# Intelligent CONTROLS for buildings | Product guide 2018









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## Product guide 2018

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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.















Window

openers



External Venetian blinds

External vertical screens

Projection eens screens

Horizontal blinds

Interior venetian blinds

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 Building Controller

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.





#### 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 Te Control

Telis 1 Modulis Smoove IB RTS pure

### 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.

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

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

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

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Zone Timer in animeo IB+ and KNX software

#### 3. The definition of zones

#### A zone can be a:



occupied during the week-end.

occupants' needs.

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

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 vi	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 LON
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 pre- cise geolocalisation.	IB+ IP KNX LON
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 function is based on a precise building model in- cluding surrounding buildings that could project shadow onto the façades.	KNX LON
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 LON

Functions for increased 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 ap- plies 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 LON
Maintain heat		Blinds are automatically down to avoid heat loss and reduce heating costs.		

Maintenance fun Protection of sol	ictions: ar 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 KNX	
Exterior shades protection	Wind, frost, ice or rain are detected at building or zone level. All blinds are up and occupants lo- cal commands are disabled to ensure blinds are protected.	Wind sensors, ice/ rain/frost sensor detection: the mes- sage is sent by the Building Controller.	LON	
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 fu Advanced functi	nctions: ions/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.	<ul> <li>Displayed on com- puter, using specific software (BMS).</li> </ul>	IP KNX LON	
Remote access	Remote access to blinds for facility managers.	Via the OPC server.	IB+ KNX LON	
			animeo	
Functions to en	hance the façade's appearance or indoor space	How does it work?	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: displayed on com- puter using specific software (BMS).	IB+ IP KNX LON	
Communication on façades	Showing messages, words on the façade.	Via the OPC server.	KNX LON	
Functions to enhance user comfort animeo Forctions to enhance user comfort animeo				

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



#### 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.

animeo®

COMPATIBLE



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 consumption	0.5-3.15 A
Installation comments	-
Applications	For roller shutters, screens, Venetian blinds, awnings, large slats, windows and Fabric Tension Systems (FTS).



Electrical connection	L, N, PE + extra cable with RS 485
Torque	5-35 Nm
Diameter	50 mm
Voltage	230 V AC
Current consumption	0.75-1.2 A
Installation comments	Specific control!
Applications	For roller shutters and screens in situations where exact positioning and consistent high precision is required. Applicable for blinds greater than three meters in height.
	Somfy Digital



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



### DC motors with typical applications

#### DC Motor (DC)

For interior Venetian blinds: motors with smaller dimensions and lower torque.

For windows: motors operated with safety low voltage.

#### DC motor with increment encoder (DC-E)

The increment encoder in the motor measures the exact position and sends the position to the controller. This is useful, especially in the DC area of interior Venetian blinds as the speed of the motor is strongly dependent on load and for this reason is not constant.

## is not constant.



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 consumption; shading systems	0.3-1 A
Current consumption; window motors	0.3-2.5 A
Installation comments	Maximum recommended distance between motor and controller: 20 m (voltage loss).
Applications	For interior shading or for window motors.

Electrical connection	+, -, cable for increment encoder
Torque	0.5-1.2 Nm
Diameter	25 mm
Voltage	24 V DC
Current consumption	0.3-1 A
Installation comments	Specific control! Max. distance between motor and controller: 20 m.
Applications	For interior Venetian blinds.

### DC motor with integrated increment encoder (DC-E)

The increment encoder in the motor measures the exact position and sends a message to the controller. Applied in all situations where precise positioning is required. Adjustable running speed guarantees high user comfort.



Electrical connection	+, - extra cable with RS 485
Torque	2 Nm
Diameter	30 mm
Voltage	24 V DC
Current consumption	0.5-1.5 A
Installation comments	Specific control!
Applications	For interior screens in situations where exact positioning and consistent high precision is required. Applicable for blinds greater than three meters in height. Somfy Digital Network

### 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 solution for new buildings.
KNX°	<b>KNX</b> World standard for home and building control which is suitable for use in any application domain.
Lon	<b>LON</b> Networking platform specifically created to address various functions within buildings (blind management, lighting, HVAC).
Wireless technologies	
R T S Radio 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 ic-homecontrol® motors compatible	<b>io homecontrol</b> Highly secure wireless technology included in a wide range of home and building equipment, making it fully compatible, reliable and secure.

### Digital technologies



#### **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 LON installation

**AC** Motor Controller and Smoove IB for local instruction



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### Typical animeo IP/io and IP/RS485 installation

Somfy RS485 devices connected to one data communication line





#### 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 Sinne	Kel. 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

#### Telis 1 RTS



1 channel handheld radio transmitter, control of one or several motors per radio.

Telis 1 RTS = 1 channel: single or group operation possible.

#### Telis 1 RTS

• Pure	Ref. 1 810 630
• Silver	Ref. 1 810 637
• Lounge	Ref. 1 810 649
• Patio	Ref. 1 810 642

Scope of delivery: handheld transmitter including wall brackets and battery.

#### Telis 1 Modulis RTS



1 channel handheld radio transmitter, manual control of one or several Venetian blind motors per radio. Comfortable manual alignment of the slats using the scroll wheel.

