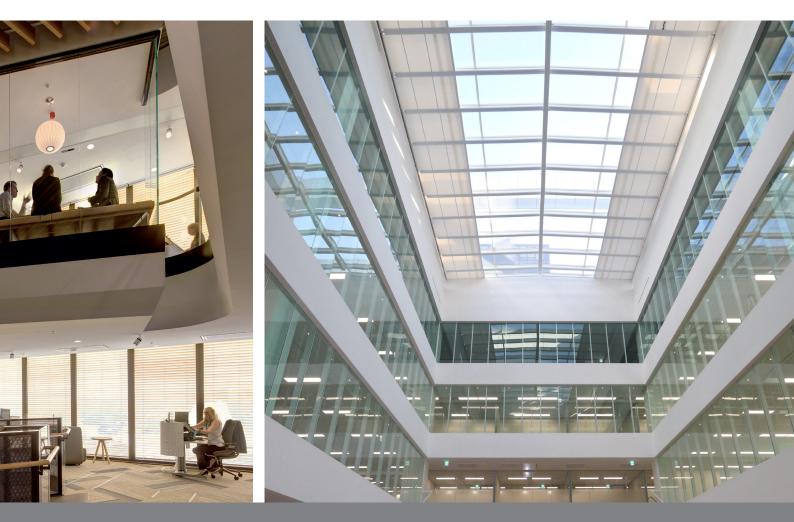
# Intelligent CONTROSS for buildings | Product guide 2021











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# Somfy solutions for greater comfort and energy savings

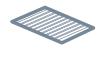
Somfy solutions offer the capability to manage all types of buildings thanks to innovative products (motors, façade management systems and local controls).

Find a Somfy solution for any project - compatible with all sunshading and opening devices.













External Venetian blinds

External vertical screens

Projection eens screens

Horizontal blinds

Interior venetian blinds

Window

openers

Interior vertical screens

# Somfy solutions include

Roller

shutters



#### 1. animeo intelligent building controls

Façade management systems enable the control of all or part of solar shadings and windows via a PC or a dedicated control system. Motors and automation communicate with each other via a proprietary Somfy bus (Solo, IB+, IP) or market standards (KNX or LON).



animeo Motor Controller



animeo TouchBuco

Somfy tubular motor



#### 2. Motors

Whatever the end product (indoor or outdoor shading devices, roller shutters, projection screens, etc.), Somfy's motorization will always meet its exact specification.

# Motor for exterior Venetian blinds

Somfy tubular motor



#### 3. Local commands

Depending on the number of blinds and the layout of the room, there will always be a specific Somfy unit available with the required number of channels.

The various technologies (radio, wired, digital, etc.) offer a number of benefits that are tailored to each type of building (hospital, school, office, etc.).





Web Remote Control

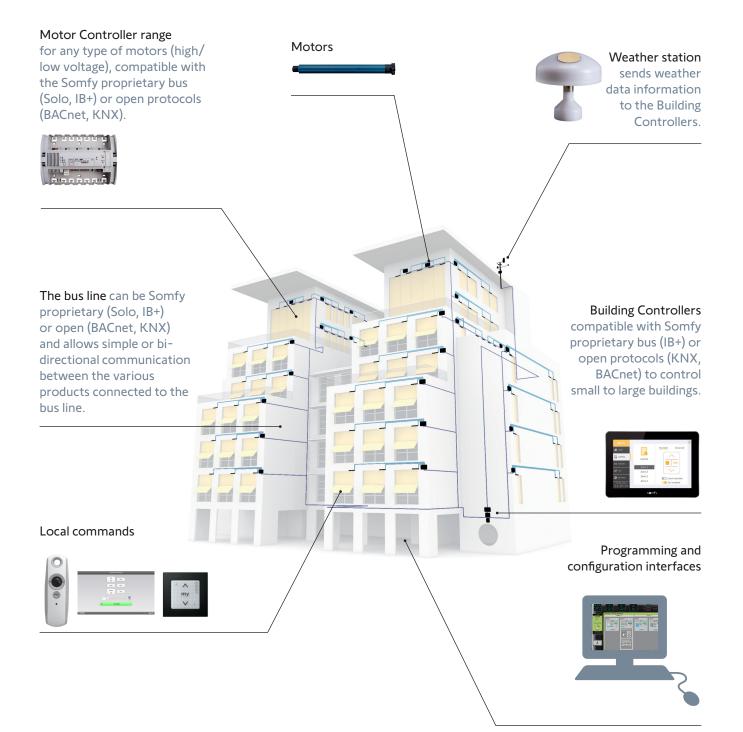
Smoove IB

Situo 5 io

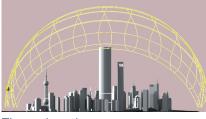
\* BACnet<sup>™</sup> is a trademark of ASHRAE

# General system architecture

Somfy products installed in a typical building equipped with exterior blinds.

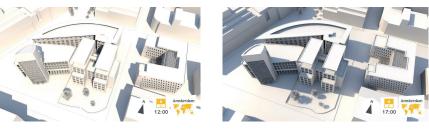


# animeo: why and what for?



The sun's path

### 1. The geolocation of the building



Sun and shadow impacting a city at different times of the day

With animeo, solar protections constantly adapt to the exterior environment and occupants' needs inside the building.

Because throughout the day the azimuth and elevation of the sun as well as the occupants' activities are constantly changing, the animeo range of intelligent controls enables the movement of blinds to be controlled accordingly.

The main elements to be taken into account are:

Each building is unique, both in terms of its size, geographical location, environment or architecture. The sun's path, the shadow generated by surrounding buildings or the building shape itself have an impact on its energy needs. Taking these into consideration is essential in the choice of solar protection and control strategy.

### 2. User needs

Honday	Divet	Position	100 %	Angles	90 ° 🖶		
Teners						12	08-00 - 38:00
Tuesday	Divet	Position	100 %	Angles	91 - 😨		
Teneri						- P	06:00-18:00
Nednesday	Divet	Paston	100 %	Angler	90 ° 蒙		
Timers						14	08:00 - 18:00
thursday.	Dives	Positions	100 % 🗃	Angles	90 ° 🖨		
Teners							06:00-33:00
Friday	Divet	Postere	100 %	Angles	99 ° 🖨		
Teners							08/00 - \$8/00
Saborday	Divet	Positions	100 % 🔠	Angles	97 B		
Tenera							13/00 - 13/00
Sanday	Bost	Puetien	100 % 🛞	Angles	91 <sup>+</sup> 🕀		
Timer							00.00-00.00

Each building is designed for a specific purpose (office, school, hospital, etc.) with different occupancy periods: a school will be closed for certain weeks, a hospital will always be occupied or blind management in an office which is not occupied during the week-end.

It is therefore essential to enhance the building's energy performance and meet occupants' needs.

### Zone Timer in animeo IB+ and KNX software

### 3. The definition of zones

#### A zone can be a:

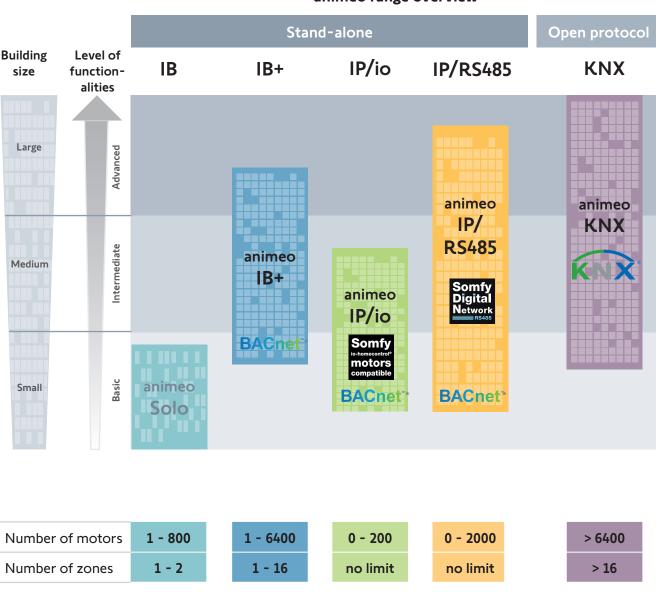


Within the same zone, all blinds behave the same way. Smaller zones enable more efficient and precise operation.

# animeo: a range of Somfy controls for buildings

animeo is a range of intelligent controls to manage blinds and shutters within buildings, designed to adapt to any façade configuration. By optimizing the management of sun, shade and air in buildings, animeo solutions actively enhance occupants' well-being while improving the building's energy performance.

# animeo: compatible with all sun shadings and opening devices



# animeo range overview

# Functions offered by the animeo range

Depending on the chosen animeo solution, many functions and algorithms are available to enhance visual comfort and energy savings.

Functions for vis	sual comfort and savings with artificial lighting	How does it work?	animeo solution compatibility
My sun position	The blinds are automatically down in direct glare, and up if there is no sun. The function applies at a building, façade, zone or floor level.	By programmable weekly timers or commands from sun sensors.	Solo IB+ IP KNX
Sun tracking	To maximise the amount of light in the room, still avoiding direct glare (group of windows). Occupants' visual comfort is increased, since they can enjoy a view through as much of the window as possible.	Algorithm embed- ded in Somfy animeo softwares: function enabled, depending on the building precise geolocalisation.	IB+ IP KNX
Shadow tracking	My sun position or sun tracking functions managed at a window or group level. This function adjusts the movement of the sun protection according to the shadow projected on the window. The need for artificial lighting is reduced.	The shadow func- tion is based on a precise building model including surrounding buildings that could project shadow onto the façades.	KNX
At night	All blinds down to avoid discomfort linked to exterior lighting (direct spotlights lighting up the façades of some office buildings).	By programmable timer.	Solo IB+ IP KNX

Functions for ine	creased building energy	performance	How does it work?	animeo solution compatibility
Block heat		To keep the heat outside, blinds are automatically down when the sun is detected. The function applies at building, façade, zone or floor level.		
Solar heating		Blinds are automatically up when the weather is sunny and when the inside temperature is lower than the outside temperature. Natural energy is used to heat the building.	Commands from sun sensors linked to indoor and outdoor temperature sensors.	Solo IB+ IP KNX
Maintain heat		Blinds are automatically down to avoid heat loss and reduce heating costs.		

Maintenance func Protection of sola	rtions: Ir shading or people (building safety)	How does it work?	animeo solution compatibility
Zone control and lock	All blinds are up and occupants' local commands are disabled to ensure the cleaners' safety. The function applies at a zone or building level.	Central command, sent from the Building Controller or key switch.	
Links to fire alarm	All blinds go up in the event of fire (building level).	Central command sent from Building Controller.	Solo IB+ IP
Exterior shades protection	Wind, frost, ice or rain are detected at building or zone level. All blinds are up and occupants local commands are disabled to ensure blinds are protected.	Wind sensors, ice/ rain/frost sensor detection: the mes- sage is sent by the Building Controller	KNX
Blind synergy	When interior blinds, exterior blinds or window openers work together, the level of priorities can be programmed.	With the Building Controller.	IB+
Maintenance fun Advanced functio	ctions: ons/links to BMS	How does it work?	animeo solution compatibility
Status of motor position	Motor feedback during movement and/or with reaching the up/down end- limits or the intermediate position.	Displayed on com- puter, using specific software (BMS).	IP KNX
Remote access	Remote access to blinds for facility managers.	Via the OPC server.	IB+ KNX
Functions to enh	ance the façade's appearance or indoor space	How does it work?	animeo solution compatibility
Blind alignment	The blinds align to the exact position in order to provide perfect room/façade aesthetics.	With RS485, io or Encoder motors and specific controls: dis- played on computer using specific software (BMS).	IB+ IP KNX
Communication on façades	Showing messages, words on the façade.	Via the OPC server.	КNХ
Functions to enh	ance user comfort	How does it work?	animeo solution compatibility
Manual override	Occupants can always control their own blinds using a wall switch, a remote control or a web remote in order to avoid feeling a loss of control due to the automated system.	With a RTS card plugged into the Mo- tor Controller by local switch or web remote.	IB+ IP KNX

animeo solutions are compatible with a large range of motors. The choice of controllers depends on the motor type.



# • AC motors with typical applications

#### Asynchronous motor (AC)

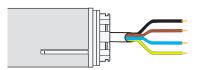
The cost-effective standard solution. Especially used outside and for applications requiring higher torque.

Asynchronous motor with integrated increment encoder (AC-E)

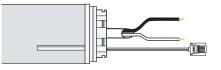
The increment encoder in the motor measures the exact position and sends a message to the controller. Used in all situations where precise positioning is required.

### Asynchronous motor with integrated radio receiver (AC radio)

Control of the motor is via a radio transmitter. There is no wiring between the motor and the point of operation. Motors can be connected in parallel. Mainly used in the residential and small purposebuildings area.

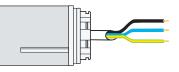


Electrical connection	L-up, L-down, N, PE
Torque of shading system	4-120 Nm
Energy by window motors	150-400 N
Diameter (not for window motors)	40-60 mm
Voltage	230 V AC
Current consump- tion	0.5-3.15 A
Installation com- ments	-
Applications	For roller shutters, screens, Venetian blinds, awnings, large slats, windows and Fabric Tension Systems (FTS).
	WIRED TECHNOLOGY



L, N, PE + extra cable with RS 485
5-35 Nm
50 mm
230 V AC
0.75-1.2 A
Specific control!
For roller shut- ters and screens in situations where exact positioning and consistent high precision is required. Applicable for blinds greater than three meters in height.

etwork



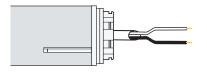
Electrical connection	L, N, PE
Torque	6-120 Nm
Diameter	50-60 mm
Voltage	230 V AC
Current consump- tion	0.5- 3.15 A
Installation com- ments	Max. recommended radio distance: 20 m with up to 2 cement walls.
Applications	For roller shutters, screens and awn- ings.
	Somfy io-homecontrol® motors compatible



# • DC motor with typical applications

### Direct currenct motor (DC)

For interior Venetian blinds: motors with smaller dimensions and lower torque. For windows: motors operated with safety low voltage.



Electrical connection	+, -
Torque of shading system	0.5–1.2 Nm
Energy with window motor	150-400 N
Diameter (not for window motors)	25–35 mm
Voltage	24 V DC
Current consump- tion; shading systems	0.3-1 A
Current consump- tion; window motors	0.3-2.5 A
Installation com- ments	Maximum recommended distance between motor and controller: 20 m (voltage loss).
Applications	For interior shading or for window mo- tors.

# Somfy solutions are compatible with most technologies on the market

Depending on the installation, various Somfy user interfaces are available:

Wired technologies	
	<b>WT</b> Wired Technology (Somfy standard proprietary wired control). An ideal solu- tion for new buildings.
KNX	<b>KNX</b> World standard for home and building control which is suitable for use in any application domain.
<b>BACnet</b> <sup>**</sup>	<b>BACnet</b> Networking protocol specifically created to address various functions within buildings (blind management, lighting, HVAC).
Wireless technologies	
RTS Zedio Technology Somfy*	<b>Radio Technology Somfy®</b> With over 3 million installations throughout the world, RTS has become the standard for secure radio technology in the building industry. Installations can be upgraded as new controls are added.
Somfy	io homecontrol

Highly secure wireless technology included in a wide range of home and building equipment, making it fully compatible, reliable and secure.

# **Digital technologies**

motors

compatible



### Somfy Digital Network

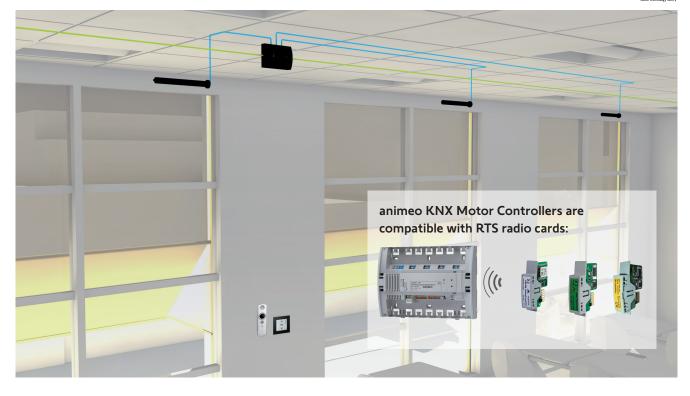
Wired protocol used by Somfy with its own digital protocol, also called "RS485". Digital controls provide the convenience of a multi-application and scalable system.

# Typical animeo IB+, KNX and BACnet installation

AC Motor Controller and Smoove IB for local instruction



- 4 ×







# Typical animeo IP/io and IP/RS485 installation

Somfy RS485 devices connected to one data communication line



Somfy

motors



# USB io Transceiver to integrate motors and local controls



# Selection of local controls for the animeo range

Somfy solutions include a wide range of fixed or remote local controls according to building usage (public/private). All local controls dedicated to the different animeo solutions (Solo, IB+, IP, KNX, LON) can be found in the relevant chapters.

### **Smoove 1 RTS**



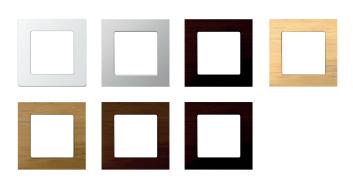
1 channel on-wall radio transmitter to communicate with the RTS radio module.

Dimensions (w × h × d)	50 × 50 × 10 mm
Degree of protection	IP 30
Protection class	II
Operating voltage	3 V (battery model CR 2430)
Operating temperature	0° C to + 60° C
Operational conditions	dry living rooms
Radio frequency	433.42 MHz

#### Smoove 1 RTS

• Pure shine	Ref. 1 810 873
Black shine	Ref. 1 810 902
Silver shine	Ref. 1 810 904
Adapter disc for other switching programs	Ref. 9 016 911

## **Smoove frames**



Smoove frames

• Pure	Ref. 9 015 022
Silver Mat	Ref. 9 015 025
• Black	Ref. 9 015 023
<ul> <li>Light Bamboo - wood finish</li> </ul>	Ref. 9 015 027
Ambergris Bamboo - wood finish	Ref. 9 015 026
Cherry - wood finish	Ref. 9 015 236
• Walnut - wood finish	Ref. 9 015 237
Double frame pure	Ref. 9 015 238

# **Smoove IB Origin**



Manual control of several motors over IB bus. Comfortable central control or group operability. Operation via the big UP, DOWN and STOP buttons is possible at any time.

# Smoove 1 RTS Origin



Manual control of several motors over RTS. Comfortable central control or group operability. Operation via the big UP, DOWN and STOP buttons is possible at any time.

Smoove IB Origin

Ref. 1 811 272

Smoove 1 RTS Origin

Ref. 1 811 218

# Selection guide for sensors associated with animeo solutions

		Wi	Tempe	erature		
	Ref. 9 013 807	Ref. 9 001 608	Ref. 9 140 180	Ref. 9101479	Ref. 9 001 611	Ref. 9 008 044
	Wind Direction Sensor	Wind Sensor	Heated Wind Sensor	Eolis Sensor	Outside Temperature Sensor	Inside Temperature Sensor
	0	•				
animeo <b>Solo</b>		<b>OK</b> (1)		<b>OK</b> (1)	<b>OK</b> (1)	<b>OK</b> (1)
animeo <b>IB+</b>	<b>OK</b> (2)	<b>OK</b> (2)	<b>OK</b> (2)		<b>OK</b> (2)	<b>OK</b> (3)
animeo <b>IP/io</b>	<b>OK</b> (2)	<b>OK</b> (2)	<b>OK</b> (2)		OK (2)	<b>OK</b> (3)
animeo IP/RS485	OK (2)	<b>OK</b> (2)	<b>OK</b> (2)		<b>OK</b> (2)	<b>OK</b> (3)
animeo KNX	<b>OK</b> (5)	<b>OK</b> (7)	<b>OK</b> (7)		<b>OK</b> (5)	ОК

(1) Directly connected to animeo Solo Building Controllers 1 and 2.

