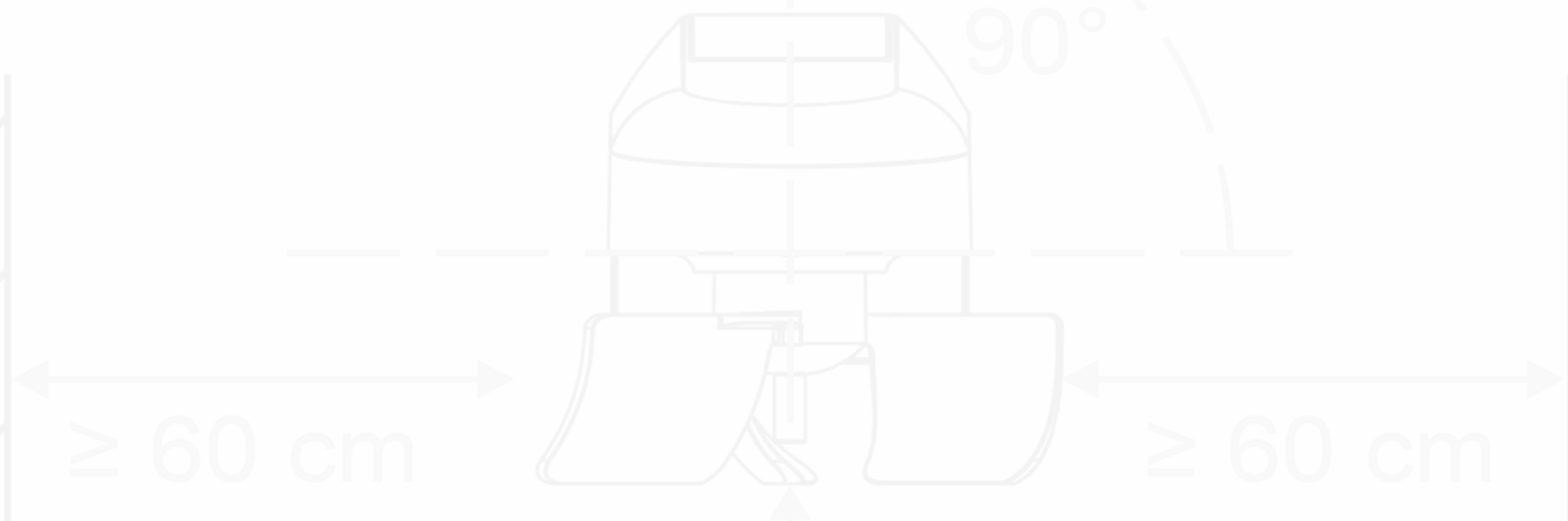
- Brightness
- Wind
- Precipitation
- Temperature
- Time reception/GPS with Windancer KNX-GPS