#### Telis 1 Modulis RTS

• Pure	Ref. 1 810 974
• Silver	Ref. 1 810 975
• Lounge	Ref. 1 810 976

Scope of delivery: handheld transmitter including wall brackets and battery.

#### Telis 4 RTS



5 channel handheld radio transmitter, manual control of one or several motors per radio.

Telis 4 RTS = 5 channels: single or group operation possible.

#### Telis 4 RTS

• Pure	Ref. 1 810 631
• Silver	Ref. 1 810 638
• Lounge	Ref. 1 810 651
• Patio	Ref. 1 810 644

Scope of delivery: handheld transmitter including wall brackets and battery.

### Telis 4 Modulis RTS



5 channel handheld radio transmitter, manual control of one or several Venetian blind motors per radio.

Comfortable manual alignment of the slats using the scroll wheel.

Telis 4 Modulis RTS = 5 channels: single or group operation possible.

#### Telis 4 Modulis RTS

• Pure	Ref. 1 810 765
• Silver	Ref. 1 810 663
• Lounge	Ref. 1 810 664

Scope of delivery: handheld transmitter including wall brackets and battery.

### Selection guide for sensors associated with animeo solutions

		Wi	nd			Temperature			
	Ref. 9 013 807	Ref. 9 001 608	Ref. 9 140 180	Ref. 9101479	Ref. 9 001 611	Ref. 9 008 044	Ref. 9 709 808		
	Wind direction sensor	Wind sensor	Heated wind sensor	Eolis wind sensor	Outside temperature sensor	Inside temperature sensor	Room thermostat		
	0	•†•	all a	<u> </u>		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> (4)			
animeo <b>IP/io</b>	<b>OK</b> (2)	<b>OK</b> (2)	<b>OK</b> (2)		<b>OK</b> (2)	<b>OK</b> (4)			
animeo IP/RS485	<b>OK</b> (2)	<b>OK</b> (2)	<b>OK</b> (2)		<b>OK</b> (2)	<b>OK</b> (4)			
animeo <b>KNX</b>	<b>OK</b> (7)	<b>OK</b> (9)	<b>OK</b> (9)		<b>OK</b> (7)				
animeo <b>LON</b>	<b>OK</b> (3)	<b>OK</b> (3)	<b>OK</b> (3)		<b>OK</b> (3)		<b>OK</b> (10)		

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

(2) Directly connected to the Outside sensor box.

(3) Directly connected to the Outside sensor box and the Outside sensor box has to be connected to the LON sensor interface.

(4) Directly connected to the Inside sensor box.

(5) The Sensor station is directly connected to the Building Controllers.

Sı	ın	Ra	in	Com	Combined sensors/Sensor Station				
Ref. 9 154 043	Ref. 9 154 217	Ref. 9 016 344	Ref. 9016345	Ref. 9154080	Ref. 9 015 047	Ref. 9 013 726	Ref. 9 013 727	Ref. 9 001 612	
Kit sun sensor and bracket	Soliris sun sensor (without bracket)	Rain sensor Ondeis 24 V DC	Rain sensor Ondeis 230 V	Sun and wind combined sensor Soliris IB	Compact Sensor (wind, sun, rain, temperature, clock)	Sensor station	Sensor station extended	DCF receiver	
				<b>*</b> *	<i>.</i>	and the first	,		
	<b>OK</b> (1)		<b>OK</b> (1)	<b>OK</b> (1)					
<b>OK</b> (2)		<b>OK</b> (2)			ОК	<b>OK</b> (5)	<b>OK</b> (5)	ОК	
<b>OK</b> (2)		<b>OK</b> (2)			ОК	<b>OK</b> (5)	<b>OK</b> (5)		
<b>OK</b> (2)		<b>OK</b> (2)			ОК	<b>OK</b> (5)	<b>OK</b> (5)		
<b>OK</b> (7)		<b>OK</b> (7)			ОК	<b>OK</b> (8)	<b>OK</b> (8)		
<b>OK</b> (3)		<b>OK</b> (3)				<b>OK</b> (6)	<b>OK</b> (6)	ОК	

(6) The Sensor station is directly connected to the LON Sensor interface.

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

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

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

(10) Via binary input on Motor Controller KNX and LON.

### **Comparative table of functions**



		Solo	IB +	IP/io	IP/RS485	<b>KNX</b> <sup>®</sup>	LON
BMS interoperability (OPC server	r)	-	✓	✓	✓	✓	✓
Integrated data logging (system	ı status)	-	✓	✓	<b>~</b>	✓	-
Integrated building timer 🔗		✓	✓	✓	✓	✓	✓
Integrated zone timer 💮		-	✓	<b>~</b>	✓	✓	~
Integrated yearly timer 📀		-	-	✓	<b>~</b>	✓	✓
Zone control switch/key switch	0	✓	✓	✓	<b>~</b>	✓	✓
System configuration	PC software	-	✓	✓	<b>~</b>	✓	✓
	Via display	✓	-	-	-	-	-
System operation	PC software (BMS)	-	<b>~</b>	<b>~</b>	<b>~</b>	~	~
	Via display	✓	-	-	-	<b>~</b>	~