(2) Directly connected to the Outside sensor box.

(3) Directly connected to the Inside sensor box.

(4) Directly connected to the Building Controllers.

S	un	Ra	in		Combin	ed sensoi	rs/Sensor	Station	
Ref. 9 154 043	Ref. 9 154 217	Ref. 9 016 344	Ref. 9016345	Ref. 9154080	Ref. 1 870 932	Ref. 1 860 306	Ref. 9 013 726	Ref. 9 013 727	Ref. 1 860 307
Kit Sun Sensor and bracket	Sun Sensor (without bracket)	Rain Sensor Ondeis 24 V DC	Rain Sensor Ondeis 230 V	Sun and wind combined sensor Soliris IB	Weather Station KNX	Weather Station M8	Sensor Station	Sensor Station extended	Weather Station M13
	<b>OK</b> (1)	<b>OK</b> (1)	<b>OK</b> (1)	<b>OK</b> (1)					
<b>OK</b> (2)		<b>OK</b> (2)				ОК	<b>OK</b> (4)	<b>OK</b> (4)	OK
<b>OK</b> (2)		<b>OK</b> (2)				ОК	<b>OK</b> (4)	<b>OK</b> (4)	OK
<b>OK</b> (2)		<b>OK</b> (2)				ОК	OK (4)	<b>OK</b> (4)	OK
<b>OK</b> (5)		<b>OK</b> (5)			ОК	ОК	<b>OK</b> (6)	<b>OK</b> (6)	ОК

(5) Directly connected to the Outside sensor box and to the Master Control W2 and W8.

(6) Directly connected to the Outside sensor box and the sensor is directly connected to the Master Control W2 and W8

(7) Directly connected to the Master Control W2 and W8.

# Comparative table of functions

		Solo	IB +	IP/io	IP/RS485	KNX
BMS interoperability (BACr	net)	-	<b>~</b>	<b>~</b>	✓	✓
Integrated data logging (sy	stem status)	-	<b>~</b>	<b>~</b>	✓	✓
Integrated building timer	9	✓	<b>~</b>	¥	<b>v</b>	✓
Integrated zone timer 🔗		-	<b>~</b>	<b>~</b>	✓	<b>~</b>
Integrated yearly timer	)	-	-	<b>~</b>	<b>v</b>	<b>~</b>
Zone control switch/key s	witch 🔞	<b>~</b>	<ul> <li>✓</li> </ul>	<b>~</b>	<b>v</b>	<b>V</b>
System configuration	PC software	-	<ul> <li>✓</li> </ul>	¥	<b>v</b>	✓
	Via display	<b>~</b>	-	-	-	-
System operation	PC software (BMS)	-	<b>~</b>	<b>~</b>	<b>v</b>	<b>V</b>
	Via display	<b>~</b>	-	-	-	<b>~</b>

# User comfort/Energy saving functions

Wired local control	<b>~</b>	<b>~</b>	-	<ul> <li>Image: A set of the set of the</li></ul>	¥
Radio local control (Somfy RTS/io)	✓	<b>~</b>	✓	-	<b>v</b>
Web remote control			<b>~</b>	<b>~</b>	✓
Radio link to Bus network (Somfy RTS)	-	-	-	-	✓
Light control through Somfy RTS	-	-	-	-	✓
Inside temperature	-	<b>~</b>	<b>~</b>	<ul> <li></li> </ul>	✓
Sun 🄆	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~
Sun tracking	-	<b>~</b>	<b>~</b>	<b>~</b>	~
Zone based shadow tracking	-	-	-	-	<b>~</b>
Window based shadow tracking	-	-	-	-	-
Auto/Manual priority	-	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>
Auto/Manual priority via presence detector	-	✓	-	-	~
Link to HVAC system	-	<b>~</b>	<b>~</b>	<b>~</b>	~
DALI connection/Light scenes	-	-	-	-	✓

# **Security Functions**

Alarm input	✓	<b>~</b>	¥	<b>~</b>	✓
Wind speed	<b>~</b>	<b>~</b>	¥	¥	✓
Wind direction	-	<b>~</b>	¥	<b>~</b>	✓
Rain 💮	<b>~</b>	<b>~</b>	<b>~</b>	¥	✓
Outside temperature	<b>~</b>	<b>~</b>	<b>~</b>	¥	✓
Snow 💥	-	<b>~</b>	¥	<b>~</b>	✓
Frost	✓	<b>~</b>	<b>~</b>	<b>~</b>	✓
lce	-	<b>~</b>	¥	<ul> <li></li> </ul>	¥
Window contact	-	-	-	-	<b>~</b>



- System topology
- Benefits
- Products

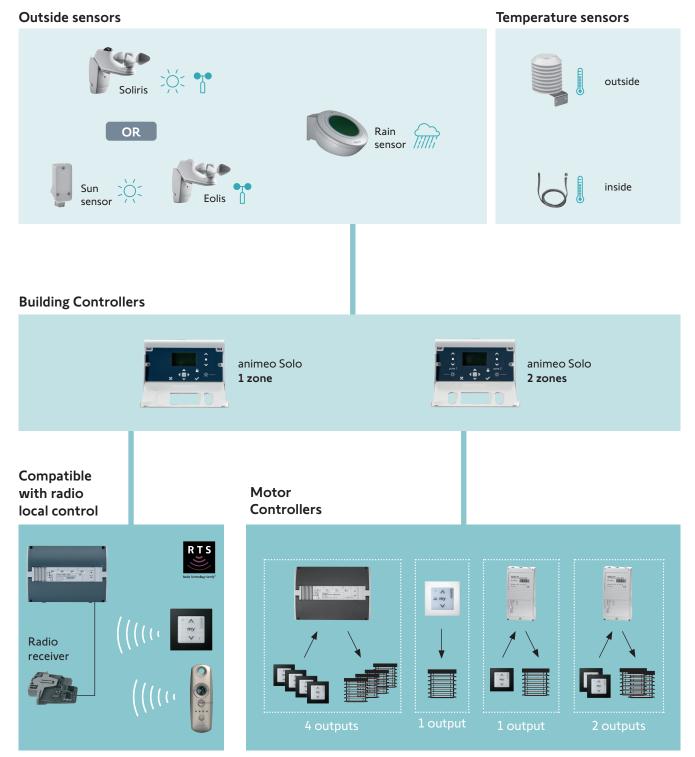
• Project example

•T•

The easy-to-use system to control 1 or 2 zones and up to 800 motors is specifically designed for small buildings.

animeo Solo is based on IB Somfy Controlling Technology and can also be integrated with the animeo IB+ Motor Controller.

# System topology



# **Benefits**

### Easy programming and installation

- Easy programming and commissioning using the LCD display (no need for a computer).
- The system comes with a basic configuration, and the user can use the screen-based interface to program the system, which saves commissioning time on site.

### **Energy-saving functions**

- Effective management of solar gains and light levels to improve building energy performance and oc-cupants visual comfort.
- In summer and winter alike, animeo Solo automatically controls your motorized sun protection devices using sensors. In winter, for example, as soon as night falls, the pre-programmed "cold protection" function closes all shutters and sun protection devices in order to increase window insulation and avoid excessive heating consumption.
- In the daytime, on the other hand, its "natural heating" function opens the shutters and sun protection devices to make the most of the sun's solar energy.

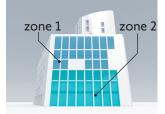
### Simple operation for facility management

- The building manager can control (up down stop) each zone separately or lock zones for maintenance operations such as window cleaning.
- The LCD continuously presents the system status and weather data such as wind speed, rain, sun radiation and temperature.











# **Building Controller**

# animeo Solo Building Controller



#### **Product benefits**

- Controlling up to 2 zones or façades.
- For each zone, up to 100 Motor Controller devices can be connected.
- AC, DC or DC-E motor systems can be controlled (one type per zone).
- Compatible with all Motor Controller devices from the Somfy Controlling technology: animeo IB+, IB-Inteo, CD.

Central Control unit to manage of 1 or 2 façade orientations.

### At zone / façade level

- Precise setting of running and tilting times depending on the selected end product to be controlled.
- Sun function with configurable threshold values, time delays, positions and angle.
- Wind security function with configurable threshold values and sensor assignment.
- Rain and frost security function with configurable threshold value and time delays.
- Outside temperature function with configurable threshold value and time delays.
- Direct connection of 1 or 2 independent zone switches for maintenance purposes.

#### At building level

- Timer with 2 time settings per day to configure an UP or DOWN command (incl. blocking).
- An input for the major alarm, potential free contact. When the input is active all end products are locked in the UP position.

Dimensions (w × h × d)	225 × 149 × 49 mm
Degree of protection	IP 20
Protection class	I.
Operating voltage	230 V AC
Operating temperature	0°C to +45°C
animeo Solo 1 zone	Ref. 1 860 143
animeo Solo 2 zone	Ref. 1 860 144

### Sensors and accessories

### **Soliris Sensor**



Combined weather station to measure wind speed and sun intensity.

#### **Product benefits**

- To measure wind speed and sun intensity combined in one housing.
- Comfort threshold setting on the animeo Solo.

Dimensions (w × h × d)	160×236×40 mm
Degree of protection	IP 34
Protection class	II
Wiring recommendations	2×2×0.8 mm
Soliris Sensor	Ref. 9 154 080

### **Eolis Sensor**



Wind speed sensor in a compact housing to measure wind speed.

#### **Product benefits**

- To measure wind speed.
- Comfort threshold setting on the animeo Solo.

Dimensions (w × h × d)	160×236×40 mm
Degree of protection	IP 34
Protection class	Ш
Wiring recommendations	2×2×0.8 mm
Eolis Sensor	Ref. 9 101 479

### Sensors and accessories



Wind Sensor

To measure wind speed in connection with the Outside Sensor Box.

#### **Product benefits**

- Provides reliable and precise wind speed measurement.
- High resilience and durability by precision bearing.

Dimensions	Height 200 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	2 × 0.8 mm <sup>2</sup>
Wind Sensor	Ref. 9 001 608

# Sun Sensor



Sun sensor to measure luminosity in connection with the Outside Sensor Box.

#### **Product benefits**

- Small unique design to allow integration directly on the external façade.
- Spring clamp connectors for save and solid wiring to the Outside Sensor Box.

Dimensions Sun Sensor (w × h × d)	34×88×47 mm
Degree of protection	IP 44
Wiring recommendations	2×0.8 mm
Angle position	150°
Sun Sensor (without mounting brackets)	Ref. 9 154 217
Mounting brackets for Sun Sensor	Ref. 9 127 888

# **Outside Temperature Sensor**



To measure the exterior temperature.

#### **Product benefits**

- Precise measurement of exterior temperature values which can be displayed in °C or °F in the animeo building control solutions.
- Protective housing to prevent measurements influenced by spiders and birds
- Delivered with solar radiation sensor protective housing.

Dimensions	Height 150 mm
Dimensions	ø 115 mm
Degree of protection	IP 65
Wiring recommendations	2×0.8 mm

Outside Temperature Sensor

Ref. 9 001 611

## Housing for Inside Temperature Sensor



Housing for Inside Temperature Sensor	Ref. 9 008 045

### Sensors and accessories

### Inside Temperature Sensor



To measure the inside temperature.

Ref. 9 008 044

# Rain Sensor Ondeis

Inside Temperature Sensor



Capacitive sensor to measure precipitation with UV-opaque and UV stabilized housing. 24 V DC and 230 V AC version available.

# Power Supply DRM 24 V DC 1.5 A



To supply the Rain Sensor Ondeis and the wind sensor.

Dimensions ( $w \times h \times d$ )	78 × 93 × 56 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Output voltage	24 V DC
Output current	1.5 A
Power Supply DRM 24 V DC 1.5 A	Ref. 9 017 611

For Din-rail installation, 4 SU's.

### Product benefits

- Fast, simple and flexible assembly. Wall assembly or installation on standard mast with 50 mm diameter.
- 24 V DC power supply provided directly through the Outside Sensor Box (ref. 9001606).
- Delivered with a 2.30 m cable (2 x 0.75 mm<sup>2</sup>).

Dimensions (w × h × d)	115 × 100 × 85 mm
Degree of protection	IP 44
Wiring recommendations	3×1.5 mm
Rain Sensor Ondeis 24 V DC	Ref. 9 016 344
Rain Sensor Ondeis 230 V AC	Ref. 9 016 345

# Local controls

# Smoove 1 RTS



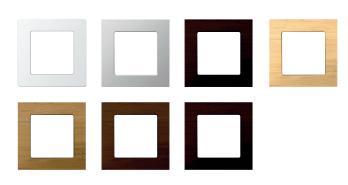
1 channel on-wall radio transmitter to communicate with the RTS radio module.

Dimensions (w × h × d)	50 × 50 × 10 mm
Degree of protection	IP 30
Protection class	II
Operating voltage	3 V (battery model CR 2430)
Operating temperature	0° C to + 60° C
Operational conditions	dry living rooms
Radio frequency	433.42 MHz

#### Smoove 1 RTS

• Pure shine	Ref. 1 810 873
Black shine	Ref. 1 810 902
Silver shine	Ref. 1 810 904
Adapter disc for other switching	Ref. 9 016 911
programs	

# Smoove frames



#### Smoove frames

• Pure	Ref. 9 015 022
Silver Mat	Ref. 9 015 025
• Black	Ref. 9 015 023
• Light Bamboo - wood finish	Ref. 9 015 027
Ambergris Bamboo - wood finish	Ref. 9 015 026
Cherry - wood finish	Ref. 9 015 236
• Walnut - wood finish	Ref. 9 015 237
Double frame pure	Ref. 9 015 238

For wall-mounted installation.

# **Smoove IB Origin**



For flush-mounted installation.

Smoove IB Origin

Manual control of several motors over IB bus. Comfortable central control or group operability.

Ref. 1 811 272

# Smoove 1 RTS Origin



Manual control of several motors over RTS. Comfortable central control or group operability. Operation via the big UP, DOWN and STOP buttons is possible at any time.

Smoove 1 RTS Origin

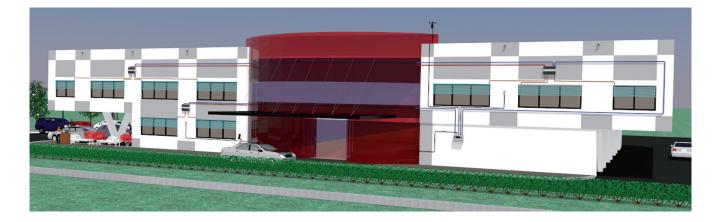
Ref. 1 811 218

# **Project example**

#### Functionality required and specified by the building owner

- A small building with two separate floors to be controlled
- The solution must be simple and intuitive to install
- An easy-to-operate display is desired for the user interface
- Local control through sensitive touch is also requested for excellent user comfort.

Links to sensors
Links to sensors
Bus line Solo
Power supply
Motor cable



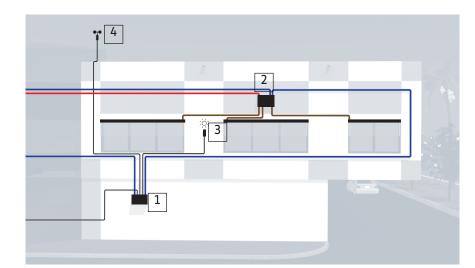
# **Products installed**



# **Automatic functions**

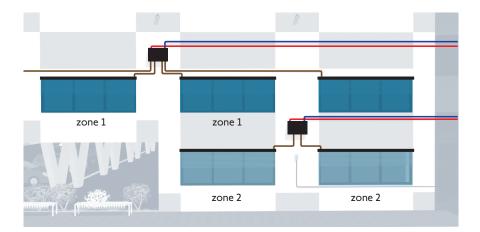
- Wind security per zone
- Sun automatic per zone
- Rain and frost security
- Daily timer per zone

# Installation details



The animeo Solo Building Controller is directly connected to the Motor Controllers, the Sun Sensor and the Sensor Station on the roof.

- 1. animeo Solo
- 2. Motor Controllers
- 3. Sun sensor
- 4. Wind sensor



The animeo Solo Building Controller enables automation of two zones (here: ground floor and first floor).

Each automatic function applies per zone.



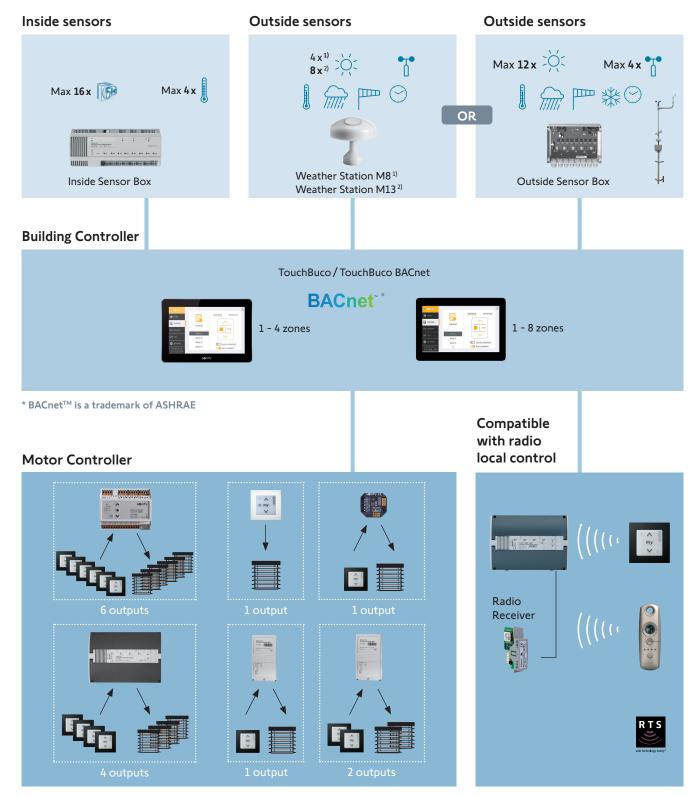
- System topology
- Benefits
- Products

• Project example

x T 🏴 🎚 ُ 🔿

An intelligent system to control 1 to 8 zones. Specifically designed for small to large buildings.

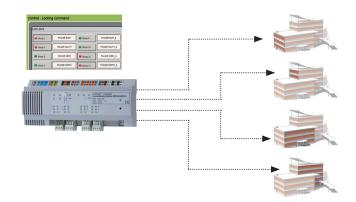
# System topology



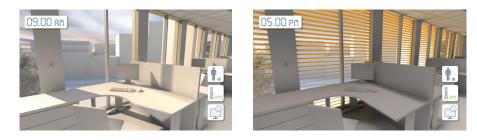
# **Benefits**

### Application independent

- Very extensive and comprehensive selection of functions and parameters, specially matched to the type of end product to be controlled such as Venetian blinds, blinds, roller shutters and windows.
- The system comes with a basic configuration and the user can use the screen-based interface to program the system and define the zones.



### Tracking the sun's position



• The sun tracking function positions the Venetian blind slats according to the direction of the sun's rays for the best visual comfort all day long.

#### **Reduced energy costs**

- Optimised energy savings in combination with a variety of functions: natural air-conditioning, cooling, heating, limited tilting angle, etc.
- The system switches back to automatic at a pre-defined time.

#### Optimum balance between user comfort and automatic funtions

• Advanced operating mode: enhanced room-specific user comfort by disabling non-security functions (e.g. sun) as soon as local operation has been assigned.

#### Interoperability with other equipment

• Open to Building Management System via BACnet

# **BACnet**<sup>\*\*</sup>

# **Building Controller**

# 4 Zone/8 Zone TouchBuco/BACnet



**BACnet**<sup>\*\*</sup>

#### **Product benefits**

- The 4 Zone/8 Zone TouchBuco<sup>™</sup> is a central unit designed for solar shading and window automation to control up to four or up to eight individual façade orientations of a building. It answers to different building segments such as public, commercial, healthcare, education and is applicable for any interior or exterior application.
- Configuration, monitoring and maintenance is realized through a menu guided intuitive capacitive 7 inch user touch screen providing a wide range of useful functions optimizing the building performance.
- The TouchBuco is compatible with all animeo IB+ Motor Controllers and the new 2 wire IB+ bus technology.