Application

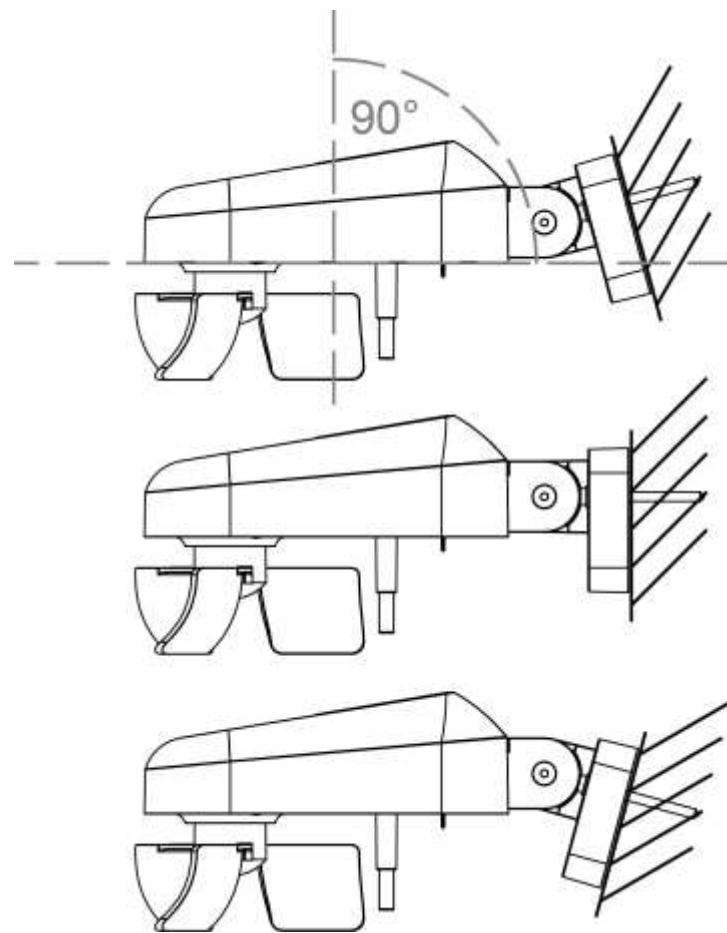
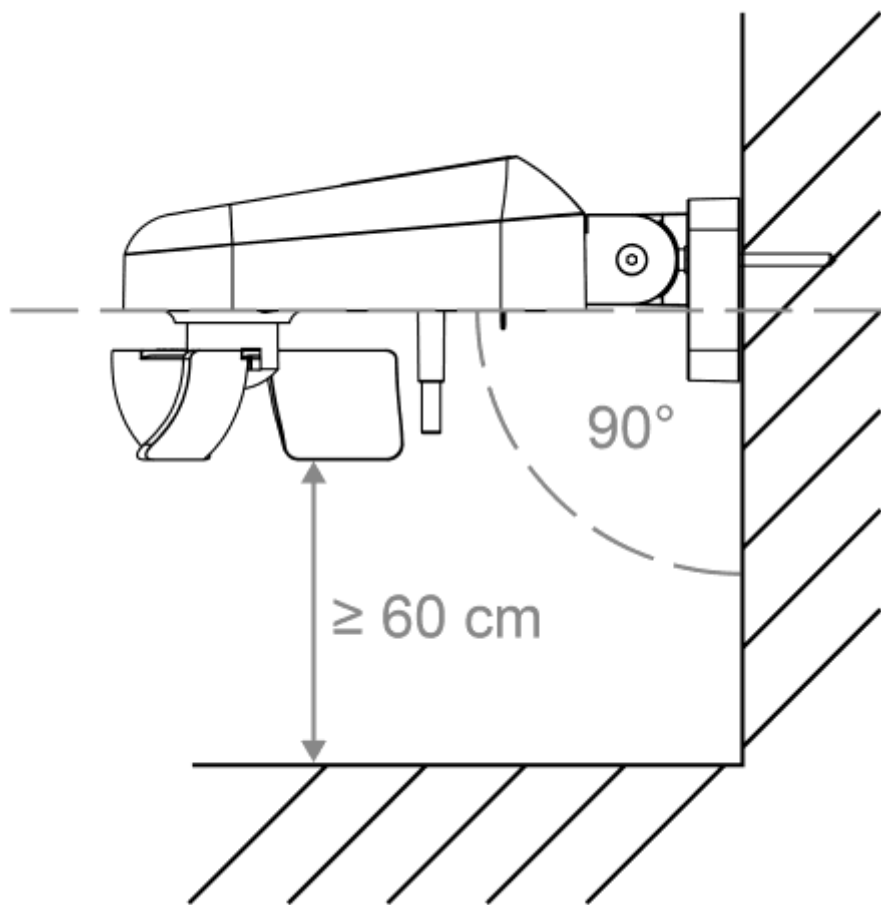
- Logic gate
- Facade control with Windancer KNX-GPS