#### User comfort/Energy saving functions

Wired local control	✓	✓	-	✓	✓	✓
Radio local control (Somfy RTS/io)	✓	✓	✓	-	✓	✓
Web remote control			✓	~	✓	✓
Radio link to Bus network (Somfy RTS)	-	-	-	-	✓	~
Light control through Somfy RTS	-	-	-	-	✓	✓
Inside temperature	-	✓	✓	✓	~	✓
Sun 🔆	✓	✓	✓	~	✓	~
Sun tracking	-	✓	✓	~	✓	✓
Zone based shadow tracking	-	-	-	-	✓	-
Window based shadow tracking	-	-	-	-	-	✓
Auto/Manual priority	-	✓	✓	~	✓	✓
Auto/Manual priority via presence detector	-	✓	-	-	✓	✓
Link to HVAC system	-	✓	✓	~	~	~
DALI connection/Light scenes	-	-	-	-	~	~

#### **Security Functions**

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



- System topology
- Benefits
- Products

• Project example

The easy-to-use system to control 1 or 2 zones and up to 800 motors.

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.



- Effective management of solar gains and light levels to improve building energy performance and occupants 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 × 148 × 48 mm
Degree of protection	IP 20
Protection class	II
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	Ш
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	II
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.

Ref. 9 001 608

#### **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 65
Wiring recommendations	2 × 0.8 mm <sup>2</sup>

Wind Sensor

### 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 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



To install an Inside Temperature Sensor.

Dimensions (w × h × d)	75 × 75 × 25 mm
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 × h × 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  $(2 \times 0.75 \text{ mm}^2)$ .

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

#### **Room Thermostat**



To measure inside temperature.

Dimensions (w × h × d)	75 × 75 × 25 mm
Degree of protection	IP 20
Protection class	III
Wiring recommendations	2 × 2 × 0.8 mm
Room Thermostat	Ref 9 709 808

#### 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

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 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 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

#### Local controls



1 channel handheld radio transmitter, control of one or several motors by radio.

Telis 1 RTS = 1 channel: single or group operation possible.

#### Telis 1 RTS

• Pure	Ref. 1 810 630
• Silver	Ref. 1 810 637
• Lounge	Ref. 1 810 649
• Patio	Ref. 1 810 642

Scope of delivery: handheld transmitter including wall brackets and battery.

#### Telis 4 RTS



5 channel handheld radio transmitter, manual control of one or several motors by radio.

Telis 4 RTS = 5 channels: single or group operation possible.

#### Telis 4 RTS

• Pure	Ref. 1 810 631
• Silver	Ref. 1 810 638
• Lounge	Ref. 1 810 651
• Patio	Ref. 1 810 644

Scope of delivery: handheld transmitter including wall brackets and battery.

#### Telis 1 Modulis RTS



1 channel handheld radio transmitter, manual control of one or several Venetian blind motors by radio. Comfortable manual alignment of the slats using the scroll wheel.

#### Telis 1 Modulis RTS

• Pure	Ref. 1 810 974
• Silver	Ref. 1 810 975
• Lounge	Ref. 1 810 976

Scope of delivery: handheld transmitter including wall brackets and battery.

#### Telis 4 Modulis RTS



5 channel handheld radio transmitter, manual control of one or several Venetian blind motors by radio.

Comfortable manual alignment of the slats using the scroll wheel.

Telis 4 Modulis RTS = 5 channels: single or group operation possible.

#### Telis 4 Modulis RTS

• Pure	Ref. 1 810 765
• Silver	Ref. 1 810 663
• Lounge	Ref. 1 810 664

Scope of delivery: handheld transmitter including wall brackets and battery.

### 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
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

#### 

An intelligent system to control 1 to 16 zones and up to 6400 motors. Specifically designed for medium and large buildings.



#### 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.

#### **Building Controller**

#### 4 Zone/8 Zone TouchBuco™



#### **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.

NEW

- 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.
- 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.

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 Touch Building Controller	Ref. 1 860 254

Touch Building Controller		1101 1 000 251
animeo IB + 8 Zone Touch Building Controller	NEW	Ref. 1 860 255

#### **Building Controller**

#### **Building Controller**





8 zones

#### **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	II
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
5 DIN 111 ( 11 () 4 D ()	

For DIN-rail installation, 12 SUs.

#### **Operating Software + Interface**



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

• For computers with minimum

Windows 2000, CD Rom disc

drive, 128 MB storage and 40

Intel Pentium II, 500 MHz,

MB free hard drive storage.

#### Product benefits Further features

- · 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	Ref. 9 012 519
USB/RS485 Interface	Ref. 9 016 356

#### Sensors and accessories

#### **Compact Sensor**



The complete weather station in a small format. 3 × sun, 1 × wind, 1 × outside temperature, 1 × rain, GPS receiver. Additional requirements: 24 VDC power supply.

#### **Product benefits**

- Wiring made easy as all sensors are integrated in the device.
- Monitored communication between Building Controller and Compact Sensor.