#### **Further features**

- One system can control up to 400 motors.
- New 2-wire IB+ bus technology.
- User-friendly configuration interface with a step-by-step guide, remote implementation and access for maintenance.
- The separation of the Sensor Interface (Outside Sensor Box), which is normally mounted outside, and the control center (Building Controller), which is normally mounted inside, enables extremely cost-effective lightning protection for the system.
- Several units can interact with a single Sensor Interface (Outside Sensor Box or Compact Sensor).
- Communication between the Outside Sensor Box and the Building Controller is monitored.
- Extensive yet clear selection of functions and parameters which are specially tailored to the type of end product to be controlled (Venetian blinds, blinds, roller shutters and windows).
- Sun function with configurable threshold values, time delays, position, angled orientation for Venetian blinds, freely defined sensor assignment, for each zone.
- Sun tracking: instead of one fixed position an unlimited number of positions can be actuated for each zone, depending on the time, date and location of the building.
- Wind safety function in combination with wind direction: to increase the lifetime of the blind elements, they can be moved into a safety position if a certain wind force is reached and if the wind direction is such that the specific zone is affected.
- \* BACnet<sup>™</sup> is a trademark of ASHRAE

- The blind elements are only moved into the safety position if there are strong winds.
- Rain and snow safety function with configurable time delays, both for each area.
- Saving three months worth data: events, settings, sensors, values etc.
- Zone timer with six configurable time ranges per day for the configuration of an up and down or position command.
- Potential free main alarm input with configurable action per area: up and down command with lock.
- Password protection for settings.
- BACnet: Sensor values can be shared with the BMS (Building Management System). The BMS can send commands to any zone with the desired priority level.

Dimensions (w × h × d)	200 × 132 × 72 mm
Degree of protection	IP 20
Protection class	1
Operating voltage	100 - 230 V AC
Operating temperature	0° C to + 45° C
animeo IB + 4 Zone TouchBuco (CE, EAC, UL, KC)	Ref. 1 860 254
animeo IB + 8 Zone TouchBuco (CE, EAC, UL, KC)	Ref. 1 860 255
animeo IB + 4 Zone TouchBuco BACnet (CE, EAC, KC)	Ref. 1 870 474
animeo IB + 8 Zone TouchBuco BACnet (CE, EAC, KC)	Ref. 1 870 475
animeo IB + 4 Zone TouchBuco BACnet (UL)	Ref. 1 860 308
animeo IB + 8 Zone TouchBuco BACnet (UL)	Ref. 1 860 309

# **Building Controller**

# **Building Controller**



#### **Product benefits**

- A system with one Building Controller can control up to eight zones (façade orientation) and a system with two Building Controllers can control up to 16 zones.
- Optimised energy savings in conjunction with a wide range of functions: natural ventilation, cooling, heating.
- Enhanced operating mode: increased, room-based user comfort thanks to the suppression of centralised non-safety functions (for example, sun function) as soon as local controls are used. The system is switched back into automatic mode at three freely definable times each day.
- Restricted Venetian blind tilting angles for room users ensure energy savings whilst still enabling excellent lighting comfort.
- Compatible with all conventional Motor Controllers (animeo IB+, Inteo and CD). For maximum functionality, we recommend animeo IB+ Motor Controllers.

#### **Further features**

- One system can control up to 6400 motors.
- User-friendly configuration software (for setup, it is recommended that the technician is fully familiar with sun protection and window control systems in order to ensure the best possible system performance).
- The separation of the Sensor Interface (Outside Sensor Box), which is normally mounted outside, and the control center (Building Controller), which is normally mounted inside, enables extremely cost-effective lightning protection for the system.
- Communication between the Outside Sensor Box and the Building Controller is monitored.
- Extensive yet clear selection of functions and parameters which are specially tailored to the type of end product to be controlled (Venetian blinds, blinds, roller shutters, and windows).
- Sun function with configurable threshold values, time delays, position, angled orientation for Venetian blinds, freely defined sensor assignment, for each zone.
- Sun tracking: instead of one fixed position, up to three different positions can be actuated per day for each zone. These three positions can be set by the software and can differ for each month. They can be manually maintained in the system.
- Wind safety function in combination with wind direction: to increase the lifetime of the blind elements, they can be moved into a safety position if a certain wind force is reached

and if the wind direction is such that the specific zone is affected.

- The blind elements are only moved into the safety position if there are strong winds (gale warning).
- Rain and snow safety function with configurable time delays, both for each area.
- Ice safety function with configurable temperature threshold value and delay times, both for each zone.
- Zone timer with two configurable time ranges per day for the configuration of an up and down or position command.
- Central timer with two configurable time ranges per day for the configuration of an up and down command.
- Potential free main alarm input with configurable action per area: up and down command with lock.
- Password protection for settings.
- Potential free error output if, for example, a sensor fails.

Dimensions (w × h × d)	210 × 90 × 61 mm
Degree of protection	IP 20
Protection class	П
Operating voltage	230 V AC
Operating temperature	0° C to + 45° C
animeo IB + Building Controller 4 zones	Ref. 1 822 395
animeo IB + Building Controller 8 zones	Ref. 1 822 064

For DIN-rail installation, 12 SUs.

### **Operating Software + Interface**



#### Product benefits

- User-friendly screen display: large, high, good resolution, multi-coloured.
- Intuitively designed, comprehensive and operator-friendly.
- The Operating software can be used regardless of the location of the Building Controller installation.

Software + USB/RS485 Interface USB/RS485 Interface

Interface between the Building Controller and the computer including configuration and user software.

#### **Further features**

 For computers with minimum Intel Pentium II, 500 MHz, Windows 2000, CD Rom disc drive, 128 MB storage and 40 MB free hard drive storage.

> Ref. 9 012 519 Ref. 9 016 356

### Sensors and accessories

Weather Station M8	Weather Station M8/M13	
	To collect the external conditions in different ori- entations. For façade and roof mounting	
Product benefits	Further features	
M8		
<ul> <li>8 sensors to collect the ex- ternal conditions in 4 differ- ent orientations.</li> </ul>	<ul> <li>4 Lux sensors for glare control and natural light management.</li> <li>Outside temperature sensor for energy optimisation.</li> <li>Sensor for wind speed and rain to protect external shades or blinds.</li> </ul>	
M13		
• 13 sensors to collect the ex- ternal conditions in 8 differ- ent orientations.	<ul> <li>8 Lux sensors for glare control and natural light management.</li> <li>Outside temperature sensor for energy optimisation.</li> <li>Sensor for wind speed, wind direction and rain to protect external shades or blinds.</li> </ul>	
Dimensions (h, Ø)	105 mm, 103 mm	
Degree of protection	IP44 in working position	
Protection class	III	
Operating voltage	24 V DC + 10 %/- 30 %	
Operating temperature	-30 °C+70 °C	
Weather Station M8	Ref. 1 860 306	
Weather Station M13	Ref. 1 860 307	

# Bracket for Weather Station M8/M13



For mounting on an already existing mast with a diameter of 50 mm.

Dimensions (w × h × d)	180 x 80 x 80 mmm
Bracket for Weather Station	Ref. 1 860 320

# Mounting accessories for Weather station M8/M13



Metallic Mast (1 m) for roof mounting with Somfy accessories.

Dimensions (h, Ø)	1 m, 50 mm
Metallic Mast	Ref. 1 860 335
(Minimum order quantity = 3)	
Dimensions (w x d x h)	200 x 90 x 30 mm
Wall Mount Bracket (2 pieces)	Ref. 1 860 336
Dimensions (h, Ø)	90 mm, 25/50 mm
Mast Adaptor for Weather Station	Ref. 1 860 321
Kit Mast with 25 mm adaptor (3 x Mast, 2 x Brackets, 1 x Adaptor)	Ref. 9 027 035

# Lightning protection



To protect the controls from lightning. Is used in conjunction with the Outside Sensor Box or Compact Sensor.

24V Lightning Protection	Ref. 9 025 707
<b>Bus Lightning Protection</b>	Ref. 9 025 706

# **Inside Sensor Box**



#### **Product benefits**

• Window cleaners need no access to the complete user interface (animeo IP Visual Configuration Software).

For connection to external push buttons or key switches per zone and up to 2 Inside Temperature Sensors.

• Inside Temperature Sensors enable easy extendability of the system's energy saving options.

Ref. 9 001 614

Dimensions (w × h × d)	210 × 90 × 61 mm
Degree of protection	IP 20
Protection class	Ш
Operating voltage	230 V AC
Operating temperature	0° C to + 45° C

**Inside Sensor Box** For DIN-rail installation, 12 SUs.

### Sensors and accessories

Housing for Inside Temperature Sensor	
•	To install an Inside Temperature Sensor.
Dimensions (w $\times$ h $\times$ d)	75 × 75 × 25 mm
Housing for Inside Temperature	Ref. 9 008 045

### **Inside Temperature Sensor**



Sensor

To measure the inside temperature.

Inside Temperature Sensor

Ref. 9 008 044

# animeo Power Supply DC



To supply the Outside Sensor Box (with heated sensors), the animeo KNX Master Control W2/W8 and the animeo LON Sensor Interface.

Dimensions (w × h × d)	130 × 180 × 61 mm
Degree of protection	IP 20
Protection class	П
Operating voltage	230 V AC
Output current	<ul><li>2.5 A (switch on duration 100%)</li><li>4.5 A (switch on duration 50%: 3 min on, 3 min off)</li></ul>
animeo Power Supply DC	Ref. 1 860 093

For wall-mounted and DIN-rail installation.

# Outside Sensor Box Outside Sensor Extension Box



Outside Sensor Box is the interface between the sensor stations or individual sensors to the animeo building control solutions. It requires an external 24 V AC/DC power supply.

#### **Product benefits**

- Up to 8 sun sensors, 2 wind sensors, 1 wind direction sensor, 1 rain sensor, 1 outside temperature sensor as well as a DCF plug module can be connected to the Outside Sensor Box.
- Only two cables must be laid to the outside. All

Outside Sensor Extension Box offers extension capabilities of two additional wind speed sensors and four sun sensors.

wires easily integrated through spring clamp connectors.

#### **Further features**

- Easy and quick start-up in conjunction with animeo building control solutions.
- Status display through LED's for clear monitoring of connected and functioning individual sensors.

Dimensions (w $\times$ h $\times$ d)	207 × 255 × 90 mm
Degree of protection	IP 44
Protection class	III
Operating voltage	24 V AC/DC
Operating temperature	- 30° C to + 70° C
Outside Sensor Box	Ref. 9 001 606
Outside Sensor Extension Box	Ref. 9 001 607

### Sensors and accessories

#### Wind Sensor Wind Direction Sensor To measure wind speed To measure wind direcin connection with the tion in connection with Outside Sensor Box. the Outside Sensor Box. **Product benefits Product benefits** Provides reliable and precise • Minimises the number of wind speed measurement. individual wind speed sensors installed to improve the • High resilience and durabilfacade aesthetics. ity by precision bearing. • Very good starting value by magnetic contact-free measure principle.

- Winter and offshore usable.
- High resilience and durability by precision bearing.

Dimensions	Height 303 mm, Arrow length 515 mm, max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	5×1.5 mm²
Wind Direction Sensor	Ref. 9 013 807

Box.

housing.

To measure exterior tem-

peratures in conjunction

with the Outside Sensor

• Delivered with solar ra-

diation sensor protective

# **Outside Temperature Sensor**



### **Product benefits**

- Precise measurement of exterior temperature values which can be displayed by °C or °F in the animeo building control solutions.
- Protective housing to prevent measurement influence by spiders and birds

Dimensions	Height 150 mm, ø 115 mm
Degree of protection	IP 65
Wiring recommendations	2×0.8 mm
Outside Temperature Sensor	Ref. 9 001 611

Dimensions	Height 200 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	2×0.8 mm <sup>2</sup>

# Wind Sensor

# **Heated Wind Sensor**



To measure wind speed in connection with the Outside Sensor Box. Recommended for geographical areas with severe winters.

Ref. 9 001 608

#### **Product benefits**

- The turning parts can not get stuck due to ice or snow thanks to integrated thermostat controlled heating.
- Provides reliable and precise wind speed measurement during the winter period.
- High resilience and durability by precision bearing.

Dimensions	Height 190 mm, ø 240 mm
	max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	5×1.5 mm²
Heated Wind Sensor	Ref. 9 140 180

#### Sensors and accessories

#### **Rain Sensor Ondeis**



#### Capacitive sensor to measure precipitation with UV-opaque housing and UV stabilized. 24 V DC and 230 V DC version available.

#### **Product benefits**

- Fast, simple and flexible assembly. Wall assembly or installation on standard mast with 50 mm diameter.
- 24 V DC power supply provided directly through the Outside Sensor Box (ref. 9001606).
- Delivered with a 2.30 m cable (2 x 0.75 mm<sup>2</sup>).

Dimensions (w × h × d)	115 × 100 × 85 mm
Degree of protection	IP 44
Wiring recommendations	3×1.5 mm
Rain Sensor Ondeis 24 V DC	Ref. 9 016 344
Rain Sensor Ondeis 230 V AC	Ref. 9 016 345

### Sun Sensor



Sun sensor to measure luminosity in connection with the Outside Sensor Box.

#### **Product benefits**

- Small unique design to allow integration directly on the external façade.
- Spring clamp connectors for save and solid wiring to the Outside Sensor Box.

Dimensions ( $w \times h \times d$ )	34×88×47 mm
Degree of protection	IP 44
Wiring recommendations	2×0.8 mm
Angle position	150°
Sun Sensor (without mounting brackets)	Ref. 9 050 100
Mounting brackets for Sun Sensor	Ref. 9 127 888
Kit Sun Sensor incl. brackets	Ref. 9 154 043

### **Sensor Station**



Product benefits

sensor devices.

#### The Sensor Station consists of an aluminium mast with pre-mounted and pre-wired Outside Sensor Box, 4 sun sensors, 1 wind sensor and 1 outside temperature sensor. The Sensor Station can be equipped with additional sensors such as sun sensors and a rain sensor. Wall brackets included.

- Indication of north direction.
- Position of pre-mounted and pre-wired sun sensors is clearly indicated for exact façade orientation.

## ery for exact positioning of the sensor station.

Reduced installation time

thanks to pre-mounted

construction components

and pre-wired individual

· Compass included in deliv-

Dimensions/mast height

#### Sensor Station

3200 mm

Ref. 9 013 726

### Sensor Station extended



The Sensor Station extended consists of an aluminum mast with a premounted and pre-wired Outside Sensor Box, 8 sun sensors, 1 wind speed sensor, 1 wind direction sensor, a rain sensor and an outside temperature sensor.

#### Product benefits

- Reduced installation time thanks to pre-mounted construction components and pre-wired individual sensor devices.
- Compass included in delivery for exact positioning of the sensor station.

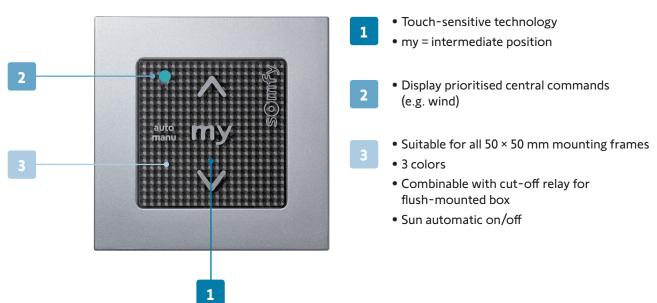
#### Dimensions/mast height

Sensor Station extended

• Indication of north direction.

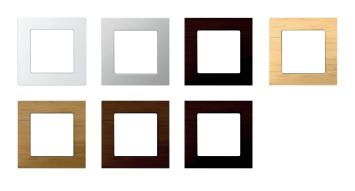
 Position of pre-mounted and pre-wired sun sensors is clearly indicated for exact façade orientation.

## Motor Controller for flush-mounted installation



#### Single flush-mounted

## **Smoove frames**





#### Motor Controller

## Smoove UNO IB+



For roller shutters, screens, exterior Venetian blinds and windows. Designed for flush-mounted installation. For the individual control of 1 × 230 V AC motors

via touch-sensitive switch or in groups via Somfy IB or animeo IB+ controlling technology.

#### **Product benefits**

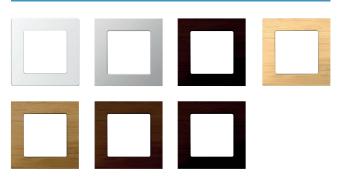
- Fits in standard 50 x 50 mm frames
- Cover plate and frame can be integrated at finish to prevent soiling during installation.
- Feedback of active status through LED on the device.

#### Further features

 Priority management between local and automatic commands directly on the device or through different modes configurable via animeo IB+ Building Controller.

#### Accessories

## Smoove UNO IB+ frames



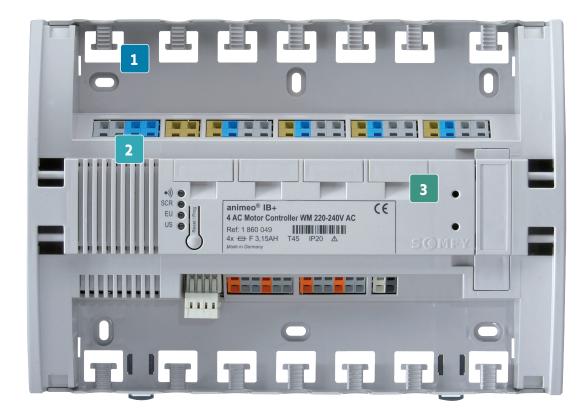
#### Smoove frames

• Pure	Ref. 9 015 022
Silver Mat	Ref. 9 015 025
• Black	Ref. 9 015 023
<ul> <li>Light Bamboo - wood finish</li> </ul>	Ref. 9 015 027
Ambergris Bamboo - wood finish	Ref. 9 015 026
Cherry - wood finish	Ref. 9 015 236
• Walnut - wood finish	Ref. 9 015 237
Double frame pure	Ref. 9 015 238

Dimensions (w × h × d)	71 × 71 × 44 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Operating temperature	0° C to + 45° C
Output voltage	230 V AC
Output current	3.15 A
Smoove UNO IB+ Pure Shine	Ref. 1 811 203
Smoove UNO IB+ Silver Shine (only on request)	Ref. 1 811 204
Smoove UNO IB+ Black Shine (only on request)	Ref. 1 811 205
For fluch-mounted installation	

For flush-mounted installation.

## Motor Controller for wall-mounted or DIN-rail installation



1

#### Quick assembly

• Integrated tension relief, usable with cable ties

## 2 Quick connectivity

- Spring-clip connectors
- Dual connectors (in-out), to connect to the mains circuit for example

## 3

- Quick maintenance
- Fuse holder per motor output accessible from the outside

#### **Motor Controller**

### **1 AC Motor Controller**

**1 AC Motor Controller** 

exterior Venetian blinds,

exterior Venetian blinds

dows. For the individual

control of 1 × 230 V AC

motor via local push but-

tons, or in groups with IB+

Controlling Technology.

**1 AC Motor Controller** 

Provides 1 x potential free output for individual con-

trol via local push buttons,

or in groups with animeo

IB+ Controlling technology.

**Output Converter** 

Further features

• Easily accessible fuses.

with 3 end limits and win-

For roller shutters, screens,



#### Product benefits

- Compact design suitable for e.g. installation in under-window or wall-mounted wiring conduits.
- Local setting of an intermediate position and of user ergonomics.