04 | INSTALLATION AND CONNECTION

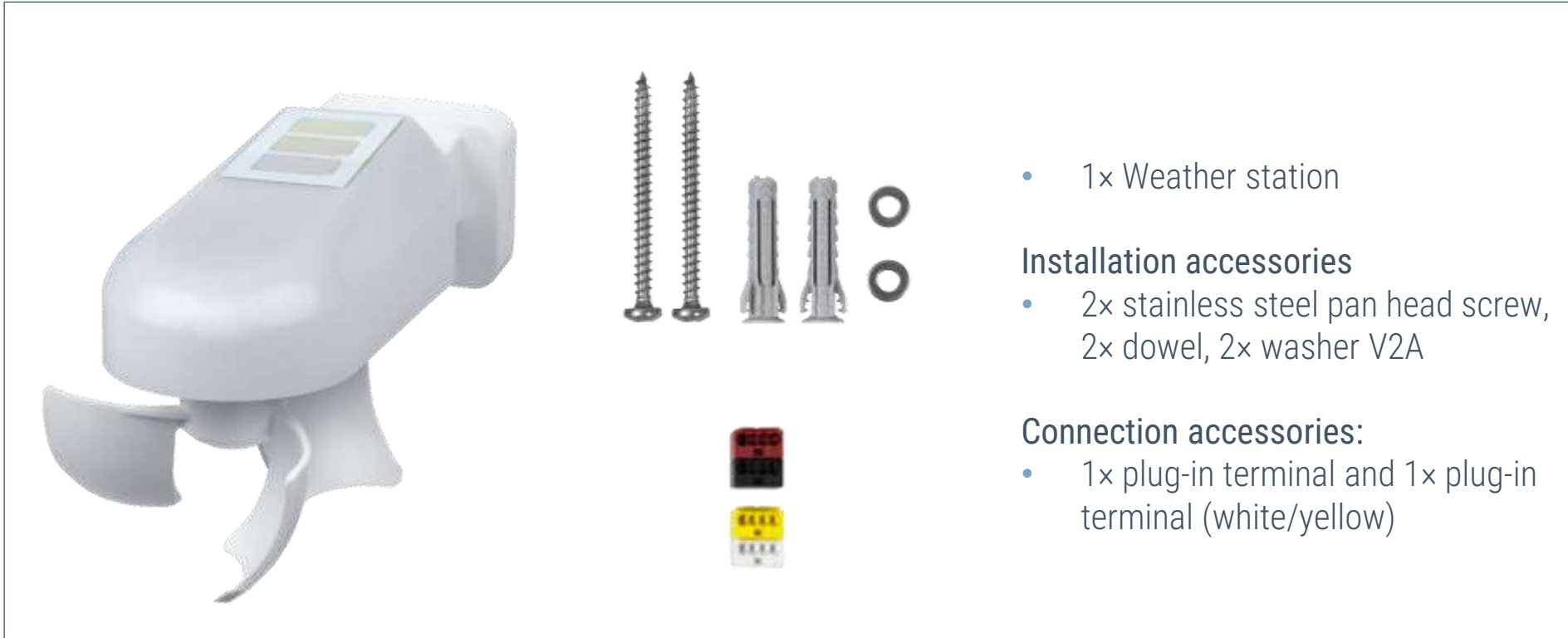


Installation



Installation accessories

| Scope of delivery



- 1x Weather station

Installation accessories

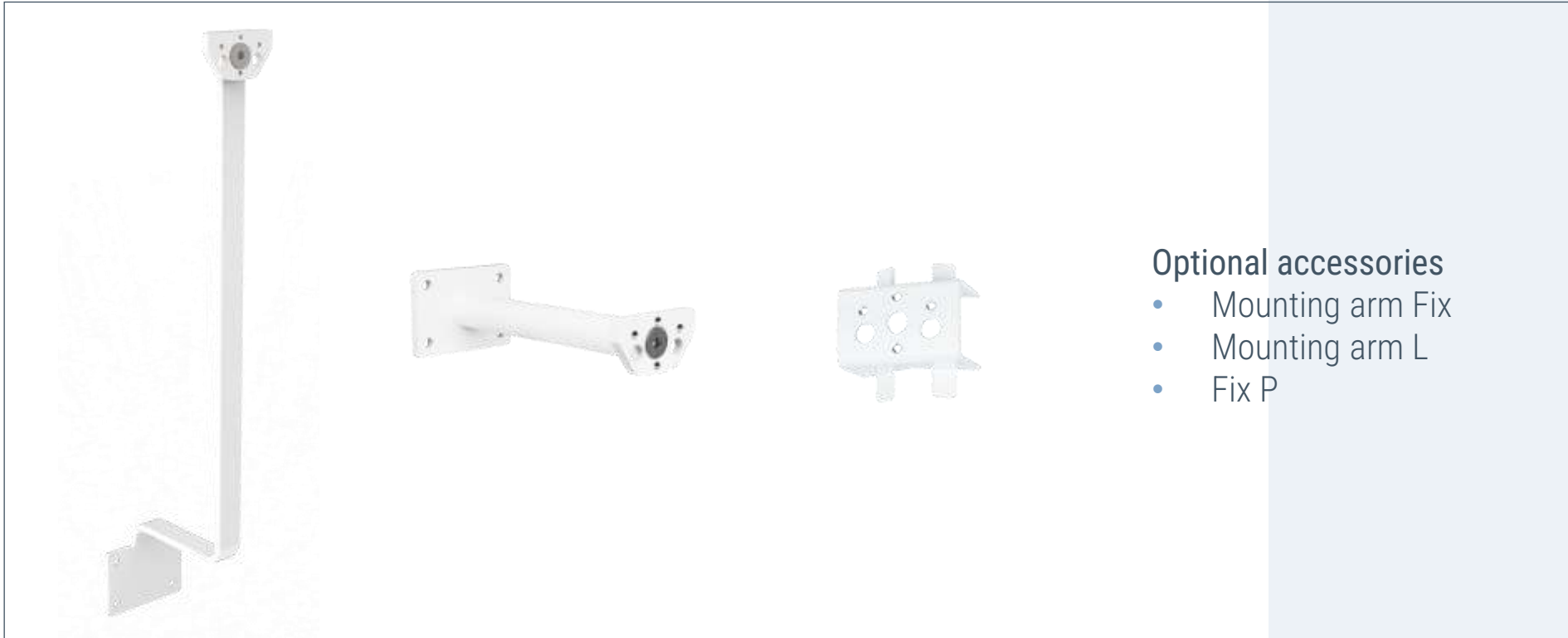
- 2x stainless steel pan head screw, 2x dowel, 2x washer V2A

Connection accessories:

- 1x plug-in terminal and 1x plug-in terminal (white/yellow)

Installation accessories

| Optional accessories



Optional accessories

- Mounting arm Fix
- Mounting arm L
- Fix P

Windancer





| Do you have any questions
about sensor technology or
installation?

05 | KNX PARAMETERS



KNX application: Threshold value wind

ETS

1.1.1 Windancer KNX-GPS > Wind threshold value 1

General settings	Threshold value: -----	
GPS settings	Threshold value setpoint per ☒ Parameter ☐ Communication objects	
Location	Threshold value in 0.1 m/s	70
Rain	Switching distance (hysteresis) of the threshold value in %	20
Night	Switching output: -----	
Temperature	Output is at (TV = threshold value) (SD = Switching distance)	TV above = 1 TV - SD below = 0
Wind	Delays can be set via objects (in seconds) ☒ No ☐ Yes	
Wind threshold value 1		
Brightness	Switching delay from 0 to 1	5 sec
Dawn	Switching delay from 1 to 0	5 min
Shading	Switching output sends	on change and periodically
Façade 1 settings	Send cycle	10 min
Façade 1 Actions	Blocking: -----	
Calendar time switch	Use block of the switching output	☒ No ☐ Yes
Weekly time switch		
Logic		