Additional requirements: 24 VDC power supply. Further features

- Integrated sensors: • Three sun sensors in fixed direc-
- tions 90° (east), 180° (south) and 270° (west).
- Wind speed sensor without moving parts.
- $\cdot$  Outside temperature sensor.
- $\cdot$  Heated rain sensor.
- Bracket for wall or post mounting.

Dimensions (w × h × d)	96 × 77 × 118 mm
Degree of protection	IP 65
Protection class	III
Operating voltage	24 V DC ± 10%
Operating temperature	– 25° C to + 50° C
animeo IB+ Compact Senor	Ref. 9 015 047

#### Lightning protection



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

Electronic lightning protection power supply	Ref. 9 001 629
Electronic lightning protection RS485	Ref. 9 001 630
## Sensors and accessories

### 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.

Outside Sensor Extension Box

offers extension capabilities of two additional wind speed sensors and four sun sensors.

• Easy and quick start-up in con-

junction with animeo building

• Status display through LED's for

clear monitoring of connected

and functioning individual

· It can directly be fixed to the

**Further features** 

control solutions.

sensor station mast

sensors.

#### **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.
- Only two cables must be laid to the outside. All wires easily integrated through spring clamp connectors.

Dimensions (w × h × d)	207 × 255 × 90 mm
Degree of protection	IP 65
Protection class	
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

## Power Supply DRM 24 V 1.5 A



To supply the Outside Sensor Box (without heated sensors) or the animeo IB+ Compact Sensor.

Dimensions (w × h × 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

## 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	II	
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 well, recorded and DIN, will installation		

For wall-mounted and DIN-rail installation.

## 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 65
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 mm <sup>2</sup>
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.
- 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

### **Outside Temperature Sensor**



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

#### 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
- 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

## Sensors and accessories



**Rain Sensor Ondeis** 

#### **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  $(2 \times 0.75 \text{ mm}^2)$ .

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

Capacitive sensor to measure

housing and UV stabilized.

available.

precipitation with UV-opaque

24 V DC and 230 V DC version

Sun sensor to measure lumi-

nosity in connection with the

Outside Sensor Box.

## Sun Sensor



#### **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 43
Wiring recommendations	2 × 0.8 mm
Angle position	150°
Soliris sun sensor (without mounting brackets)	Ref. 9 154 217
Mounting brackets for sun sensor	Ref. 9 127 888
Kit Soliris 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

Sensor Station

### Sensor Station extended



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

The Sensor Station consists

of an aluminium mast with

Outside Sensor Box, 4 sun

sensors, 1 wind sensor and 1 outside temperature sen-

sor. The Sensor Station can

sensors such as sun sen-

brackets included.

entation.

sors and a rain sensor. Wall

· Indication of north direction.

· Position of pre-mounted and

pre-wired sun sensors is clearly

3200 mm

Ref. 9 013 726

indicated for exact façade ori-

be equipped with additional

pre-mounted and pre-wired

#### **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.

Ref	. 9 013 727

3200 mm

## Sensors and accessories

Mast without sensors		Inside Sensor Box	
	Individual mast for sun, wind and rain sensors.		For connection to external push buttons or key switches per zone and up to 2 Inside Temperature Sensors.
		Product benefits	
		<ul> <li>Window cleaners need no access to the complete user interface (animeo IP Visual Configuration Software).</li> </ul>	
1		<ul> <li>Inside Temperature Sensors enable easy extendability of the system's energy saving options</li> </ul>	
Dimensions/mast height	3200 mm		
Mast without sensors	Ref. 9 014 301	system s energy saving options.	
		Dimensions (w × h × d)	210 × 90 × 61 mr

## Mast extended without sensors



Dimensions/mast height	3200 mm
Mast without sensors	Ref. 9 014 302

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 For DIN-rail installation, 12 SUs.

## Housing for Inside Temperature Sensor



## Inside Temperature Sensor



To measure the inside temperature.

Inside Temperature Sensor

Ref. 9 001 614

## 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 flushmounted 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.

• Priority management between

local and automatic commands directly on the device or through

different modes configurable via

animeo IB+ Building Controller.

**Further features** 

#### **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.

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 flush-mounted installation.

### 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
<ul> <li>Walnut – wood finish</li> </ul>	Ref. 9 015 237
Double frame nure	Ref 9 015 238

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





### 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



#### Quick maintenance

• Fuse holder per motor output accessible from the outside

## **Motor Controller**

## 4 AC Motor Controller





Technology.

• Upgradable for local controlling by radio.

For roller shutters, screens, exterior Venetian blinds and windows. For individual control of 4 × 230

VAC motors via local push buttons, or in groups with IB+ Controlling

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

#### **Further features**

• Easily accessible safety fuses per output.

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
Dimensions (w × h × d)	255 × 180 × 61 mm
Degree of protection	IP 20
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 a IP 54 housing. For wall-mounted installation.

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
Dimensions (w × h × d)	255 × 180 × 61 mm
Degree of protection	IP 20
4 AC Motor Controller RTS WM	Ref. 1 860 109

For wall-mounted installation.

#### 2 AC Motor Controller



#### **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.

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

#### Further features

· Easy accessible fuses.