Dimensions (w × h × d)	90 × 180 × 45 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Operating temperature	0° C to + 45° C
Output voltage	230 V AC
Output current	3.15 A
1 AC Motor Controller WM	Ref. 1 860 121
1 AC Motor Controller WM 3 end limit	Ref. 1 860 123
1 AC Motor Controller WM Output Converter	Ref. 1 860 125

For wall-mounted installation.

Dimensions (w × h × d)	65 × 105 × 20 mm
Degree of protection	according to installation type
1 AC Motor Controller Panel	Ref. 1 860 122
1 AC Motor Controller Panel 3 end limits	Ref. 1 860 124
1 AC Motor Controller Panel Output Converter	Ref. 1 860 126

Printed Circuit Board (PCB) version for DIN-rail installation. Additional DIN-rail adapter needed.

### **1 AC Motor Controller IWM**



Motor Controller for motorized external Venetian blinds, roller shutters and windows.

For the individual controlling of a 1 x 230 V AC motor via a unlocked serial push button and/or through Somfy solar shading management systems such as Somfy New Wired Range and Somfy animeo IB+. Available for flush mounting (IWM).

#### **Product benefits**

- Designed to fit in standard flush mounting boxes.
- Quick installation and integration of the Motor Controller through:
  - 1. Smallest possible housing dimensions following up to date installation norms.
- 2. Spring tension connectors to fasten the wiring.
- 3. Double terminals allow daisy chaining and provide space saving in the flush mounting socket.
- Independent of switch manufacturer design. Recommended: Somfy Smoove Origin IB, Ref. 1 811 272.
- Motor Controller can be used on delivery state with different selectable operating modes to choose from.
- Economical: < 0.5 W standby power consumption.

## Further features • A freely selecteable inter-

- mediate positon "my" can be chosen by the user. Intelligent switching be-
- tween manual and automatic operation to guarantee excellent user comfort and energy savings.
- The Auto mode can optionally be switched on or off with a separate input.
- Adressable with visual feedback for the integration in Somfy solar shading management systems.
- Compatible with Somfy IB, Somfy animeo IB+ and installer-friendly 2-wire Somfy animeo IB+ technology.

Dimensions (w × h × d)	50 mm x 50 mm x 25 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Operating temperature	0° C to + 50° C
Output voltage	230 V AC
Output current	3 A
IB+1 AC Motor Controller IWM	Ref. 1 860 328

IB+1 AC Motor Controller IWM

For wall-mounted installation.

### **Motor Controller**

## 2 AC Motor Controller



For roller shutters, screens, exterior Venetian blinds and windows. For the individual controlling of 2 × 230 V AC motors via local push buttons, or in groups with IB+ Controlling Technology.

#### **Product benefits**

- Compact design suitable for e.g. installation in under-window or wall-mounted wiring conduits.
- Easy accessible fuses.

Further features

• Local setting of an intermediate position and of user ergonomics.

Dimensions (w $\times$ h $\times$ d)	90 × 180 × 45 mm
Degree of protection	IP 20
Protection class	Ш
Operating voltage	230 V AC
Operating temperature	0° C to + 45° C
Output voltage	230 V AC
Output current	3.15 A
2 AC Motor Controller WM	Ref. 1 860 209
2 AC Motor Controller PCB	Ref. 1 860 210
Output current 2 AC Motor Controller WM	3.15 A Ref. 1 860 209

For wall-mounted installation.

Printed Circuit Board (PCB) version for DIN-rail installation. Additional DIN-rail adapter needed (Ref. 9 008 049).

## **4 AC Motor Controller**







For roller shutters, screens, exterior Venetian blinds and windows. For individual control of 4 × 230 V AC motors via local push buttons, or in groups with IB+ Controlling Technology.

#### Product benefits

- Upgradable for local controlling by radio.
- Local setting of an intermediate position and of user ergonomics.

#### Further features

• Easily accessible safety fuses per output.

	1	
Dimensions (w × h × d)	255 × 180 × 61 mm	
Degree of protection	IP 20	
Protection class	II	
Operating voltage	230 V AC	
Operating temperature	0° C to + 45° C	
Output voltage	230 V AC	
Output current	max. 3.15 A per output	
4 AC Motor Controller WM	Ref. 1 860 049	
For wall-mounted installation.		
Dimensions (w × h × d)	210 × 90 × 61 mm	
Degree of protection	IP 20	
4 AC Motor Controller DRM	Ref. 1 860 081	
For DIN-rail installation, 12 SUs.		
Dimensions (w × h × d)	254 × 180 × 61 mm	
Degree of protection	IP 20	
Housing IP 54	Ref. 9 012 740	
For the integration of a Motor Controller DRM in an IP 54 housing. For wall- mounted installation.		
Dimensions (w × h × d)	255 × 180 × 61 mm	
Degree of protection	IP 20	
Protection class	II	
Operating voltage	230 V AC	
Operating temperature	0° C to + 45° C	

Operating voltage	230 V AC
Operating temperature	0° C to + 45° C
Output voltage	230 V AC
Output current	max. 3.15 A per output
Dimensions	255 × 180 × 61 mm
Degree of protection	IP 20
4 AC Motor Controller RTS WM	Ref. 1 860 109

For wall-mounted installation.

#### **Motor Controller**

### **4 DC Motor Controller**



For interior blinds, interior Venetian blinds and windows.

For individual control of 4 × 24 V DC motors via local push buttons, or in groups with IB+ Controlling Technology. External 24 V DC power supply required (see accessories).

**Further features** 

current detection.

• Output protected through

Ref. 1 870 451

#### **Product benefits**

- Upgradable for local controlling by radio.
- Local setting of an intermediate position and of user ergonomics.
- Configurable slats and turning speed for optimum user ergonomics.

Dimensions ( $w \times h \times d$ )	255 × 180 × 61 mm
Degree of protection	IP 20
Protection class	III
Operating voltage	24 V DC
Operating temperature	0° C to + 45° C
Output voltage	24 V DC
Output current	up to max. 2.1 A per output

4 DC Motor Controller

For wall-mounted installation.

## **6 AC Motor Controller**



#### Product benefits

- Push button on façade to validate the motor wiring direction.
- Status feedback through LEDs.
- Basic motor settings possible with the "PROG" button
- Starting delay time setable for electronic motors.
- Access for software updates.

Dimensions ( $w \times h \times d$ )	110 x 90 x 60 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Operating temperature	0° C to + 50° C
Output voltage	230 V AC
Output current	max. 3 A per output
6 AC Motor Controller WM	Ref. 1 870 399

6 AC Motor Controller WM

For DIN-rail installation in electrical cabinet, 6 SUs

For roller shutters, screens, exterior Venetian blinds and windows. For the individual controlling of 6 × 230 V AC motors via local push buttons, or in groups with IB+ Controlling Technology.

#### **Further features**

- Modern push-in CAGE CLAMP<sup>®</sup> connectors for any wire type.
- Daisy chain for the mains.

#### Accessories

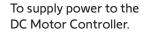
### **RTS Radio Receiver**



Receiver to upgrade 4 AC, 4 DC or 4 DC / DC-E Motor Controller sdevices. Direct plug-in to Motor Controller.

Dimensions (w $\times$ h $\times$ d)	52 × 92 × 27 mm
Degree of protection	IP 20
Protection class	Ш
Supply voltage	5 V DC, from animeo IB+ Motor Controller
Operating temperature	0° C to + 45° C
Radio frequency	433 MHz
Radio range	20 m through 2 walls
RTS Radio module	Ref. 1 860 105

## **Power Supply DC**



When using "Somfy Concept 25" motors, up to 2 Motor Controllers 4 DC can be supplied via one power supply (= 8 motors). Switchable also in parallel: 2 x 4.5 A = 9 A.

Dimensions ( $w \times h \times d$ )	130 × 180 × 61 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Output current	2.5 A (switch on duration 100%) 4.5 A (switch on duration 50%: 3 min. on, 3 min. off)
Power Supply DC	Ref. 1 860 093

For wall-mounted and DIN-rail installation.

### Switch zone splitter



To create sub-groups within an IB+ zone.

Dimensions (w × h × d)	80 × 80 × 52 mm
Degree of protection housing	IP 65
Protection class	III
Switch zone splitter	Ref. 1 810 392
For wall-mounted installation.	

### **Sensor Hub**



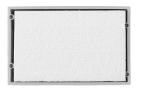
## A 4-ch isolated RS-485 active star wiring hub.

4 independent RS-485 output channels each equipped with an individual driver, and one RS-485 input channel. The data from a master to the input channel will simultaneously be forwarded to all the four output channels.

Dimensions (w × h × d)	72 × 122 × 35 mm
Sensor Hub	Ref. 9 018 147

For DIN-rail installation.

## Flush Mounting Box TouchBuco



192 × 119 × 68 mm

Flush Mounting Box TouchBuco

Ref. 9 019 837

Flush-mounted installation.

Dimensions ( $w \times h \times d$ )

Surface Mounting B	ox TouchBuco	IB+ Wiring Test Too	I
			To ensure that the system is properly wired.
۲		animeo IB+ Wiring Test Tool	Ref. 1 810 7
Dimensions (w × h × d)	254 × 180 × 90 mm		
Surface Mounting Box TouchBucc	Ref. 9 019 838	<b>RTS Programming 1</b>	Tool
For wall-mounted installation.			
DIN-rail adapter			Programming tool to assign remote control channels to the animeo RTS card
	For installation on 35 mm DIN-rail to mount		(ref. 1 860 105).
11	circuit board versions	RTS Programming Tool	Ref. 1 810 8
	CD 1 × 1 P6, CD 2 × 1 P6, CD 1 × 4 P6, animeo 1 AC/2 AC Motor Con- troller PCB.	USB IB+ Interface	Kel. 10100
Dimensions (w × h × d)	70 × 105 × 23 mm		USB IB+ Interface for
<b>DIN-rail adapter</b> For 35 mm DIN-rail, colour; black,	Ref. 9 008 049 4 SUs		direct connection of the computer to the Motor Controller.
IB/IB+ Repeater			
	Circuit board for signal amplification of IB / IB+ controlling technology signal with longer cable connection (from 1000 m).	USB IB+ Interface	Ref. 1 860 14
Dimensions (w × h × d)	165 × 160 × 60 mm		
Degree of protection	IP 54		
begree of protection			
Protection class	Ш		
Protection class Operating voltage	230 V AC		
Protection class Operating voltage			
	230 V AC		

### Local controls

### Smoove 1 RTS



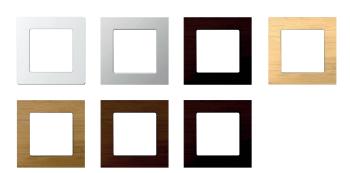
1 channel on-wall radio transmitter to communicate with the RTS radio module.

Dimensions (w × h × d)	50 × 50 × 10 mm
Degree of protection	IP 30
Protection class	II
Operating voltage	3 V (battery model CR 2430)
Operating temperature	0° C to + 60° C
Operational conditions	dry living rooms
Radio frequency	433.42 MHz

#### Smoove 1 RTS

• Pure shine	Ref. 1 810 873
Black shine	Ref. 1 810 902
Silver shine	Ref. 1 810 904
Adapter disc for other switching programs	Ref. 9 016 911

## Smoove frames



#### Smoove frames

• Pure	Ref. 9 015 022
• Silver Mat	Ref. 9 015 025
• Black	Ref. 9 015 023
• Light Bamboo - wood finish	Ref. 9 015 027
Ambergris Bamboo - wood finish	Ref. 9 015 026
Cherry - wood finish	Ref. 9 015 236
• Walnut - wood finish	Ref. 9 015 237
Double frame pure	Ref. 9 015 238

For wall-mounted installation.

### **Smoove IB Origin**



Manual control of several motors over IB bus. Comfortable central control or group operability.

Ref. 1 811 272

### Smoove 1 RTS Origin



Manual control of several motors over RTS. Comfortable central control or group operability. Operation via the big UP, DOWN and STOP buttons is possible at any time.

Smoove 1 RTS Origin

Ref. 1 811 218

For wall-mounted installation.

Smoove IB Origin

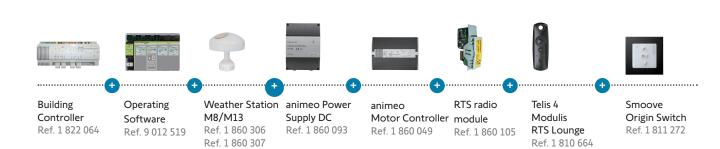
## **Project example**

## Functionality required and specified by the building owner

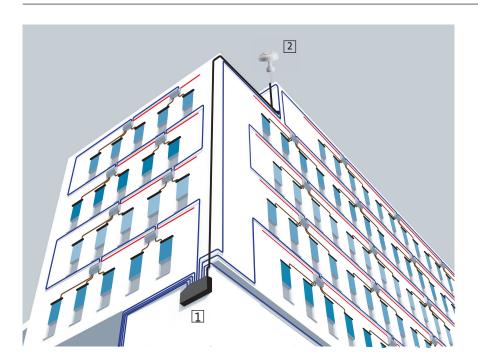
- Up to 8 separate façade zones are to be controlled.
- Ergonomic PC software for the user interface.
- Exterior Venetian blinds except for the ground floor to be equipped with roller shutters (security).
- Local control through Somfy RTS technology.



## **Products installed**



## Installation details



The animeo IB+ Building Controller enables automation of up to 8 zones.

The Weather Station is directly linked to the Building Controller and each zone is separately managed depending on the weather and other parameters to be defined.

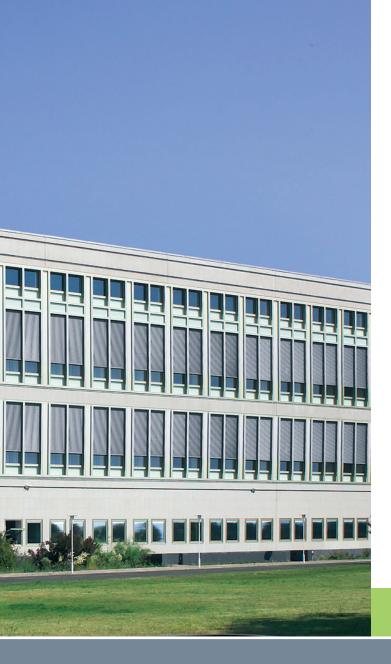
animeo IB+ Building Controller
 Weather Station M8/M13



Each Motor Controller for the same zone is connected to the same IB+ network via the animeo IB+ Building Controller.

1. animeo IB+ Building Controller

2. animeo IB+ Motor Controller



- System topology
- Benefits
- Products

• Project example

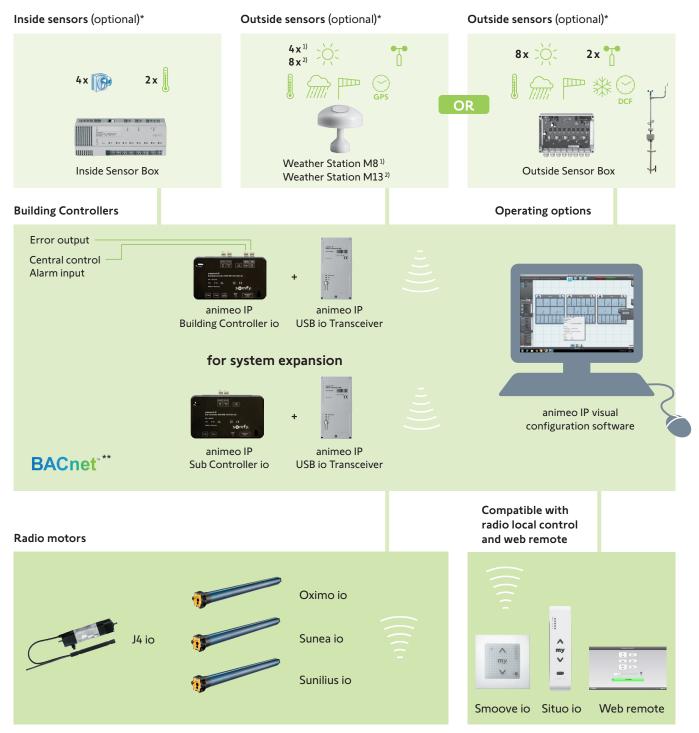
animeo IP/io

Dedicated to the refurbishment of small and medium size buildings, animeo IP/io is the wireless solution that makes it easy to manage your commercial sector sites. This solution is especially dedicated to exterior screens.

Thanks to minimal wiring and plug and play installation, animeo IP/io reduces wiring mistakes.

An intuitive user interface allows simplified commissioning, building management and technical support, featuring drag-and-drop zone creation, motor discovery and at-a-glance system status updates.

## System topology



\* Per Building Controller/Sub Controller 50

\*\* BACnet<sup>™</sup> is a trademark of ASHRAE

## All benefits at a glance

#### **Real and Astronomic Timed Events**

• With animeo IP's timed events feature, schedules can be created to keep building's energy efficient based on certain times of day. Creating timed events around periods of high occupancy (between 8:00 AM and 6:00 PM, Monday to Friday) and low occupancy (weekends, holidays) ensures the building is running as efficiently as possible.

#### **Control Versatility**

• Wireless controls and virtual keypads provide occupants with control over nearby window coverings. animeo IP can override manual occupant commands during specific time periods (e.g. east façade from 8:00 AM - 12:00 PM) to keep the building running as efficiently as possible, providing just the right balance of manual and automated control.





Web remote



Situo io

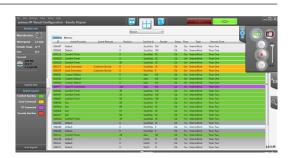
#### Sun Tracking

• Automates natural light management based on the sun's position and façade orientation to minimize glare and maximize the opportunity for daylighting.



#### **Facility Management**

• animeo IP/io technology provides bi-directional status reporting of window covering positions. With this information, animeo IP exports system status snapshots in convenient graph or table form. Quickly see how and why shades were adjusted with simple color codes for timed events, occupant actions or building overrides. Facility managers can also receive systems alerts via email.



### **Building and Sub Controller**

### **Building Controller**



The IP Building Controller is an integrated central hardware and software device for animeo IP/io installations. It provides dynamic solar management by directly controlling Somfy-motorized window coverings and climate information given by a real-time weather station.

#### **Product benefits**

- The IP Building Controller provides an intuitive graphical user interface for simple programming, commissioning, operational and system status.
- Automatic discovery of blinds, sensors and local control points.
- No zone limitation; a single window can be a zone.
- Allows configuration and binding of web remotes.
- A system with a Building Controller can control max. 200 motors.
- One Building Controller can connect to 1 x Compact Sensor or 1 x Outside Sensor Box and 2 x Inside Sensor Box.
- Optimised energy savings in conjunction with a wide range of functions: cooling, heating.
- Enhanced operating mode: Increased, room-based user comfort thanks to the suppression of centralised non-safety functions (e.g. sun function) as soon as local controls are used. The system is switched back into automatic mode at freely definable times each day.

#### **Further features**

- For larger installations, the IP Building Controller's capacity can be expanded with the addition of an animeo IP Sub Controller .
- RJ45 and spring clamp connectors in case of false connection.
- Suitable for wall-mounting and DIN-rail installation.
- The separation of the Sensor Interface (Outside Sensor Box), which is normally mounted outside, and the control center (Building Controller), which is normally mounted inside, enables extremely cost-effective lightning protection for the system.
- Communication between the Outside Sensor Box and the Building Controller is monitored.
- Extensive yet clear selection of functions and parameters which are specially tailored to the type of end product to be controlled (screens, blinds, roller shutters).
- Sun function with configurable threshold values, delays, position, angled orientation for Venetian blinds, freely defined sensor assignment for each zone.

- Wind safety function in combination with wind direction: to increase the lifetime of the blind elements, they can be moved into a safety position if a certain wind force is reached and if the wind direction is such that the specific zone is affected.
- The blind elements are only moved into the safety position if there are strong winds (gale warning).
- Rain and snow safety function with configurable time delays, both for each zone.