KNX application: Brightness threshold value

ETS

1.1.1 Windancer KNX-GPS > Dawn of the threshold value 1

General settings	Threshold value: -----
GPS settings	Threshold value setpoint per ☒ Parameter ☐ Communication objects
Location	Threshold value in lux 200
Rain	Switching distance (hysteresis) of the threshold value in % 20
Night	Switching output: -----
Temperature	Output is at (TV = threshold value) (SD = Switching distance) TV above = 1 TV - SD below = 0
Wind	Delays can be set via objects (in seconds) ☒ No ☐ Yes
Wind threshold value 1	Switching delay from 0 to 1 none
Brightness	Switching delay from 1 to 0 none
Dawn	Switching output sends on change

Dawn of the threshold value 1

Shading	Blocking: -----
Façade 1 settings	Use block of the switching output ☒ No ☐ Yes
Façade 1 Actions	
Calendar time switch	
Weekly time switch	
Logic	
AND logic 1	

KNX application: Façade control 1/2

ETS

1.1.1 Windancer KNX-GPS > Façade 1 Actions

General settings	If for more than 5 min
GPS settings	Is light enough (brightness condition fulfilled)
Location	AND
Rain	the sun is shining on the façade (sun position condition fulfilled)
Night	Then: --> Object "Façade 1 status" = 1
Temperature	--> Movement position 100 %
Wind	--> Slat position 75 %
Wind threshold value 1	If it is not bright enough for more than 10 min
Brightness	Then: Change movement position ☒ No ☐ Yes
Dawn	Change slat position ☐ No ☒ Yes
Dawn of the threshold value 1	--> Slat position 0 %
Shading	If afterwards 30 min
Façade 1 settings	it is still not bright enough
Façade 1 Actions	OR
Calendar time switch	the sun is no longer shining on the façade
Weekly time switch	Then: Object "Façade 1 status" = 0
Logic	Change movement position ☐ No ☒ Yes
AND logic 1	--> Movement position 0 %
	Change slat position ☐ No ☒ Yes
	--> Slat position 0 %

KNX application: Façade control 2/2

ETS

1.1.1 Windancer KNX-GPS > Façade 1 Actions

General settings	Then:
GPS settings	Object "Façade 1 status" = 0
Location	Change movement position ☐ No ☒ Yes
Rain	--> Movement position 0 %
Night	Change slat position ☐ No ☒ Yes
Temperature	--> Slat position 0 %
Wind	Transmission behaviour of the objects:
Wind threshold value 1	Movement position and slat position ☒ send in case of change ☐ send in case of change and cyclically
Brightness	Object "Façade 1 status" transmits: on change
Down	Heat protection ☐ No ☒ Yes
Down of the threshold value 1	Use heat protection ☐ No ☒ Yes
Shading	Actuation position 100 %
Façade 1 settings	Slat position 100 %
Façade 1 Actions	Block and safety ☐ react to the last automatic command ☐ wait for the next automatic command
Calendar time switch	Behaviour after block: ☒ react to the last automatic command ☐ wait for the next automatic command
Weekly time switch	Blocking object value before 1. communication: ☒ 0 ☐ 1
Logic	Use safety (lower priority than block) ☐ No ☒ Yes
AND logic 1	Action for safety = 1: ☒ do not send positions ☐ move to safe position (0% / 0%)
	Action for safety = 0: ☒ react to the last automatic command ☐ wait for the next automatic command