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
Dimensions (w × h × d)	90 × 180 × 45 mm
Degree of protection	IP 20
2 AC Motor Controller WM	Ref. 1 860 209
2 AC Motor Controller PCB	Ref. 1 860 210

For wall-mounted installation.

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

## Motor Controller

### 1 AC Motor Controller





#### **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.

Protection class	I
Operating voltage	230 V AC
Operating temperature	0° C to + 45° C
Output voltage	230 V AC
Output current	3.15 A
Dimensions (w × h × d)	90 × 180 × 45 mm
Degree of protection	IP 20
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 ( $w \times h \times d$ )	65 × 105 × 20 mm

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**

For roller shutters, screens, exterior Venetian blinds, exterior Venetian blinds with 3 end limits and windows. For the individual control of 1 × 230 VAC motor via local push buttons, or in groups with IB+ Controlling Technology.

#### 1 AC Motor Controller Output Converter Provides 1 x potential free output for individual control via local push buttons, or in groups with animeo IB+ Controlling technology.

#### Further features

· Easily accessible fuses.

## 1 AC Motor Controller IWM



**Product benefits** 

mounting boxes.

· Designed to fit in standard flush

• Quick installation and integration of the Motor Controller through:

1. Smallest possible housing

date installation norms.

fasten the wiring.

socket.

Ref. 1 811 272.

choose from.

dimensions following up to

2. Spring tension connectors to

3. Double terminals allow daisy

chaining and provide space

· Independent of switch manu-

Somfy Smoove Origin IB,

 Motor Controller can be used on delivery state with different selectable operating modes to

• Economical: < 0.5 W stand-by power consumption.

facturer design. Recommended:

saving in the flush mounting

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).

#### Further features

NEW

- A freely selecteable intermediate positon "my" can be chosen by the user.
- Intelligent switching between 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 installerfriendly 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 Ш Operating voltage 230 V AC 0° C to + 50° C Operating temperature Output voltage 230 V AC Output current 3 A IB+ 1 AC Motor Controller IWM Ref. 1 860 328

## **Motor Controller**

## 4 DC Motor Controller



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

· Output protected through current

**Further features** 

detection.

#### **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 × h × 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	Ref. 1 860 085
For wall-mounted installation	

For wall-mounted installation.

## 4 DC-E Motor Controller



#### Product benefits

- Easy installation: integrated 230 VAC power supply.
- · In conjunction with the DC encoder motor and the CTS windup system, it allows particularly precise setting of the slats and exact positioning of the Venetian blinds.
- Configurable up and down speed (in combination with an animeo IB+ Building Controller).
- · Upgradable for local control by radio.
- · Local setting of an intermediate position and of user ergonomics.
- Configurable slats and rotation speed for optimum user ergonomics.

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	24 V DC
Output current	max. 0.5 A continuous current per output
4 DC/DC-E Motor Controller WM	Ref. 1 860 087
For wall-mounted installation.	
Dimensions (w x h x d)	210 x 90 x 61 mm
4 DC/DC-E Motor Controller DRM	Ref. 1 860 200

For DIN-rail installation, 12 SUs

For interior blinds, interior Venetian blinds and windows. For the individual controlling of 4 × 24 V DC / DC-E motors from the "Somfy Concept 25" series via local push buttons, or in groups with IB+ Controlling Technology.

#### **Further features**

· Output protected through current detection.

### 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 × h × d)	52 × 92 × 27 mm
Degree of protection	IP 20
Protection class	II
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

## 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	
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 Touch Buco



Dimensions (w × h × d)

192 × 119 × 68 mm

Ref. 9 019 837

Flush Mounting Box Touch Buco Flush-mounted installation.

## **Power Supply DC**



## To supply power to the DC Motor Controller.

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 × 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)
Power Supply DC	Ref. 1 860 093

For wall-mounted and DIN-rail installation.

### Accessories



## 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

For wall-mounted installation.

## Smoove IB Origin



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

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

## 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

## 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

## Local controls



1 channel handheld radio transmitter, control of one or several motors per radio.

Telis 1 RTS = 1 channel: single or group operation possible.

#### Telis 1 RTS

• Pure	Ref. 1 810 630
• Silver	Ref. 1 810 637
• Lounge	Ref. 1 810 649
• Patio	Ref. 1 810 642

Scope of delivery: handheld transmitter including wall brackets and battery.

## Telis 4 RTS



5 channel handheld radio transmitter, manual control of one or several motors per radio.

Telis 4 RTS = 5 channels: single or group operation possible.

Telis	4	RTS
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• Pure	Ref. 1 810 631
• Silver	Ref. 1 810 638
• Lounge	Ref. 1 810 651
• Patio	Ref. 1 810 644

Scope of delivery: handheld transmitter including wall brackets and battery.

## Telis 1 Modulis RTS



1 channel handheld radio transmitter, manual control of one or several Venetian blind motors per radio. Comfortable manual alignment of the slats using the scroll wheel.

#### Telis 1 Modulis RTS

• Pure	Ref. 1 810 974
• Silver	Ref. 1 810 975
• Lounge	Ref. 1 810 976

Scope of delivery: handheld transmitter including wall brackets and battery.