Housing Dimensions (w × h × d)	100 x 175 x 50 mm
Degree of protection	IP 20
Protection class	П
Supply voltage	100 - 240 V AC / 50/60 Hz
Operating temperature	0° C to +45° C
animeo IP/io Building Controller	Ref. 1822314

for integration of an IP Sub

Controller. It provides dy-

namic solar management

dow coverings and climate

real-time weather station.

by directly controlling

Somfy-motorized win-

information given by a

Allows expansion of the

local control points.

station.

• The IP Sub Controller in-

tegrates additional sensors

on the real-time weather

simplified connectivity of

the additional IP Sub Con-

• Integrated IP switch for

trollers (pass through).

installation and the integra-

tion of additional blinds and

Further features

## Sub Controller



The IP Sub Controller expands animeo IP/io installations. An IP Building Controller is essential

#### Product benefits

- The IP Sub Controller utilizes the IP Building Controller's integrated router to interface over an IP backbone to provide a stable connection between all appliances.
- RJ45 and spring clamp connectors for false prove connections.
- Suitable for wall-mounting and DIN-rail installation.
- One Sub Controller can connect to 1 x Compact Sensor or 1 x Outside Sensor Box and 2 x Inside Sensor Box.

Housing Dimensions (w × h × d)	100 x 175 x 50 mm
Degree of protection	IP 20
Protection class	П
Supply voltage	100-240 V AC / 50/60 Hz
Operating temperature	0° C to +45° C

animeo IP/io Sub Controller

Ref. 1 860 201

#### Transceiver

### **USB** io Transceiver



The use of the USB io Transceiver is mandatory with every animeo IP/io Building and Sub Controller. The transceiver establishes communication from the IP Building Controller/Sub Controller to the io motors and io local control points.

• LED display of sent and re-

• Scans 3 frequencies be-

tween 868 and 870 MHz

and communicates over the most reliable transmission.

**Further features** 

io radio signals.

ceived

#### **Product benefits**

- Plug and play connection through USB to the IP Building Controller and IP Sub Controller.
- Delivered with pre-installed USB cable.
- Suitable for wall mounted and DIN-rail installations.

Housing Dimensions (w $\times$ h $\times$ d)	90 x 180 x 45 mm
Degree of protection	IP 20
Protection class	III
Supply voltage	5 V DC via USB 2.0
Operating temperature	0° C to +45° C

USB io Transceiver Ref. 9 018 682

#### Sensors and accessories

Weather Station M8/M13	
	To collect the external conditions in different orientations. For façade and roof mounting
Product benefits	Further features
M8	
• 8 sensors to collect the ex- ternal conditions in 4 differ- ent orientations.	<ul> <li>4 Lux sensors for glare control and natural light management.</li> <li>Outside temperature sensor for energy optimisation.</li> <li>Sensor for wind speed and rain to protect external shades or blinds.</li> </ul>
M13	
• 13 sensors to collect the ex- ternal conditions in 8 differ- ent orientations.	<ul> <li>8 Lux sensors for glare control and natural light management.</li> <li>Outside temperature sensor for energy optimisation.</li> <li>Sensor for wind speed, wind direction and rain to protect external shades or blinds.</li> </ul>
Dimensions (h, Ø)	105 mm, 103 mm
Degree of protection	IP44 in working position
Protection class	III
Operating voltage	24 V DC + 10 %/- 30 %
Operating temperature	-30 °C+70 °C
Weather Station M8	Ref. 1 860 306
Weather Station M13	

## Bracket for Weather Station M8/M13



For mounting on an already existing mast with a diameter of 50 mm.

Dimensions (w × h × d)	180 x 80 x 80 mmm
Bracket for Weather Station	Ref. 1 860 320

#### Sensors and accessories

## Mounting accessories for Weather station M8/M13

Metallic Mast (1 m) for roof mounting with Somfy accessories.

Dimensions (h, Ø)	1 m, 50 mm
Metallic Mast (Minimum order quantity = 3)	Ref. 1 860 335
Dimensions (w x d x h)	200 x 90 x 30 mm

## animeo Power Supply DC



To supply the Outside Sensor Box (with heated sensors).

Dimensions (w × h × d)	130 × 180 × 61 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Output current	2.5 A (switch on duration 100 %)
	4.5 A (switch on duration 50 %: 3 min on, 3 min off)
animeo Power Supply DC	Ref. 1 860 093
Frank II. and a state of DINI and the	A - 11 - A2

For wall-mounted and DIN-rail installation.

#### Lightning protection



To protect the controls from lightning. Used in conjunction with the Outside Sensor Box or Compact Sensor.

24V Lightning Protection	Ref. 9 025 707
Bus Lightning Protection	Ref. 9 025 706

### **Outside Sensor Box**

Mast Adaptor for Weather Station

(3 x Mast, 1 x Brackets, 1 x Adaptor)

Kit Mast with 25 mm adaptor



Wall Mount Bracket

Dimensions (h, Ø)

The Outside Sensor Box is the interface between the weather station and the Building Controller or Sub Controller. All measurement values are evaluated here and sent to the Building Controller. It requires an external 24 V AC/DC power supply.

Ref. 1 860 336

Ref. 1 860 321

Ref. 9 027 035

90 mm, 25/50 mm

#### **Product benefits**

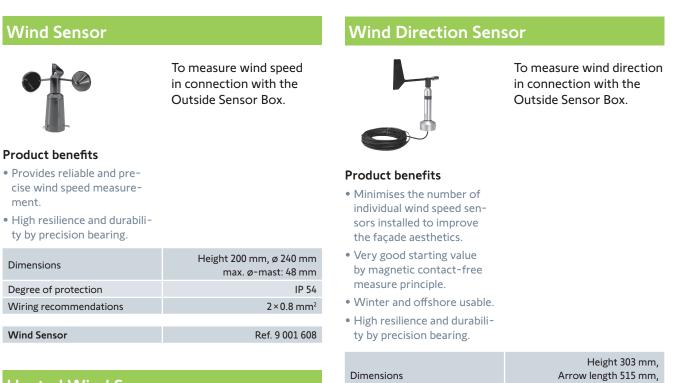
- All sensors incl. Outside Sensor Box can be fixed to the Sensor Station mast.
- Up to 8 sun sensors, 2 wind sensors, 1 wind direction sensor, 1 rain sensor, 1 outside temperature sensor can be

connected to the Outside Sensor Box.

Dimensions (w × h × d)	207 × 255 × 90 mm
Degree of protection	IP 44
Protection class	III
Operating voltage	24 V AC / DC
Operating temperature	- 30° C to +70° C

Outside Sensor Box Ref. 9 001 606
For wall-mounted installation.

#### Sensors and accessories



#### Heated Wind Sensor

To measure wind speed in connection with the Outside Sensor Box. Recommended for geographical areas with severe winter conditions.

#### **Product benefits**

- The turning parts can not get stuck due to ice or snow thanks to integrated thermostat controlled heating.
- Provides reliable and precise wind speed measurement during the winter period.
- High resilience and durability by precision bearing.

Dimensions	Height 190 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	5 × 1.5 mm²
Heated Wind Sensor	Ref. 9 140 180

Dimensions	Height 303 mm, Arrow length 515 mm, max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	5×1.5 mm²

Wind Direction Sensor

Ref. 9 013 807

#### Sensors and accessories

#### **Outside Temperature Sensor**



#### **Product benefits**

- Precise measurement of exterior temperature values which can be displayed in °C or °F in the animeo building control solutions.
- Protective housing to prevent measurements influenced by spiders and birds.
- Delivered with solar radiation sensor protective housing.

Dimensions	Height 150 mm, ø 115 mm
Degree of protection	IP 65
Wiring recommendations	2×0.8 mm
Outside Temperature Sensor	Ref. 9 001 611

### Sun Sensor



Sun sensor to measure luminosity in connection with the Outside Sensor Box.

To measure exterior tem-

peratures in conjunction

with the Outside Sensor

Box.

#### **Product benefits**

- Small unique design to allow integration directly on the external façade.
- Spring clamp connectors for save and solid wiring to the Outside Sensor Box.

Dimensions (w × h × d)	34×88×47 mm
Degree of protection	IP 44
Wiring recommendations	2×0.8 mm
Angle position	150°
Sun Sensor (without mounting brackets)	Ref. 9 050 100
Mounting brackets for Sun Sensor	Ref. 9 127 888
Kit Sun Sensor incl. brackets	Ref. 9 154 043

### **Rain Sensor Ondeis**



#### **Product benefits**

- Fast, simple and flexible assembly. Wall assembly or installation on standard 50 mm diameter mast.
- 24 V DC power supply provided directly through the Outside Sensor Box (ref. 9001606).

Capacitive sensor to measure precipitation with UVopaque and UV stabilized housing. 24 V DC and 230 V AC version available.

• Delivered with a 2.30 m cable (2 x 0.75 mm<sup>2</sup>).

Dimensions (w × h × d)	115 × 100 × 85 mm
Degree of protection	IP 44
Wiring recommendations	5 x 1.5 mm²
Rain Sensor Ondeis 24 V DC	Ref. 9 016 344
Rain Sensor Ondeis 230 V AC	Ref. 9 016 345

### **Sensor Station**



The Sensor Station consists of an aluminium mast with pre-mounted and pre-wired Outside Sensor Box, 4 sun sensors, 1 wind sensor and 1 outside temperature sensor. The Sensor Station can be equipped with additional sensors such as sun sensors and a rain sensor. Wall brackets included.

#### **Product benefits**

- Reduced installation time thanks to pre-mounted construction components and pre-wired individual sensor devices.
- Compass included in delivery for exact positioning of the sensor station.

#### Dimensions / mast height

Sensor Station

• Indication of north direction.

 Position of pre-mounted and pre-wired sun sensors is clearly inidcated for exact façade orientation.

3200 mm

#### Sensors and accessories

#### Sensor Station extended



The Sensor Station extended consists of an aluminum mast with a premounted and pre-wired Outside Sensor Box, 8 sun sensors, 1 wind speed sensor, 1 wind direction sensor, a rain sensor and an outside temperature sensor.

• Indication of north direc-

• Position of pre-mounted

and pre-wired sun sensors

is clearly indicated for precise façade orientation.

3200 mm

Ref. 9 013 727

tion.

- Product benefits
- Reduced installation time thanks to pre-mounted construction components and pre-wired individual sensor devices.
- Compass included in delivery for exact positioning of the sensor station.

Dimensions / mast height

Sensor Station extended

### **Inside Sensor Box**



#### **Product benefits**

• Window cleaners need no access to the complete user interface (animeo IP Visual Configuration Software). For connection to external push buttons or key switches per zone and up to 2 Inside Temperature Sensors.

 Inside Temperature Sensors enable easy extendability of the system's energy saving options.

Dimensions (w × h × d)	210 × 90 × 61 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Operating temperature	0° C to +45° C
Inside Sensor Box	Ref. 9 001 614

For DIN-rail installation, 12 SUs.

## •

Housing for Inside Temperature Sensor

Housing for Inside Temperature Sensor

Dimensions ( $w \times h \times d$ )

#### Ref. 9 008 045

75 × 75 × 25 mm

#### Inside Temperature Sensor



To measure the inside temperature.

To install inside tempera-

ture sensor.

Inside Temperature Sensor

Ref. 9 008 044

### **BMS Interface**



Product benefits

- RJ45 connector for false prove connections
- LED indicators providing information about the status of the product, the normal operation or a system error.

Provides communication between Building Management Systems and Somfy motorized shading systems over BACnet. Compatible with Radio Technology Systems (RTS), Stand-alone SDN, animeo IP/io and animeo IP/RS485 shade systems.

## **BACnet**<sup>\*\*</sup>

- Programmable through user-friendly interface.
- Integration capabilities: Modbus, BACnet MS/TP, BACnet IP.
- Auto device discovery for animeo IP.

Dimensions (w × h × d)	115 × 92 × 41 mm
Degree of protection	IP 20
Operating voltage	24 V DC
Operating temperature	0° C to +50° C

**BMS** Interface

Ref. 1 822 558

### Local wall controls

## Smoove 1 io



1 channel on-wall radio transmitter.

Dimensions (w × h × d)	50 × 50 × 10 mm
Degree of protection	IP 30
Protection class	Ш
Operating voltage	3 V (battery model CR 2430)
Operating temperature	0° C to +60° C
Operating conditions	Dry living rooms
Radio frequency	865.95 MHz
Pure shine	Ref. 1 800 445
Black shine	Ref. 1 811 003
Silver shine	Ref. 1 811 007
Adapter disk for other switch- ing programs	Ref. 9 016 911

## Smoove Origin io



1 channel on-wall radio transmitter.

Dimensions (w × h × d)	50 × 50 × 50 mm
Degree of protection	IP 30
Protection class	II
Operating voltage	3 V (battery model CR 2430)
Operating temperature	0° C to +60° C
Operating conditions	Dry living rooms
Radio frequency	865.95 MHz
Pure shine	Ref. 1 811 066

## Smoove IB Origin



Manual control of several motors over IB bus. Comfortable central control or group operability.

Smoove IB Origin

Ref. 1 811 272

## Smoove frames



#### Smoove frames

• Pure	Ref. 9 015 022
Silver Mat	Ref. 9 015 025
• Black	Ref. 9 015 023
<ul> <li>Light Bamboo - wood finish</li> </ul>	Ref. 9 015 027
Ambergris Bamboo - wood finish	Ref. 9 015 026
Cherry - wood finish	Ref. 9 015 236
<ul> <li>Walnut - wood finish</li> </ul>	Ref. 9 015 237
Double frame pure	Ref. 9 015 238

### Local remote controls

## Situo 1 io/Situo 5 io



To control 1 io application or 1 group of io applications.

To control up to 5 io applications or 5 groups of io applications.

Dimensions (w × h × d)	42 × 139 × 16 mm
Degree of protection	IP 30
Protection class	Ш
Operating voltage	3 V (battery model CR 2430)
Operating temperature	0° C to +48° C
Operating conditions	Dry living rooms
Radio frequency	868 MHz +/- 1 KHz
Situo 1 io Pure	Ref. 1 870 311
Situo 1 io Iron	Ref. 1 870 315
Situo 1 io Arctic	Ref. 1 870 323
Situo 1 io Natural	Ref. 1 870 319
Situo 5 io Pure	Ref. 1 870 327
Situo 5 io Iron	Ref. 1 870 331
Situo 5 io Arctic	Ref. 1 870 339
Situo 5 io Natural	Ref. 1 870 335

## Situo 1/Situo 5 Variation io



To control 1 io application or 1 group of io applications.

To control up to 5 io applications or 5 groups of io applications.

With scroll wheel for tilting and dimming.

Dimensions (w × h × d)	45 × 140 × 20 mm
Degree of protection	IP 30
Protection class	Ш
Operating voltage	3 V (battery model CR 2430)
Operating temperature	0° C to +48° C
Operating conditions	Dry living rooms
Radio frequency	868 MHz
Situo 1 Variation io Iron	Ref. 1 811 635
Situo 1 Variation io Pure	Ref. 1 811 634
Situo 5 Variation io Iron	Ref. 1 811 636
Situo 5 Variation io Iron	Ref. 1 811 637

### Web remote control

#### Web remote control



Product benefits

- Applicable at any time
- Can easily be adapted to the user's environment

animeo IP web remote license key

Manual user control. Allows control of one blind or a group of blinds via a web page from a user's computer or a smartphone.

#### **Further features**

- Controls Up/Down position
- Controls slat position
- Displays of blind position
- Overrides automatic functions

Ref. 9 019 244

#### **Motors**



### Oximo io



The universal io solution for roller shutters. Three end limit setting modes: automatic, semiautomatic and manual.

Type of head	Star
Diameter	50 mm
Degree of protection	IP 44
Protection class	1
Supply voltage	230 V AC
Operating temperature	20%: 20 to 70°C / 80%: 10 to 40°C
Speed with load	17 rpm
Limit Switch Unit	Bi-directional radio
Oximo io 6/17 VVF 3M BAR	Ref. 1 032 700
Oximo io 10/17 VVF 3M BAR	Ref. 1 037 689
Oximo io 20/17 VVF 3M BAR	Ref. 1 041 626
Oximo io 15/17 VVF 3M UNIT	Ref. 1 039 589
Oximo io 30/17 VVF 3M BAR	Ref. 1 045 517

The motors listed above are a selection from the full motor range. For more details, please contact your local Somfy partner.

#### Sunea io



Oximo io 40/17 VVF 3M BAR

The all-in-one io vertical screen motor with advanced features. Adjustable electronic stop detection.

Ref. 1 049 608

Type of head	Star or round
Diameter	50 or 60 mm
Degree of protection	IP 44
Protection class	I.
Supply voltage	230 V AC
Operating temperature	20%: 20 to 70°C / 80%: 10 to 40°C
Speed with load	17 rpm
Limit Switch Unit	Electronic
Sunea 50 io 35/17 VVF 3M BAR	Ref. 1 116 230
Sunea 50 io 35/17 VVF 3M PACK100	Ref. 1 116 247
Sunea 50 io 50/12 VVF 3M BAR	Ref. 1 118 171
Sunea 50 io 50/12 VVF 3M PACK100	Ref. 1 118 185
Sunea 60 io 70/17 VVF3M UNIT	Ref. 1 182 211

The motors listed above are a selection from the full motor range. For more details, please contact your local Somfy partner.

## Sunilus io



The entry-level io motor dedicated to awnings and vertical screens with no cassette.

Type of head	Star
Diameter	50 mm
Degree of protection	IP 44
Protection class	1
Supply voltage	230 V AC
Operating temperature	20%: 20 to 70°C / 80%: 10 to 40°C
Speed with load	17 rpm
Limit Switch Unit	Electronic
Sunilus io 6/17	Ref. 1 033 312
Sunilus io 10/17	Ref. 1 038 083
Sunilus io 15/17	Ref. 1 040 006
Sunilus SCR S RH IO 6/32	Ref. 1 033 132
Sunilus SCR io 10/17 VVF 3M BAR	Ref. 1 037 935
Sunilus 50 io 35/17 VVF 3M BAR	Ref. 1 047 344
Sunilus 50 io 40/17 VVF 3M BAR	Ref. 1 049 774
Sunilus 50 io 50/12 VVF 3M BAR	Ref. 1 051 407

The motors listed above are a selection from the full motor range. For more details, please contact your local Somfy partner.

#### Motors



### Sunea Screen io



The io motor to suit all types of vertical screens.

Type of head	Star
Diameter	50 mm
Degree of protection	IP 44
Protection class	1
Supply voltage	230 V AC
Operating temperature	20%: 20 to 70°C 80%: 10 to 40°C
Speed with load	17 rpm
Limit Switch Unit	Electronic
Sunea SCR io 6/17 VVF 5M UNIT	Ref. 1 110 202
Sunea SCR io 6/17 VVF 10M BAR	Ref. 1 110 243
Sunea SCR io 10/17 IN BULK	Ref. 1 111 155
Sunea SCR io 10/32 VVF 5M BAR	Ref. 1 111 150
Sunea SCR io 15/32 RH VVF5M BAR	Ref. 1 112 244

The motors listed above are a selection from the full motor range. For more details, please contact your local Somfy partner.

## J4 io Protect



io motor dedicated to exterior Venetian Blinds. The shortest EVB motor available on the market. Consisting of a J4 io motor and a J4 io captive plate.

Degree of protection	IP 54 for motor - IP 67 for plate
Protection class	1
Supply voltage	230 V AC
Operating temperature	20%: 20 to 70°C / 80%: 10 to 40°C
Speed with load	24 rpm
Stand-by consumption motor + plate	0.85 W
Limit Switch Unit	Electronic
End-limits	Preset & adjustable up & down end-limit
J406 6/24 io Protect Unit	Ref. 1 210 673
J410 10/24 io Protect Unit	Ref. 1 210 674
J418 18/24 io Protect Unit	Ref. 1 210 675

▲ Step/Stop functionality using local controls for slat orientation is limited! A short step/stop command for slat orientation can only be executed by pushing an up or down command and then a stop command immediately afterwards. Defined, precise positions for slat orientation can be executed through the web remote.