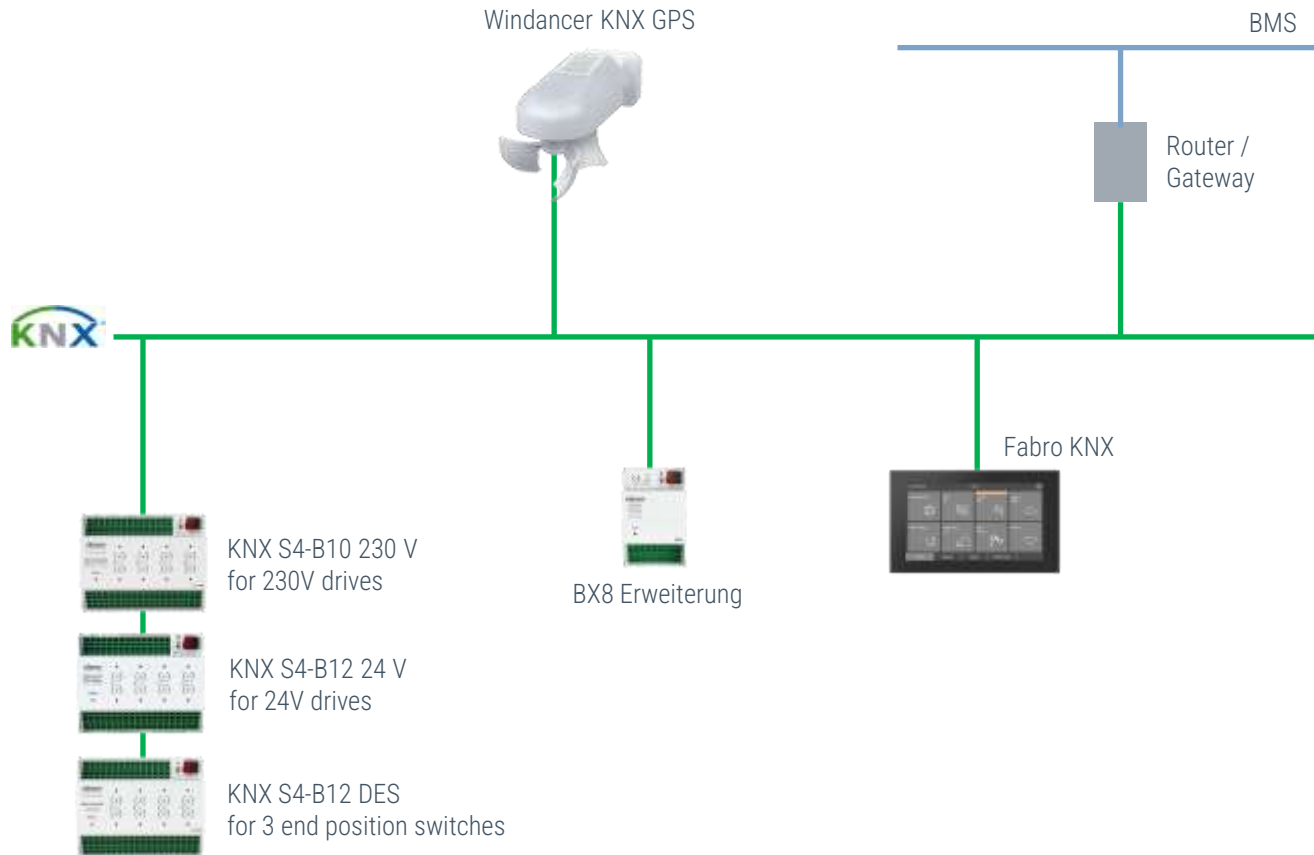
| Do you still have questions
about the KNX parameters?

06 | APPLICATION EXAMPLES



Prinzip-Darstellung

| Anwendungsbeispiel



- Windancer
- To control the actuators
- Extension with BX8 KNX by up to 8 façades
- Operation also via Fabro KNX display
- Connection option for transmitting the weather data and status of the façade to the building management system



| WISHES, SUGGESTIONS & FEEDBACK

Contact me!

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You can find more webinars &
recordings here



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