## Telis 4 Modulis RTS



5 channel handheld radio transmitter, manual control of one or several Venetian blind motors per radio.

Comfortable manual alignment of the slats using the scroll wheel.

Telis 4 Modulis RTS = 5 channels: single or group operation possible.

#### Telis 4 Modulis RTS

• Pure	Ref. 1 810 765
• Silver	Ref. 1 810 663
• Lounge	Ref. 1 810 664

Scope of delivery: handheld transmitter including wall brackets and battery.

## 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 Sensor 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
 Sensor Station



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

animeo IB+ Building Controller
 animeo IB+ Motor Controller



- System topology
- Benefits
- Products

• Project example

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

## 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.

#### 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.











Facility Manager View

Web remote



Situo io

55



## **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.
- $\cdot$  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 .
- $\cdot$  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	II
Supply voltage	100 - 240 V AC / 50/60 Hz
Operating temperature	0° C to +45° C
animeo IP/io Building Controller	Ref. 1822314

### Sub Controller



The IP Sub Controller expands animeo IP/io 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 realtime weather station.

#### **Product benefits**

- The IP Sub Controller utilizes the IP Building Controller's inte-
- grated 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).

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

### Transceiver

### **USB io Transceiver**



#### **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.

The use of the USB io Trans-
ceiver is mandatory with every
animeo IP/io Building and Sub
Controller. The transceiver es-
tablishes communication from
the IP Building Controller/Sub
Controller to the io motors and
io local control points.

#### Further features

- LED display of sent and received io radio signals.
- Scans 3 frequencies between 868 and 870 MHz and communicates over the most reliable transmission.

Housing Dimensions (w × h × 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

### **Compact Sensor**



#### **Product benefits**

- Wiring made easy as all sensors are integrated in the device.
- Monitored communication between Building Controller, Sub Controller and Compact Sensor.

The complete weather station in a small format. 3 x sun, 1 x wind, 1 x outside temperature, 1 x rain. Additional requirements: 24 VDC power supply.

#### **Further features**

#### Integrated sensors:

- Three sun sensors in fixed direction 90° (east), 180° (south) and 270° (west).
- Wind speed sensor without moving parts.
- Outside temperature sensor.
- Heated rain sensor.
- Bracket for wall or post mounting.

Dimensions (w × h × d)	96 × 77 × 118 mm
Degree of protection	IP 65
Protection class	III
Operating voltage	24 V DC ± 10%
Operating temperature	-25° C to +50° C
animeo IB+ Compact Sensor	Ref. 9 015 047

## Sensors and accessories

## **Outside Sensor Box**



#### **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 65
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.

## Power Supply DRM 24 V 1.5 A



To supply the Outside Sensor Box (without heated sensors) or the animeo IB+ Compact Sensor.

The Outside Sensor Box is the

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.

interface between the weather

Dimensions (w × h × d)	78 × 93 × 56 mm
Degree of protection	IP 20
Protection class	11
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.

### 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

For wall-mounted and DIN-rail installation.

Ref. 1 860 093

### Lightning protection



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

Electronic lightning protection power supply	Ref. 9 001 629
Electronic lightning protection RS 485	Ref. 9 001 630

## Sensors and accessories



Wind Sensor

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

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

winter conditions.

- 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 65
Wiring recommendations	2 × 0.8 mm <sup>2</sup>
Wind Sensor	Ref. 9 001 608

## Heated Wind Sensor



#### **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 mm <sup>2</sup>
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.
- 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

## Sensors and accessories

### **Outside Temperature Sensor**



**Product benefits** 

spiders and birds.

Degree of protection

Wiring recommendations

**Outside Temperature Sensor** 

Dimensions

tions.

Precise measurement of exterior

temperature values which can be displayed in °C or °F in the

animeo building control solu-

Protective housing to prevent

measurements influenced by

• Delivered with solar radiation sensor protective housing.

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

### 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).
- $\cdot$  Delivered with a 2.30 m cable (2 x 0.75 mm<sup>2</sup>).

Rain Sensor Ondeis 230 V AC

Dimensions (w × h × d)	115 × 100 × 85 mm
Degree of protection	IP 54
Wiring recommendations	5 x 1.5 mm <sup>2</sup>
Rain Sensor Ondeis 24 V DC	Ref. 9 016 344

Capacitive sensor to measure precipitation with UV-opaque

and UV stabilized housing. 24 V DC and 230 V AC version

Ref. 9 016 345

available.

## Sun Sensor



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

Height 150 mm, ø 115 mm

IP 65

2×0.8 mm

Ref. 9 001 611

#### **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 43
Wiring recommendations	2 × 0.8 mm
Angle position	150°
Soliris sun sensor (without mounting brackets)	Ref. 9 154 217
Mounting brackets for sun sensor	Ref. 9 127 888
Kit Soliris sun sensor incl. brackets	Ref. 9 154 043

## Sensors and accessories

### 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

Sensor Station

3200 mm

Ref. 9 013 726

The Sensor Station consists

of an aluminium mast with

Outside Sensor Box, 4 sun

sensors, 1 wind sensor and

1 outside temperature sen-

sor. The Sensor Station can

be equipped with additional

• Indication of north direction.

and pre-wired sun sensors

is clearly inidcated for exact

• Position of pre-mounted

façade orientation.

sensors such as sun sensors and a rain sensor. Wall brack-

ets included.

pre-mounted and pre-wired

## Sensor Station extended



The sensor station extended consists of an aluminum mast with a pre-mounted and prewired 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 direction.