## **Project example**

#### Functionality required and specified by building owners.

- Requirements for minimum cabling and installation because the building is in use.
- Management per window, group or façade for exterior screens.
- Local control points using radio remote or web remote controls.
- Configuration and us can be monitored and modified remotely. The exact position and status of the exterior screens should be visible at any time.



## **Products installed**



## Automatic functions

- Wind safety to protect the exterior screens from damage. Also wind direction dependent.
- Sun automatic including sun tracking to prevent overheating of the building and provide glare control and comfort for the occupants.
- Possibility for the local user to override automatic functions at any time unless safety functions are active.

## Installation details



The animeo IP/io Building Controllers and Sub Controllers communicate bi-directionally with the motors through the USB/io Transceiver. The local radio remote controls also communicate with the USB/ io Transceiver.

The connections between motors and local control points are set-up through the animeo IP Visual Configuration Software.

The sensor station is directly linked to the animeo IP/io Building Controller. Each window, group or façade is managed separately depending on the weather conditions and the parameters defined.

- 1. Sensor Station Extended
- 2. animeo IP/io Building Controller + USB/io Transceiver
- 3. animeo IP/io Sub Controller + USB/io Transceiver
- 4. Maintenance through animeo IP Visual Configuration Software



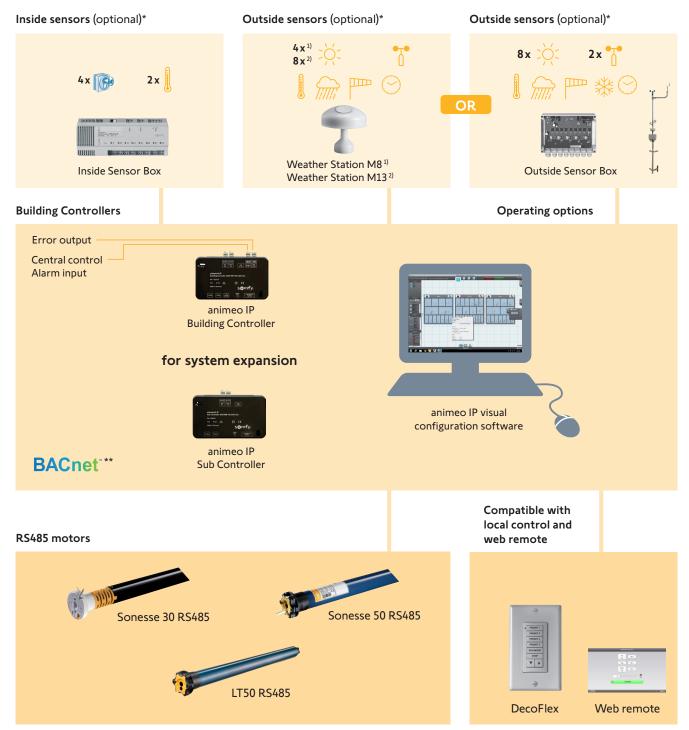
- System topology
- Benefits
- Products
- Project example

Dedicated to new medium to large buildings, animeo IP/RS485 is the digital solution that makes it easy to manage your sites.

Thanks to limited wiring and plug and play installation, animeo IP/RS485 reduces wiring errors.

An intuitive user interface allows simplified commissioning, building management and technical support, featuring drag and drop zone creation, motor discovery and at-a-glance system status updates.

## System topology



\* Per Building Controller/Sub Controller

## All benefits at a glance

#### **Real and Astronomic Timed Events**

• With animeo IP's timed events feature, schedules can be created to keep buildings energy efficient based on certain times of day. Creating timed events around periods of high occupancy (between 8:00 AM and 6:00 PM, Monday to Friday) and low occupancy (weekends, holidays) ensures the building is running as efficiently as possible.

#### **Control Versatility**

Sun Tracking

Wall-mounted keypads, controls and virtual keypads give occupants control over nearby window coverings. animeo IP can override manual occupant commands during specific time periods (e.g. east façade from 8:00 AM - 12:00 PM) to keep the building running as efficiently as possible, providing just the right balance of manual and automated control.

• Automates natural light management based on the sun's position and façade direction to minimize glare and maximize the opportunity for daylighting.





Facility Manager View

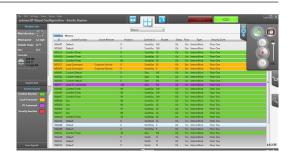
Web remote



.

#### **Facility Management**

• animeo IP/RS485 technology provides bi-directional status reporting of window covering positions. With this information, animeo IP exports system status snapshots in convenient graph or table form. Quickly see how and why shades were adjusted with simple color codes for timed events, occupant actions or building overrides. Facility managers can also receive system alerts via email.



### **Building and Sub Controller**

### **Building Controller**



The IP Building Controller is an integrated central hardware and software device for animeo IP/ RS485 installations. It provides dynamic solar management by directly controlling Somfy-motorized window coverings and climate information given by a real-time weather station.

#### **Product benefits**

- The IP Building Controller features an intuitive graphical user interface for simple programming, commissioning, operational and system status.
- Automatic discovery of blinds, sensors and local control points.
- No zone limitation; a single window can be a zone.
- Allows configuration and binding of web remotes.
- A system with a Building Controller can control max. 2000 motors.
- One Building Controller can connect to 1 x Compact Sensor or 1 x Outside Sensor Box and 2 x Inside Sensor Box.
- Optimised energy savings in conjunction with a wide range of functions: cooling, heating.
- Enhanced operating mode: Increased, room-based user comfort thanks to the suppression of centralised non-safety functions (e.g. sun function) as soon as local controls are used. The system is switched back into automatic mode at freely definable times each day.

#### **Further features**

- For larger installations, the IP Building Controller's capacity can be expanded with the addition of an animeo IP Sub Controller (ref. 1860201).
- RJ45 and spring clamp connectors in case of false connection.
- Suitable for wall-mounting and DIN-rail installation.
- The separation of the Sensor Interface (Outside Sensor Box), which is normally mounted outside, and the control center (Building Controller), which is normally mounted inside, enables extremely cost-effective lightning protection for the system.
- Communication between the Outside Sensor Box and the Building Controller is monitored.
- Extensive yet clear selection of functions and parameters which are specially tailored to the type of end product to be controlled (Venetian blinds, blinds, roller shutters).
- Sun function with configurable threshold values, time delays, position, angled orientation for Venetian blinds, freely defined sensor assignment for each zone.
- Wind safety function in combination with wind direction: to increase the lifetime of the blind elements, they can be moved into a safety position if a certain wind force is reached and if the wind direction is such that the specific zone is affected.

- The blind elements are only moved into the safety position if there are strong winds (gale warning).
- Rain and snow safety function with configurable time delays, both for each zone.

Housing Dimensions (w $\times$ h $\times$ d)	100 x 175 x 50 mm
Degree of protection	IP 20
Protection class	II
Supply voltage	100 - 240 V AC / 50/60 Hz
Operating temperature	0° C to +45° C

animeo IP/RS485 Building Controller

## Sub Controller



The IP Sub Controller expands animeo IP/RS485 installations. An IP Building Controller is essential for integration of an IP Sub Controller. It provides dynamic solar management by directly controlling Somfy-motorized window coverings and climate information given by a real-time weather station.

Ref. 1822314

#### Product benefits

- The IP Sub Controller utilizes the IP Building Controller's integrated router to interface over an IP backbone to provide a stable connection between all appliances.
- RJ45 and spring clamp connectors for false prove connections.
- Suitable for wall-mounting and DIN-rail installation.
- One Sub Controller can connect to 1 x Compact Sensor or 1 x Outside Sensor Box and 2 x Inside Sensor Box.

#### Further features

- Allows expansion of the installation and the integration of additional blinds and local control points.
- The IP Sub Controller integrates additional sensors on the real-time weather station.
- Integrated IP switch for simplified connectivity of the additional IP Sub Controllers (pass through).

SOF DOX.	
Housing Dimensions (w × h × d)	100 x 175 x 50 mm
Degree of protection	IP 20
Protection class	II
Supply voltage	100-240 V AC / 50/60 Hz
Operating temperature	0° C to +45° C
animeo IP/io Sub Controller	Ref. 1 860 201

### Sensors and accessories

Weather Station M8	/M13	Bracket for Weather	Station M8/M13
	To collect the external conditions in different orientations. For façade and roof mounting		For mounting on an al- ready existing mast with a diameter of 50 mm.
Product benefits	Further features	Dimensions (w × h × d)	180 x 80 x 80 mmm
M8		Bracket for Weather Station	Ref. 1 860 320
<ul> <li>8 sensors to collect the ex- ternal conditions in 4 differ- ent orientations.</li> </ul>	<ul> <li>4 Lux sensors for glare control and natural light management.</li> <li>Outside temperature sensor for energy optimisa-</li> </ul>	Mounting accessories for Weather station M	8/M13
	<ul><li>tion.</li><li>Sensor for wind speed and rain to protect external shades or blinds.</li></ul>		Metallic Mast (1 m) for roof mounting with Somfy accessories.
M13			
• 13 sensors to collect the external conditions in 8 different orientations.	<ul> <li>8 Lux sensors for glare con- trol and natural light man- agement.</li> </ul>	Dimensions (h, Ø) <b>Metallic Mast</b> (Minimum order quantity = 3)	1 m, 50 mm Ref. 1 860 335
	<ul> <li>Outside temperature sen- sor for energy optimisa- tion.</li> </ul>	Dimensions (w x d x h) Wall Mount Bracket	200 x 90 x 30 mm Ref. 1 860 336
	<ul> <li>Sensor for wind speed,</li> </ul>	Dimensions (h, Ø)	90 mm, 25/50 mm
	wind direction and rain to protect external shades or	Mast Adaptor for Weather Station	
	blinds.	Kit Mast with 25 mm adaptor	Ref. 9 027 035
Dimensions (h, Ø)	105 mm, 103 mm	(3 x Mast, 1 x Brackets, 1 x Adaptor)	
Degree of protection	IP44 in working position		
Protection class	III	Lightning protection	
Operating voltage	24 V DC + 10 %/- 30 %		
Operating temperature	-30 °C+70 °C		To protect the controls
Weather Station M8	Ref. 1 860 306		from lightning. Used in
Weather Station M13	Ref. 1 860 307		conjunction
			with the Outside Sensor Box or Compact Sensor.

## Sensors and accessories

## **Outside Sensor Box**



The Outside Sensor Box is the interface between the weather station, the Building Controller or Sub Controller. All measurement values are evaluated here and sent to the Building Controller. It requires an external 24 V AC/DC power supply.

#### animeo Power Supply DC



To supply the Outside Sensor Box (with heated sensors).

Dimensions (w × h × d)	130 × 180 × 61 mm
Degree of protection	IP 20
Protection class	Ш
Operating voltage	230 V AC
Output current	2.5 A (switch on duration 100 %)
	4.5 A (switch on duration 50 %: 3 min on, 3 min off)
animeo Power Supply DC	Ref. 1 860 093

For wall-mounted and DIN-rail installation.

## Wind Sensor



To measure wind speed in connection with the Outside Sensor Box.

#### / DC **Product benefits**

- Provides reliable and precise wind speed measurement.
- High resilience and durability by precision bearing.

Dimensions	Height 200 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	2 × 0.8 mm <sup>2</sup>
Wind Sensor	Ref. 9 001 608

#### **Product benefits**

- All sensors incl. Outside Sensor Box can be fixed to the Sensor Station mast.
- Up to 8 sun sensors, 2 wind sensors, 1 wind direction sensor, 1 rain sensor, 1 outside

temperature sensor as well as a DCF plug module can be connected to the Outside Sensor Box.

Dimensions (w × h × d)	207 × 255 × 90 mm
Degree of protection	IP 44
Protection class	III
Operating voltage	24 V AC / DC
Operating temperature	- 30° C to +70° C

Outside Sensor Box	Ref. 9 001 606
Featurell, as sumbed in shallships	

For wall-mounted installation.

#### Sensors and accessories

#### Heated Wind Sensor

#### Product benefits

- Rotating parts cannot stick due to ice or snow thanks to integrated thermostat controlled heating.
- Provides reliable and precise wind speed measurement during the winter period.
- High resilience and durability by precision bearing.

Dimensions	Height 190 mm, ø 240 mm
	max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	5×1.5 mm²

Heated Wind Sensor

Ref. 9 140 180

### Outside Temperature Sensor



#### **Product benefits**

- Precise measurement of exterior temperature values which can be displayed in °C or °F in the animeo building control solutions.
- Protective housing to prevent measurements influenced by spiders and birds.
- Delivered with solar radiation sensor protective housing.

Dimensions	Height 150 mm, ø 115 mm
Degree of protection	IP 65
Wiring recommendations	2×0.8 mm

housing.

sion available.

Outside Temperature Sensor

Ref. 9 001 611

Capacitive sensor to measure precipitation with UVopaque and UV stabilized

24 V DC and 230 V AC ver-

To measure exterior tem-

peratures in conjunction

with the Outside Sensor

Box.

### Wind Direction Sensor



#### **Product benefits**

• Minimises the number of individual wind speed sensors installed to improve the façade aesthetics.

To measure wind direction in connection with the Outside Sensor Box.

To measure wind speed

in connection with the

Sensor Box. Recom-

mended for geographical areas with severe winter

Outside

conditions.

- Very good starting value by magnetic contact-free measure principle.
- Winter and offshore usable.
- High resilience and durability by precision bearing.

Dimensions	Height 303 mm, Arrow length 515 mm, max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	5 × 1.5 mm <sup>2</sup>
Wind Direction Sensor	Ref. 9 013 807

#### Rain Sensor Ondeis



#### Product benefits

- Fast, simple and flexible assembly. Wall assembly or installation on standard 50 mm diameter mast.
- 24 V DC power supply provided directly through the Outside Sensor Box (ref. 9001606).
- Delivered with a 2.30 m cable (2 x 0.75 mm<sup>2</sup>).

Dimensions (w × h × d)	115 × 100 × 85 mm
Degree of protection	IP 44
Wiring recommendations	5 x 1.5 mm²
Rain Sensor Ondeis 24 V DC	Ref. 9 016 344
Rain Sensor Ondeis 230 V AC	Ref. 9 016 345

#### Sensors and accessories

#### Sun Sensor



Sun sensor to measure luminosity in connection with the Outside Sensor Box.

The Sensor Station consists of an aluminium mast

with pre-mounted and

pre-wired Outside Sen-

sor Box, 4 sun sensors,

1 wind sensor and 1 out-

side temperature sensor.

equipped with additional

sensors such as sun sen-

brackets included.

tion.

sors and a rain sensor. Wall

• Indication of north direc-

• Position of pre-mounted

and pre-wired sun sensors

is clearly indicated for precise façade orientation.

The Sensor Station can be

#### **Product benefits**

- Small unique design to allow integration directly on the external façade.
- Spring clamp connectors for save and solid wiring to the Outside Sensor Box.

Dimensions (w × h × d)	34×88×47 mm
Degree of protection	IP 44
Wiring recommendations	2×0.8 mm
Angle position	150°
Sun Sensor (without mounting brackets)	Ref. 9 050 100
Mounting brackets for Sun Sensor	Ref. 9 127 888
Kit Sun Sensor incl. brackets	Ref. 9 154 043

#### **Sensor Station**



#### **Product benefits**

- Reduced installation time thanks to pre-mounted construction components and pre-wired individual sensor devices.
- Compass included in delivery for exact positioning of the sensor station.

Dimensions / mast height	3200 mm
Sensor Station	Ref. 9 013 726

#### Sensor Station extended



The Sensor Station extended consists of an aluminum mast with a premounted and pre-wired Outside Sensor Box, 8 sun sensors, 1 wind speed sensor, 1 wind direction sensor, a rain sensor and an outside temperature sensor.

#### Product benefits

- Reduced installation time thanks to pre-mounted construction components and pre-wired individual sensor devices.
- Compass included in delivery for precise positioning of the sensor station.

Sensor Station extended

## Indication of north direction.

 Position of pre-mounted and pre-wired sun sensors is clearly indicated for exact façade orientation.

Dimensions / mast height	3200 mm

#### Ref. 9 013 727

#### **Inside Sensor Box**

1111111	0			2	1			
	Andrée Senar Box (MM 335-040 M) an 300/6 Thi Por A					somfy		
	1	• 11	0 210 G	111 <b>0</b> 40	0 11	0.2%	9.15	<b>9</b> 2%

#### **Product benefits**

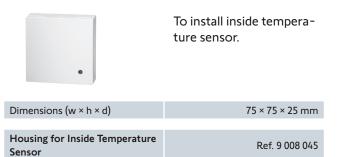
 Window cleaners need no access to the complete user interface (animeo IP Visual Configuration Software). For connection to external push buttons or key switches per zone and up to 2 Inside Temperature Sensors.

 Inside Temperature Sensors enable easy extendability of the system's energy saving options.

Dimensions (w × h × d)	210 × 90 × 61 mm				
Degree of protection	IP 20				
Protection class	П				
Operating voltage	230 V AC				
Operating temperature	0° C to +45° C				
Inside Sensor Box	Ref. 9 001 614				

For DIN-rail installation, 12 SUs.

#### Housing for Inside Temperature Sensor



#### Inside Temperature Sensor



To measure the inside temperature.

Inside Temperature Sensor

Ref. 9 008 044

#### RS485 Network Power Supply



A component designed to power RS485 Somfy Digital Network devices via the RS485 network segment. Required for the integration of the Decoflex Digital Keypad.

#### Product benefits

• Power supply with 2 x RJ45 connectors to facilitate wir-ing (in and out).

Dimensions (w × h × d)	132 × 200 × 72 mm
Degree of protection	IP 20
Operating temperature	0° C to 40° C
Operating voltage	90 V AC - 260 V AC
Output voltage	24 V DC
Output current	1 A
RS485 Network Power Supply	Ref. 9 019 003

#### **BMS Interface**



#### **Product benefits**

- RJ45 connector for false prove connections
- LED indicators providing information about the status of the product, the normal operation or a system error.

115 × 92 × 41 mm
IP 20
24 V DC
0° C to +50° C

BMS Interface

Ref. 1 822 558

Provides communication

between Building Management Systems and Somfy motorized shading systems over BACnet. Compatible with Radio

Technology Systems (RTS), Stand-alone SDN,

BACnet<sup>\*</sup> \*

BACnet IP.

animeo IP

animeo IP/io and animeo

IP/RS485 shade systems.

• Programmable through us-

er-friendly interface.

• Integration capabilities:

Modbus, BACnet MS/TP,

• Auto device discovery for

A component designed to

RS485 Somfy Digital Net-

network segment.

facilitate the connection of

work devices on the RS485

#### RS485 6 x RJ45 Bridging Adapter



#### **Product benefits**

• 6 x RJ45 Bridging Adapter for the wiring of the RS485 Somfy Digital Network devices. Two holes for mounting to a wall or a panel.

Dimensions (w × h × d)	103 × 39,9 × 26,5 mm
RS485 6 x RJ45 Bridging Adapter	Ref. 9 019 004

#### Sensors and accessories

#### RS485 Terminator



A RS485 component designed to terminate RS485 network segment.

#### **Product benefits**

#### • Easy plug in RJ45.

Dimensions (w × h × d)	11,7 × 21,5 × 7,9 mm
Operting temperature	- 30° C to +90° C
RS485 Terminator	Ref. 9 019 005

#### **RS485 Setting tool**



An intuitive tool for blind makers to set the parameters (e.g. end limits) of the motors before or during installation on site.

#### **Product benefits**

• Display with 2 lines (16 characters per line) RJ45

female connector for fast connection.

Dimensions (w × h × d)	117 × 79 × 24 mm
Degree of protection	IP 30
RS485 Setting Tool	Ref. 9 017 142

#### Web remote control

#### Web remote control



#### Product benefits

- Applicable at any time
- Can easily be adapted to the user's environment

Manual user control. Allows control of one blind or a group of blinds via a web page from a user's computer or a smartphone.

#### **Further features**

- Control Up/Down position
- Control slat position
- Display of blind position
- Overrides automatic functions

#### Ref. 9 019 244

### SDN Configuration tool

animeo IP web remote license key



**Product benefits** 

diagnostic.

• This intuitive tool makes

commissioning much eas-

ier, from configuration to

The all-inclusive tool for RS485 systems. The SDN Configuration Tool is a single tool that controls a full façade or building via easy access on site.

#### **Further features**

- Setting motor limits and groops.
- Setting switch configurations
- Updating the motor firmware ...

For additional information, please contact SOMFY.

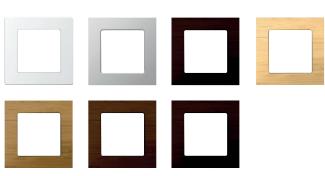
#### Local wall controls

#### Smoove IB Origin



Manual control of several motors over IB bus. Comfortable central control or group operability. Operation via the UP, DOWN and STOP buttons is possible at any time.

Smoove IB Origin	Ref. 1 811 272
For flush-mounted installation.	
Smoove frames	



Smoove frames

• Pure	Ref. 9 015 022
Silver Mat	Ref. 9 015 025
• Black	Ref. 9 015 023
• Light Bamboo - wood finish	Ref. 9 015 027
Ambergris Bamboo - wood finish	Ref. 9 015 026
Cherry - wood finish	Ref. 9 015 236
• Walnut - wood finish	Ref. 9 015 237
Double frame pure	Ref. 9 015 238
<ul> <li>Ambergris Bamboo - wood finish</li> <li>Cherry - wood finish</li> <li>Walnut - wood finish</li> </ul>	Ref. 9 015 026 Ref. 9 015 236 Ref. 9 015 236

#### **Decoflex Digital Keypad**



#### Product benefits

- Configurable button functionality presets.
- Auto-discoverable address and location.
- Interchangeable buttons to match selected preset.
- Single or multi-gang compatible.
- Standard Decora® size.
- Inputs on the back to connect standard switches to

Overall dimensions (without wall plate)	36.51 x 69.85 x 38.10 mm
Degree of protection	IP 20 (mounted)
Protection class	П
Operating temperature	0°C to 45°C
Supply voltage	+ 24 V DC, supplied by Somfy Digi- tal Network Bus
Stand-by current	9 mA @ 24 V DC
Relative humidity	85 %
Material	Face plates & buttons: Lexan 945U
Weight	65 g
Decoflex Digital Keypad	Ref. 1 811 289

For flush-mounted installation.

A wired RS485 user interface for local control of individual motors or groups of motors. Provides push button on front for up to 8 buttons including up, down, stop, eco mode and presets.

fulfill all commands accessible at the front.

#### **Motors**

animeo® compatible

#### Sonesse30 RS485



Somfy quiet digital motorization for small blinds, dedicated to interior applications.



Type of head	Thin
Diameter	28
Degree of protection	IP 30
Protection class	
Operating temperature	0° C to + 60° C
Supply voltage	24 V DC
Speed with load	Adjustable speed from 6 to 28 rpm
Torque	2 Nm
Limit Switch Unit	Digital
Sonesse30 DC RS485 2/28	Ref. 1 000 658

#### LT50 RS485



The proven digital 50 mm diameter for blinds and screens.

Type of head	Star	
Diameter	47	
Degree of protection	IP 44	
Protection class	L	
Operating temperature	- 20° C to + 60° C	
Supply voltage	230, 120, 100 or 220 V AC	
Speed with load	17, 20, 32 or 38 rpm	
Torque	5 - 35 Nm	
Limit Switch Unit	Digital	
LT50 RS485 6/32	1 002 494	
LT50 RS485 15/32	1 002 495	
LT50 RS485 15/38	1 002 427	
LT50 RS485 5/32-38	1 002 283	
LT50 RS485 18/20	1 002 504	

The motors listed above are a selection from the full motor range. For more details, please contact you local Somfy partner

#### Sonesse50 Ultra AC & DC



The quietest and strongest motor on the market.



	AC	DC
Type of head	Star	Square
Diameter	63	63.7
Degree of protection	IP 31	IP20
Protection class	1	III
Operating temperature	0° C to	+ 60° C
Supply voltage	120 V/60 Hz	24 V DC
Speed with load	24 rpm	10 - 25 rpm
Torque	6 Nm	4 Nm
Limit Switch Unit	Elect	ronic
Sonesse ULTRA 50 RS485	Ref. 1 002 566	Ref. 1 134 022

The motors listed above are a selection from the full motor range. For more details, please contact you local Somfy partner

#### Sonesse50 RS485



The digital solution with the new acoustic standard for interior blinds.



Type of head	Star
Diameter	47
Degree of protection	IP 44
Protection class	1
Operating temperature	- 20° C to + 60° C
Supply voltage	230, 120, 100 or 220 V AC
Speed with load	17, 28 or 32 rpm
Torque	5 - 15 Nm
Limit Switch Unit	Digital
Sonesse 50 RS485 6/28	Ref. 1 002 382
Sonesse 50 RS485 6/32	Ref. 1 002 286
Sonesse 50 RS485 10/32	Ref. 1 002 287
Sonesse 50 RS485 5/28-32	Ref. 1 002 384
Sonesse 50 RS485 5/32	Ref. 1 002 505

The motors listed above are a selection from the full motor range. For more details, please contact you local Somfy partner

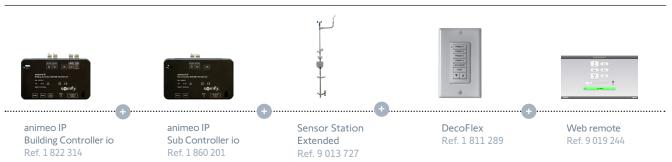
#### **Project example**

#### Functionality required and specified by building owners.

- Alignment of defined groups or blinds.
- Management per window, group or façade for interior screens.
- Local control points through local control or web remote.
- Configuration and maintenance can be monitored and modified remotely. The exact position and status of the interior screens should be visible at any time.



#### **Products installed**



#### **Automatic functions**

- Alignment of blinds when the building is not occupied.
- Sun automatic including sun tracking to prevent overheating of the building and provide glare control and comfort for the occupants.
- Possibility for the local user to override automatic functions at any time unless safety functions are active.

# 

#### Installation details

The animeo IP/RS485 Building Controllers and Sub Controllers are communicate bi-directionally with the motors.

The local controls also communicate with the system.

The connections between motors and local control points are set up through the animeo IP Visual Configuration Software.

The sensor station is directly linked to the animeo IP/RS485 Building Controller. Each window, group or façade is managed separately depending on the weather conditions and the parameters defined.

- 1. Sensor Station Extended
- 2. animeo IP/RS485 Sub Controller
- 3. animeo IP/RS485 Building Controller
- 4. Maintenance through animeo IP Visual Configuration Software





- System topology
- Benefits
- Products

• Project example



Adaptable façade management system compatible with KNX standards. Multifunctional Motor Controller to control all types of blinds and window coverings. Local wired switches and Somfy RTS remote controls can be integrated with to the KNX bus using binary inputs.

#### Building Controller | 1-8 zones Building Controllers | 1-16 zones NEW **KNX BUS** Max 8 × 205 Max 2 × 1 ких Operating software Weather Station KNX Master Control W8 8× 🏴 Timer KNX Weather Station Master Control W2 2× M8/M13 Local control options **Motor Controllers** Push button input KNX RS485 interface Pluggable radio modules Wall mounted for 230 V motors Universal binary input Radio Receiver DIN rail for 230 V motors KNX RTS Receiver Wall mounted for 24 V motors KNX Local radio control or radio control via Wall mounted EnOcean 0 ..... for 24 V motors Receiver -----0 with Encoder 868 MHz technology **KNX RTS Receiver** KNX 433 MHz WM KNX EnOcean Receiver 868 MHz Motor Controller 6 AC KNX

#### System topology



#### **Benefits**

#### Intuitive animeo KNX Operating Software

• Simplified programming of all functions, such as wind direction and sun-tracking.

#### Wind direction measurement

• The blinds move up into the security position only when the façade is affected by wind speed, depending on wind direction. All other areas of the façade remain shaded. In the event of a storm, the blinds on all facades move up.

#### Zone based daylight/shadow tracking

• animeo KNX guarantees optimum lighting management, glare protection, and better viewing comfort. This saves energy spent on artificial lighting and improves the lighting conditions in the room. Shadows on the building façade can be taken into account for a defined zone to maximise the use of natural light.

#### **Energy savings through**

- Solar gains from the sun in winter when occupants are absent.
- Diminished slat-turn angles and reduced cooling requirements in summer.
- Intelligent wind protection controlled using only façades affected by the wind In all other facade zones, the blinds remain in the sun protection position and thus reduce the load for cooling.

#### Functions integrated with other systems

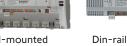
• Other applications such as lighting, heating, cooling, can be integrated.

#### High levels of user comfort

• All blinds can be operated locally. The user is able to override the automatic function.

#### More functions

- Individual sun protection control per façade and thus improved working conditions in every room.
- Sensors can be used in multiple ways.
- All types of blinds and façade elements can be controlled. 19 different blind and façade elements are available.
- Manual override of automatic orders possible at a room level.



Compatible with all installation environments

Wall-mounted Motor Controller

Motor Controller

81





M13



#### **Building Controller**

#### Weather Station KNX



#### **Product benefits**

- Automatic sun protection algorithm (sun tracking) to optimize occupants' comfort.
- Multiple security sensors to protect the installation
- Energy optimisation by measuring the global radiation.
- 4 brightness sensors in 4 orientations and sensors for twilight, wind speed and wind direction, rain, absolute and relative humidity, temperature, global radiation.
- Integrated heating

# Dimensions (Ø/h)130 mm/68 mmDegree of protectionIP 44Protection classIIISupply voltage24 VOperating temperature-30° C to + 60° CWeather Station KNXRef. 1 870 932

## NEW

The Weather Station KNX is a building controller with advanced functionalities to manage 8 façade areas and all types of blinds.

#### **Further features**

- Compact design discrete on façade or roof.
- Integrated KNX bus coupling unit.
- Software logic modules for linking events.

#### Shadow Device



#### Product benefits

- The device is provided with a shadow data base which is derived from a building model created through Somfy service and expertise.
- The calculated shadow zones can easily be assigned to the façade zones defined in the animeo KNX Master Control.
- A maximum of 5 animeo KNX Master Control units can be linked to one KNX Shadow Device providing 80 shadow zones.
- Connects easily through standard RJ45 network connector to the animeo KNX Master Control.

Dimensions (w $\times$ h $\times$ d)	100 × 175 × 50 mm
Degree of protection	IP 20
Protection class	II
Supply voltage	100 - 240 V AC / 50/60 Hz
Operating temperature	-0° C to + 45° C
Shadow Device KNX	Ref. 1 860 252

 $\triangle$  The implemented shadow data base which is derived from a model created through Somfy service and expertise will be invoiced with a separate fee in addition to the Shadow Device. The amount of this fee depends on the size of the building and the Somfy service and expertise. The Somfy service and expertise is responsible for supplying the shadow data base.

The KNX Shadow Device stores the relevant data which is derived from building model provided through Somfy. It is essential in conjunction with the animeo KNX Master Control to realize zone based shadow tracking for buildings.

#### **Further features**

- Intuitive network configuration (IP) through a Somfy web page.
- The shadow data base can simply be uploaded through an USB port.



#### **Building Controller**

#### KNX Master Control W2/W8

The animeo KNX Master

ing controller which ena-

tracking of 16 or more

façade areas for a selec-

tion of 19 different types

The configuration of the

facade areas is realized

with the animeo KNX

Operating Software which

reduces the commissioning

of blinds.

time.

bles a zone-based shadow

Control W2/W8 is a build-



Ref. 1 860 187



Ref. 1 860 193



#### **Product benefits**

- The orientation direction of the façades is taken into account in the building's own precise shadow and in the shadow cast by opposite buildings.
- A maximum of 5 animeo KNX Master Control units can be linked to one KNX shadow device, providing 80 shadow zones.
- Optimisation of energy consumption through automatic protection of over-heating. In cold weather conditions, sunlight is utilised as a natural source of energy.
- The animeo KNX Operating Software can be used independently of the ETS programming tool.
- The Somfy service includes full preparation of the project-related shadow model, as well as expert consultation.
- The weather station (IP 65) is able to define 2× (W2) or 8× (W8) wind speed, wind direction, rain, snow, frost, ice, outside temperature and 8× sun zones.
- The animeo Compact Sensor can ideally be applied for the façade orientations.
- Indoor temperature values can be defined and assigned to zones to gain maximum energy savings.
- Weekly and annual timers are also included and can be integrated freely on the KNX bus.
- Automatic functions can be allocated by the user selectively and can be overriden.
- Monitoring of all weather data for energy optimation.
- All real values can be sent to the KNX bus and viewed at the same time via the Windows graphical user interface on the PC.

• The status of the façades can be called up from memory and the set values, by using a password, can be changed in the menu by the user without prior ETS knowledge.

#### Further features

- All safety functions (wind speed, wind direction, rain, snow, frost, ice, outside temperature) are sent cyclically on the bus.
- Using one wind direction sensor, multiple individual wind speed sensors on the façade can be avoided.
- For each of the 16 façades, individual response and delay times can be configured for all available functions.
- Sun tracking for each zone depending on the sun's elevation and azimuth can be configured in the user software.
- The entire configuration of the sun protection control centre is performed using a user-friendly Windows interface.
- Individual façades can be controlled over the operating user interface.
- For maintenance purposes it is possible to block single façades or the complete building over the user interface.

Dimensions (w × h × d)	180 × 182 × 110 mm
Degree of protection	IP 20
Protection class	III
Operating voltage	24 V AC
Operating temperature	0° C to + 55° C

KNX Master Control W2	Ref. 1 860 187	
For wall-mounted installation. For 2 wind speed sensors		

Dimensions (w × h × d)	180 × 254 × 110 mm
Degree of protection	IP 20
Protection class	
Operating voltage	24 V AC
Operating temperature	0° C to + 55° C

#### KNX Master Control W8

For wall-mounted installation. For 8 wind speed sensors

Ref. 1 860 193

#### **Motor Controller**

#### **KNX 4 AC Motor Controller**



#### **Product benefits**

- Cost savings through use of 8 freely-definable binary inputs.
- Upgradable for local operation by radio.
- User-friendly and intuitive parameter settings in the ETS software.
- Intelligent switching between manual and automatic operation to guarantee excellent user-friendliness and energy savings.
- Extendability: extendable at any time with the animeo RTS radio module. Without any additional wiring investment, 4 motors can be controlled individually or in a group by radio using the Somfy RTS Technology.
- Through the animeo KNX RTS Radio Receiver (Ref. 1 860 191) signals can be linked to the KNX bus.

#### **Further features**

 Position feedback per motor output during movement and when reaching the top and bottom end position. For roller shutters, screens, exterior Venetian blinds and windows. To control 4 × 230 V AC motors.

- Two different safety positions freely definable for each individual motor output.
- Safety position after mains voltage return freely definable.
- Automatic cascading of the outputs with mains voltage return and bus safety function to minimise current peaks.
- The device can be used "out of the box", without requiring programming with the ETS software.
- Mixed systems: in contrast to Motor Controllers based on the Somfy Controlling Technology, with KNX different motor types can be connected to one Motor Controller device (e.g. for Venetian blinds, screens, windows).
- Advanced operating mode: greater user comfort through local disabling of non-security commands (e.g. sun) as soon as local operation is assigned. At a defined time, the system switches back to automatic again.

#### KNX 4 DC Motor Controller



#### Product benefits

- Cost savings through use of 8 freely-definable binary inputs.
- Clear, self-explanatory ETS index cards.
- Configurable slat tilting speed for optimum user ergonomics.

Dimensions (w × h × d)	255 × 180 × 61 mm
Degree of protection	IP 20
Protection class	III
Operating voltage	240 V DC
Operating temperature	0° C to + 45° C
Output voltage	24 V DC
Max. current consumption	max. 2,1 A per output

#### KNX 4 DC Motor Controller WM

For wall-mounted installation.

Ref. 1 870 452

For interior blinds, interior

Venetian blinds and win-

motors. External 24 V DC power supply required (see

• Output protected through

To control 4 × 24 V DC

dows.

accessories).

**Further features** 

current detection.

Dimensions ( $w \times h \times d$ ) 255 × 180 × 61 mm IP 20 Degree of protection Protection class Ш 230 V AC Operating voltage Operating temperature 0° C to + 45° C Output voltage 230 V AC Max. current consumption max. 3.15 A per output KNX 4 AC Motor Controller WM Ref. 1 860 114 For wall-mounted installation. Dimensions ( $w \times h \times d$ ) 210 x 90 × 61 mm KNX 4 AC Motor Controller DRM Ref. 1 860 116 For DIN-rail installation.



#### **Motor Controller**

#### **Motor Controller 6 AC KNX**



#### **Product benefits**

- Modern push-in CAGE CLAMP<sup>®</sup> connectors for any wire type (flexible or rigid cable) for any cable connection on the device.
- 6 individual motor outputs (motors neutral and safety wires (earth) connected on the electrical cabinet).
- Push-button on the device to validate the motor wiring direction.

Motor Controller for electrical cabinet (DRM). Compatible with exterior Venetian blinds, screens, roller shutters, windows openers and with all animeo KNX devices.

#### **Further features**

- Status feedback through LEDs.
- The shadow data base can simply be uploaded through an USB port.
- Access for software updates in case of functional evolution.

Dimensions (w × h × d)	108 x 90 x 60 mm
Degree of protection	IP 20
Protection class	II
Supply voltage	100 - 230 V AC / 50/60 Hz
Operating temperature	-5° C to + 50° C
Motor Controller 6 AC KNX	Ref. 1 870 398



#### KNX/RS485 Motor Controller

#### KNX RS485 Motor Controller WM





#### **Product benefits**

- Flexible installation: suspended ceiling/raised floor, under-window or wall-mounted wiring channels.
- Quick installation and connection of the motor controller through:
- > Plug and play solution.
- > Cable tension relief points to tighten cables to the housing of the product

KNX RS485 Motor Controller enables the controlling of up to 18 motors. The motors can be controlled either individually or by groups.

#### **Further features**

- With the Somfy SDN configuration software the motor settings can be done before configuring via ETS software.
- Perfect alignment of the blind thanks to the increment encoder technology of the RS485 motors.
- The exact position of the blind during move and when reaching the upper and lower end limits can be monitored.
- Using dedicated Byte telegram both for switches and/ or automatic commands, the blind can be moved to numerous intermediate positions.

RS485 motors can be connected to the RS485 Bridging Adapter, ref. 9019004. Different motor types can be used.

Dimensions (w $\times$ h $\times$ d)	90 × 180 × 45 mm
Degree of protection	IP 20
Protection class	III
Operating voltage	24 V DC
Operating temperature	- 5° C to + 50° C
Nominal current consumption KNX bus	<= 12.5 mA DC
KNX RS485 Motor Controller WM	Ref. 1 860 286

For wall-mounted installation.

#### RS485 6 x RJ45 Bridging Adapter



A component designed to facilitate the connection of RS485 Somfy Digital Network devices on the RS485 network segment.

#### **Product benefits**

• 6 x RJ45 Bridging Adapter for the wiring of the RS485 Somfy Digital Network devices. Two holes for mounting to a wall or a panel.