· Position of pre-mounted and

indicated for precise façade

pre-wired sun sensors is clearly

#### **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

orientation.

Sensor Station extended

Ref. 9 013 727

## Mast without sensors

	Individual mast for sun, wind and rain sensors.
Dimensions/mast height	3 200 mm
Mast without concore	Def. 0.001.204
Mast Without sensors	Rei. 9 001 394

## Sensors and accessories

## Mast extended without sensors

Mast extended without sensors and Outside Sensor Box. Incl. accessories for wind direction sensor.

## Housing for Inside Temperature Sensor



Dimensions/mast height 3 200 mm
Mast extended without sensors Ref. 9 014 302

## 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.

### Inside Temperature Sensor



To measure the inside temperature.

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. Compatible with Radio Technology Systems (RTS), Stand-alone SDN, animeo IP/io and animeo IP/ RS485 shade systems.

- Programmable through userfriendly 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.

Degree of protectionIP 30Protection classIIOperating voltage3 V (battery model (R 2430)Operating temperature0° C to +60° COperating conditionsDry living roomsRadio frequency865.95 MHzPure shineBlack shineRef. 1 800 445Black shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Dimensions (w × h × d)	50 × 50 × 10 mm
Protection classIIOperating voltage3 V (battery model CR 2430)Operating temperature0° C to +60° COperating conditionsDry living roomsRadio frequency865.95 MHzPure shineBlack shineRef. 1 800 445Black shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Degree of protection	IP 30
Operating voltage3 V (battery model CR 2430)Operating temperature0° C to +60° COperating conditionsDry living roomsRadio frequency865.95 MHzPure shineRef. 1 800 445Black shineRef. 1 800 445Silver shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Protection class	Ш
Operating temperature0° C to +60° COperating conditionsDry living roomsRadio frequency865.95 MHzPure shineRef. 1 800 445Black shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Operating voltage	3 V (battery model CR 2430)
Operating conditionsDry living roomsRadio frequency865.95 MHzPure shineRef. 1 800 445Black shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Operating temperature	0° C to +60° C
Radio frequency865.95 MHzPure shineRef. 1 800 445Black shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Operating conditions	Dry living rooms
Pure shineRef. 1 800 445Black shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Radio frequency	865.95 MHz
Pure shineRef. 1 800 445Black shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911		
Black shineRef. 1 811 003Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Pure shine	Ref. 1 800 445
Silver shineRef. 1 811 007Adapter disk for other switching programsRef. 9 016 911	Black shine	Ref. 1 811 003
Adapter disk for other switching programs Ref. 9 016 911	Silver shine	Ref. 1 811 007
	Adapter disk for other switching 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	11
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

• 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

## Local remote controls



#### 1 channel radio remote transmitters.

Dimensions (w × h × d)	36 × 154 × 15 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	868,95 MHz
Situo 1 io Pure 5L	Ref. 1 800 463
Situo 1 io Titane 5L	Ref. 1 800 464
Situo 1 io Metal Orange 5L	Ref. 1 800 465
Situo 1 io Metal Green 5L	Ref. 1 800 475

### Situo 5 io



5 channel radio remote transmitters.

Dimensions (w × h × d)	36 × 154 × 15 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	868,95 MHz
Situo 5 io Pure 5L	Ref. 1 811 297
Situo 5 io Titane 5L	Ref. 1 811 298
Situo 5 io Metal Orange 5L	Ref. 1 811 299
Situo 5 io Metal Green 5L	Ref. 1 811 352

## Web remote control

## Web remote control



#### **Product benefits**

- $\cdot$  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**

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

animeo IP web remote license key

Ref. 9 019 244

#### Motors



#### Oximo io



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

Type of head	Star
Diameter	50 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	Bi-directional radio
Oximo io 6/17 WF 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
Oximo io 40/17 VVF 3M BAR	Ref. 1 049 608

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

#### Sunea io



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

Type of head	Star or round
Diameter	50 or 60 mm
Degree of protection	IP 44
Protection class	
Supply voltage	230 V A0
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 WF 3M BAR	Ref. 1 118 171
Sunea 50 io 50/12 WF 3M PACK100	Ref. 1 118 185
Sunea 60 io 70/17 WF3M 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 10 6/32	Ref. 1 033 132
Sunilus SCR io 10/17 WF 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 WF 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 WF 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.