Dimensions (w × h × d)	103 × 39,9 × 26,5 mm
RS485 6 x RJ45 Bridging Adapter	Ref. 9 019 004

#### DIN-rail adapter



For installation on 35 mm DIN-rail to mount circuit board versions CD 1 × 1 P6, CD 2 × 1 P6, CD 1 × 4 P6, animeo 1 AC/2 AC Motor Controller PCB.

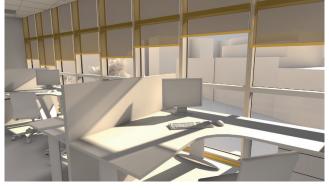
Dimensions (w × h × d)	70 × 105 × 23 mm
DIN-rail adapter	Ref. 9 008 049

For 35 mm DIN-rail, colour; black, 4 SUs

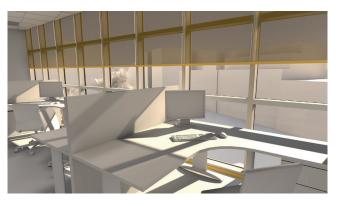


#### KNX/RS485 Motor Controller

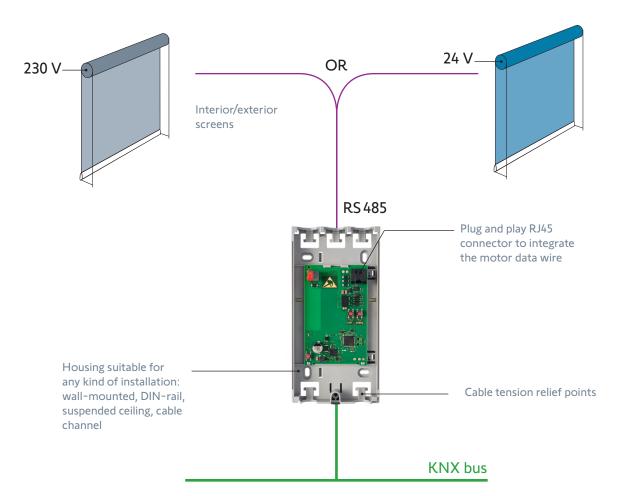
- Perfect alignment
- Numerous intermediate positions
- Precise motor positioning feedback
- Precise façade design



With standard motor



With the digital RS485 motor



# animeo KNX<sup>•</sup>

#### Accessories

#### **RTS Radio Receiver**



Radio for retrofitting KNX 4 AC, 4 DC or 4 DC/ DC-E Motor Controllers. Directly pluggable into the Motor Controller.

Dimensions (w $\times$ h $\times$ d)	52 × 92 × 27 mm
Protection class	II
Supply voltage	5 V DC, from animeo KNX Mo- tor Controller
Operating temperature	0° C to + 45° C
Radio frequency	433 MHz
Radio range	20 m through 2 walls
Degree of protection	IP 20
KNX RTS Receiver	Ref. 1 860 191

Dimensions (w × h × d)	52 × 92 × 27 mm
Protection class	II
Supply voltage	5 V DC, from animeo KNX Mo- tor Controller
Operating temperature	0° C to + 45° C
Radio frequency	433 MHz
Radio range	20 m through 2 walls
Degree of protection	IP 20
KNX RTS Receiver	Ref. 1 860 105

#### **KNX RTS Receiver**



Radio receiver for forwarding the Somfy RTS radio signals to the KNX bus.

#### Product benefits

- Economical radio operation for KNX.
- No additional bus subscriber (physical address).
- Pluggable into existing animeo KNX Motor Controller.
- Selection of usual applications such as Venetian blinds, light switch/dimming, scene call-up.
- Comfortable operation using scroll wheel with Modulis handheld sender – ideal for Venetian blinds and dimming lights.

#### **Further features**

- Up to 5 universal radio channels.
- Application per radio channel freely defineable (Venetian blinds, switching, turning Venetian blinds slowly).
- Up to 4 Somfy RTS sender addresses per radio channel can be learned.

#### **EnOcean Receiver 868 MHz**



An EnOcean radio receiver to interwork with En-Ocean switches PTM200, PTM210. Enables shading systems in buildings to be linked up with the battery-free, wireless EnOcean radio technology. Compatible with all animeo KNX Motor Controllers.

#### Product benefits

- Refurbishment is especially economical since it can be performed in very little time and without installation work.
- Can be inserted into animeo KNX Motor Controllers at any time.
- The receiver can be combined with the battery-free, wireless EnOcean radio switch module PTM200, PTM 210.

#### **Further features**

- Simple and intuitive learning process of EnOcean switch module PTM200, PTM210 to the animeo EnOcean Receiver.
- Individual and group control of motor outputs freely definable.
- Priority management between local and central commands directly on the device or through different operation modes.



#### KNX EnOcean Receiver 868 MHz



#### **Product benefits**

- Economic radio operation for KNX.
- No additional bus subscriber (physical address).
- Pluggable in existing animeo KNX Motor Controller.
- Selection of usual applications such as Venetian blinds, light switch/dimming, scene call-up.
- The receiver can be combined with the battery-free, wireless EnOcean radio switch module PTM 200, PTM 210.

An EnOcean radio receiver for forwarding the EnOcean radio signals on the KNX bus. Available for all animeo KNX Motor Controllers.

#### **Further features**

- Up to 5 universal radio channels.
- Application per radio channel freely definable (Venetian blinds, switching, turning Venetian blinds slowly).
- Up to 4 remotes per radio channel can be learned-in.



**Product benefits** 

• Enables control of all types

of solar shadings and oth-

er applications (switch

functions, lighting and

same remote control.

• Up to 10 universal radio

plication per radio

able.

inputs with max. 5 trans-

mitters per input. The ap-

in input is freely define-

dimming, HVAC) via the

KNX RTS Receiver 433 MHz WM

Universal radio receiver to forward orders from Somfy RTS transmitters to the KNX bus for the integration with any application. The receiver enables the controlling of shades, any switch function, lighting and dimming or HVAC. It is simply powered over the KNX bus network.

#### **Further features**

- Suitable for visible or non visible wall-mounting environments and on flush-mounted boxes.
- Somfy RTS transmitters can easily be trained in via a display independent of the ETS software.
- The device is powered over the KNX bus network.

Dimensions (w × h × d)	60 × 16 × 46 mm
Protection class	II
Supply voltage	5 V DC, from animeo KNX+ Motor Controller
Operating temperature	0° C to + 45° C
Radio frequency	868 MHz
Radio range	20 m through 2 walls
Degree of protection	IP 20
EnOcean Receiver 868 MHz	Ref. 1 860 229

Dimensions (w × h × d)	81 × 81 × 25 mm
Protection class	П
Supply voltage from KNX bus	KNX voltage 2132 V DC, SELV
Operating temperature	-5° C to + 50° C
Radio frequency	433 MHz
Radio range	20 m through 2 walls
Degree of protection	IP 20
KNX RTS Receiver 433 MHz WM	Ref. 1 860 292

#### **Accessories**

Weather Station M8/M13	
	To collect the external conditions in different orientations. For façade and roof mounting
Product benefits	Further features
M8	
• 8 sensors to collect the ex- ternal conditions in 4 differ- ent orientations.	<ul> <li>4 Lux sensors for glare control and natural light management.</li> <li>Outside temperature sensor for energy optimisation.</li> <li>Sensor for wind speed and rain to protect external shades or blinds.</li> </ul>
M13	
<ul> <li>13 sensors to collect the external conditions in 8 dif- ferent orientations.</li> </ul>	<ul> <li>8 Lux sensors for glare control and natural light management.</li> <li>Outside temperature sensor for energy optimisation.</li> <li>Sensor for wind speed, wind direction and rain to protect external shades or blinds.</li> </ul>
Dimensions (h, Ø)	105 mm, 103 mm
Degree of protection	IP44 in working position
Protection class	III
Operating voltage	24 V DC + 10 %/- 30 %
<b>0</b>	22.22

#### Weather Station M8 Ref. 1 860 306 Weather Station M13 Ref. 1 860 307

#### Bracket for Weather Station M8/M13



Operating temperature

For mounting on an already existing mast with a diameter of 50 mm.

Dimensions ( $w \times h \times d$ )	180 x 80 x 80 mmm
Due shot fou Wasth ou Station	Def 1 000 220
Bracket for Weather Station	Ref. 1 860 320

#### Mounting accessories for Weather station M8/M13



Metallic Mast (1 m) for roof mounting with Somfy accessories.

Dimensions (h, Ø)	1 m, 50 mm
Metallic Mast (Minimum order quantity = 3)	Ref. 1 860 335
Dimensions (w x d x h)	200 x 90 x 30 mm
Wall Mount Bracket	Ref. 1 860 336
Dimensions (h, Ø)	90 mm, 25/50 mm
Mast Adaptor for Weather Station	Ref. 1 860 321
Kit Mast with 25 mm adaptor (3 x Mast, 1 x Brackets, 1 x Adaptor)	Ref. 9 027 035

#### Lightning protection



-30 °C...+70 °C

To protect the controls from lightning. Used in conjunction with the Outside Sensor Box or Compact Sensor.

24V Lightning Protection	Ref. 9 025 707
Bus Lightning Protection	Ref. 9 025 706



#### Weather Station KNX



#### Product benefits

- Automatic sun protection algorithm (sun tracking) to optimize occupants' comfort
- Multiple security sensors to protect the installation
- Energy optimisation by measuring the global radiation.
- 4 brightness sensors in 4 orientations and sensors for twilight, wind speed and wind direction, rain, abso-

NEW

The Weather Station KNX is a building controller with advanced functionalities to manage 8 façade areas and all types of blinds.

- lute and relative humidity, temperature, global radiation.
- Integrated heating

#### **Further features**

- Compact design discrete on façade or roof.
- Integrated KNX bus coupling unit.
- Software logic modules for linking events.

Dimensions (Ø/h)	130 mm/68 mm
Degree of protection	IP 44
Protection class	
Supply voltage	24 V
Operating temperature	-30° C to + 60° C
Weather Station KNX	Ref. 1 870 932

#### animeo Power Supply DC

Prove na 50 5 to	To supply the Outside Sensor Box (with heated sensors), the animeo KNX Master Control W2/W8.
Dimensions ( $w \times h \times d$ )	130 × 180 × 61 mm
Degree of protection	IP 20
Protection class	II
Operating voltage	230 V AC
Output current	2.5 A (switch on duration 100%) 4.5 A (switch on duration 50%: 3 min. on, 3 min. off)
animeo Power Supply DC	Ref. 1 860 093

For wall-mounted and DIN-rail installation.

#### **Outside Sensor Box**



Product benefits

laid to the outside.

• Convenient lightning pro-

tection – only two cables

(power supply 24 V AC/DC

and data cable) need to be

The Outside Sensor Box is the interface between the weather station and the animeo KNX Master Control W2/W8. All measurement values are evaluated here and sent to the animeo KNX Master Control W2/W8. It requires an external 24 V AC/DC power supply.

#### Further features

- All sensors incl. Outside Sensor Box can be fixed to the Sensor Station mast.
- Up to 8 sun sensors, 2 wind sensors, 1 wind direction sensor, 1 rain sensor, 1 outside temperature sensor.

Ref. 9 001 606

Dimensions (w × h × d)	235 × 207 × 90 mm
Degree of protection	IP 44
Protection class	III
Operating voltage	24 V AC/DC
Operating temperature	-30° C to + 70° C

For wall-mounted installation.

**Outside Sensor Box** 





Wind Sensor

To measure wind speed in connection with the Out-side Sensor Box.

#### **Product benefits**

- Provides reliable and precise wind speed measurement.
- High resilience and durability by precision bearing.

Dimensions	Height 200 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	2 × 0.8 mm <sup>2</sup>
Wind Sensor	Ref. 9 001 608

#### **Heated Wind Sensor**



To measure wind speed in connection with the Out-side

Sensor Box. Recommended for geographical areas with strong winter periods.

#### **Product benefits**

- Rotating parts cannot stick due to ice or snow thanks to integrated thermostat controlled heating.
- Provides reliable and precise wind speed measurement during the winter period.
- High resilience and durability by precision bearing.

Dimensions	Height 190 mm, ø 240 mm max. ø-mast 48 mm
Degree of protection	IP 54
Wiring recommendations	5 × 1.5 mm²
Heated Wind Sensor	Ref. 9 140 180

#### Wind Direction Sensor



To measure wind direction in connection with the Outside Sensor Box.

#### **Product benefits**

- Minimises the number of individual wind speed sensors installed to improve the façade aesthetics.
- Very good starting value by magnetic contact-free measure principle.

<ul> <li>Winter and offshore usable</li> </ul>	e
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• High resilience and durability by precision bearing.

Dimensions	Height 303 mm, Arrow length 515 mm, max. ø-mast: 48 mm
Degree of protection	IP 54
Wiring recommendations	5 × 1.5 mm²

Wind Direction Sensor

Ref. 9 013 807

#### **Outside Temperature Sensor**



To measure exterior temperatures in conjunction with the Outside Sensor Box.

#### **Further features**

- Precise measurement of exterior temperature values which can be displayed in °C or °F in the KNX Master Control W2/W8 solution.
- Protective housing to prevent measurements influenced by spiders and birds
- Delivered with solar radiation sensor protective housing.

Dimensions	Height 150 mm, ø 115 mm
Degree of protection	IP 65
Wiring recommendations	2 × 0.8 mm
Outside Temperature Sensor	Ref. 9 001 611



#### **Rain Sensor Ondeis**



Capacitive sensor to measure precipitation with UV-opaque and UV stabilized housing. 24 V DC and 230 V AC version available.

#### Product benefits

- Fast, simple and flexible assembly. Wall assembly or installation on standard 50 mm diameter mast.
- 24 V DC power supply provided directly through the Outside Sensor Box (ref. 9001606).
- Delivered with a 2.30 m cable (2 x 0.75 mm<sup>2</sup>).

115 × 100 × 85 mm
IP 44
3 × 1.5 mm
Ref. 9 016 344
Ref. 9 016 345

#### Sun Sensor



Sun sensor to measure luminosity in connection with the Outside Sensor Box.

#### **Product benefits**

- Small unique design to allow integration directly on the external façade.
- Spring clamp connectors for save and solid wiring to the Outside Sensor Box.

Dimensions (w × h × d)	34×88×47 mm
Degree of protection	IP 44
Wiring recommendations	2×0.8 mm
Angle position	150°
Sun Sensor (without mounting brackets)	Ref. 9 050 100
Mounting brackets for Sun Sensor	Ref. 9 127 888
Kit Sun Sensor incl. brackets	Ref. 9 154 043

#### **Sensor Station**



**Product benefits** 

• Reduced installation time

thanks to pre-mounted

construction components

and pre-wired individual

#### The Sensor Station consists of an aluminium mast with pre-mounted and pre-wired Outside Sensor Box, 4 sun sensors, 1 wind sensor and 1 outside temperature sensor. The Sensor Station can be equipped with additional sensors such as sun sensors and a rain sensor. Wall brackets included.

- Indication of north direction.
- Position of pre-mounted and pre-wired sun sensors is clearly indicated for precise façade orientation.
- sensor devices.
  Compass included in delivery for exact positioning of the sensor station.

#### Dimensions/mast height

#### Sensor Station

Ref. 9 013 726

3200 mm

#### Sensor Station extended



The Sensor Station extended consists of an aluminum mast with a premounted and pre-wired Outside Sensor Box, 8 sun sensors, 1 wind speed sensor, 1 wind direction sensor, a rain sensor and an outside temperature sensor.

#### Product benefits

- Reduced installation time thanks to pre-mounted construction components and pre-wired individual sensor devices.
- Compass included in delivery for exact positioning of the sensor station.

Dimensions / mast height

Sensor Station extended

#### • Indication of north direction.

 Position of pre-mounted and pre-wired sun sensors is clearly indicated for exact façade orientation.

3200 mm
Ref. 9 013 727

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#### System accessories

#### KNX IP Interface



The KNX/IP-Interface is used to connect a PC to the KNX network. The connection is made over the LAN (IP). The IP address can be obtained by a DHCP server or by manual configuration (ETS) respectively.

Dimensions ( $w \times h \times d$ )	18 × 90 × 56 mm (1 SU)
Degree of protection	IP 20
Protection class	III
Operating temperature	- 5° C to + 45° C
Supply voltage	External supply 12 - 24 V AC / 12 - 30 V DC Alternative: power - over Ethernet
Power consumption	< 800 mW
KNX IP Interface	Ref. 9 018 246

#### **RS485** Terminator



A RS485 component designed to terminate RS485 network segment.

#### **Product benefits**

• Easy plug in RJ45.

Dimensions (w × h × d)	11,7 × 21,5 × 7,9 mm
Operting temperature	- 30° C to +90° C
RS485 Terminator	Ref. 9 019 005



#### Local controls

#### Smoove IB Origin



Manual control of several motors over IB bus. Comfortable central control or group operability. Operation via the UP, DOWN and STOP buttons is possible at any time.

Smoove IB Origin	Ref. 1 811 272
For flush-mounted installation	).

#### Smoove 1 RTS



1 channel on-wall radio transmitter to communicate with the RTS radio module.

Dimensions (w × h × d)	50 × 50 × 10 mm
Degree of protection	IP 30
Protection class	II
Operating voltage	3 V (battery model CR 2430)
Operating temperature	0° C to + 60° C
Operational conditions	dry living rooms
Radio frequency	433.42 MHz

#### Smoove 1 RTS

• Pure shine	Ref. 1 810 873
Black shine	Ref. 1 810 902
Silver shine	Ref. 1 810 904
Adapter disc for other switching programs	Ref. 9 016 911

For wall-mounted installation.

#### Smoove 1 RTS Origin

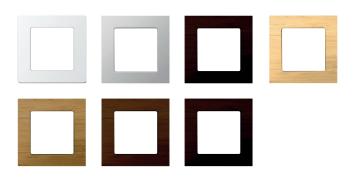


Manual control of several motors over RTS. Comfortable central control or group operability. Operation via the big UP, DOWN and STOP buttons is possible at any time.

Smoove 1 RTS Origin

Ref. 1 811 218

#### **Smoove frames**



Smoove frames

• Pure	Ref. 9 015 022
Silver Mat	Ref. 9 015 025
• Black	Ref. 9 015 023
• Light Bamboo - wood finish	Ref. 9 015 027
Ambergris Bamboo - wood finish	Ref. 9 015 026
Cherry - wood finish	Ref. 9 015 236
• Walnut - wood finish	Ref. 9 015 237
Double frame pure	Ref. 9 015 238

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#### **Project example**

#### Functionality required and specified by the building owner.

- Unlimited number of zones to control exterior Venetian blinds.
- Interaction with lighting and HVAC system.
- Zone based shadow tracking.
- Control of blinds and light through Somfy RTS.



#### **Products installed**



**KNX** Master

Ref. 1 860 187

Control

••••••



KNX 4 AC Motor Controller Ref. 1 860 114

Weather Station M8/M13 Ref. 1 860 306 Ref. 1 860 307

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Links to sensors

Bus line KNX

Power supply

Smoove Origin IB

.....

**KNX-RTS Receiver** Ref. 1 860 191

Telis 4 Modulis Ref. 1 810 664

Ref. 1 811 272



#### **Automatic functions**

- Wind safety, as well as wind direction dependent.
- Sun automatic with sun tracking including zone based shadow tracking to provide a maximum of user confort and energy saving.
- Movement detectors are used to switch between the energy saving mode and comfort functions. The movement detectors are integrated into the bus system using the universal binary inputs of the Motor Controller.

# 1 3 2

#### Installation details

All the Motor Controllers are connected to the same KNX network via the animeo KNX Master Control.

One KNX Building Controller enables to creation of up to 16 zones. Additional zones can be created by adding more KNX Master Controls.

The Sensor Station is directly linked to the KNX Building Controller and each zone is separately managed depending on the weather and other parameters to be defined.

1. Sensor Station/ Weather Station M8/M13

- 2. animeo KNX Master Control
- 3. animeo KNX Motor Controller

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