### 4 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
1418 18/24 in 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**



animeo IP Building Controller io Ref. 1 822 314 animeo IP Sub Controller io Ref. 1 860 201

Sensor Station Extended Ref. 9 013 727

animeo IP USB io transceiver Ref. 9 018 682

Situo io Ref. 1 800 463 Web remote Ref. 9 019 244

## **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 setup 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
- 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



## animeo IP/RS485

- System topology
- Benefits
- Products
- Project example

## animeo IP/RS485

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



## animeo IP/RS485

## 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**

• 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.

### Sun Tracking

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

#### **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 realtime 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.
- $\cdot$  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 po-

sition 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	Ш
Supply voltage	100 - 240 V AC / 50/60 Hz
Operating temperature	0° C to +45° C
animeo IP/RS485 Building Controller	Ref. 1822314

### Sub Controllei

Product benefits

appliances.

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

· RJ45 and spring clamp connec-

tors for false prove connections.

· Suitable for wall-mounting and

• One Sub Controller can connect

to 1 x Compact Sensor or 1 x Outside Sensor Box and

2 x Inside Sensor Box.

DIN-rail installation.



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.

#### 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).

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
# animeo IP/RS485

#### Sensors and accessories

#### **Compact Sensor**



#### **Product benefits**

- Wiring made easy as all sensors are integrated in the device.
- Monitored communication between Building Controller, Sub Controller and Compact Sensor.

The complete weather station in a small format. 3 x sun, 1 x wind, 1 x outside temperature, 1 x rain. Additional requirements: 24 VDC power supply.

#### Further features

Integrated sensors:

- Three sun sensors in fixed direction 90° (east), 180° (south) and 270° (west).
- Wind speed sensor without moving parts.
- · Outside temperature sensor.
- Heated rain sensor.
- Bracket for wall or post mounting.

Dimensions (w × h × d)	96 × 77 × 118 mm
Degree of protection	IP 65
Protection class	
Operating voltage	24 V DC ± 10%
Operating temperature	-25° C to +50° C
animeo IB+ Compact Sensor	Ref. 9 015 047

#### Lightning protection



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

Electronic lightning protection power supply	Ref. 9 001 629
Electronic lightning protection RS 485	Ref. 9 001 630

#### 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.

#### 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 ( $w \times h \times d$ )	207 × 255 × 90 mm
Degree of protection	IP 65
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.

#### Power Supply DRM 24 V 1.5 A



To supply the Outside Sensor Box (without heated sensors) or the animeo IB+ Compact Sensor.

Dimensions (w × h × 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 ARef. 9 017 611For Din-rail installation.

#### 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

For wall-mounted and DIN-rail installation.

#### 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 200mm, ø 240mm max. ø-mast: 48mm
Degree of protection	IP 65
Wiring recommendations	2 × 0.8 mm <sup>2</sup>
Wind Sensor	Ref 9 001 608

#### **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 mm <sup>2</sup>
Heated Wind Sensor	Ref. 9 140 180

#### Wind Direction Sensor



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

To measure wind speed in connection with the Outside

winter conditions.

Sensor Box. Recommended for geographical areas with severe

#### 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.
- 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

# animeo IP/RS485

#### **Outside Temperature Sensor**



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

#### **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

#### 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  $(2 \times 0.75 \text{ mm}^2)$ .

Dimensions (w × h × d)	115 × 100 × 85 mm
Degree of protection	IP 54
Wiring recommendations	5 x 1.5 mm <sup>2</sup>
Rain Sensor Ondeis 24 V DC	Ref. 9 016 344
Rain Sensor Ondeis 230 V AC	Ref. 9 016 345

#### Sun Sensor



#### **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 43
Wiring recommendations	2 × 0.8 mm
Angle position	150°
Soliris sun sensor (without mounting brackets)	Ref. 9 154 217
Mounting brackets for sun sensor	Ref. 9 127 888
Kit Soliris sun sensor incl. brackets	Ref. 9 154 043

#### Sensor Station



The Sensor Station consists of an aluminium mast with premounted 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.

Sun sensor to measure luminosity in connection with the

Outside Sensor Box.

#### **Product benefits**

Dimen

Senso

- 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.

•	Indication of north direction.
•	Position of pre-mounted and

pre-wired sun sensors is clearly indicated for precise façade orientation.

sions / mast height	3200 mm
r Station	Ref. 9 013 726



The sensor station extended consists of an aluminum mast with a pre-mounted 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.

Individual mast for sun, wind

and rain sensors.

#### **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.
- · 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
Sensor Station extended	Ref. 9 013 727





Mast extended without sensors

Ref. 9 014 302



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

#### **Product benefits**

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

imensions/mast height	3 200 mm
last without sensors	Ref. 9 014 301

Housing for Inside Temperature Sensor	
•	To install inside temperature sensor.
Dimensions (w × h × d)	75 × 75 × 25 mm
Housing for Inside Temperature Sensor	Ref. 9 008 045



To measure the inside temperature.

Inside Temperature Sensor

Ref. 9 008 044



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 wiring (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



#### **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.

#### shading systems. Compatible with Radio Technology Systems (RTS), Stand-alone SDN, animeo IP/io and animeo IP/ RS485 shade systems.

Provides communication between Building Management Systems and Somfy motorized

- Programmable through userfriendly 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

**BMS Interface** 

#### 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

#### **RS485** Terminator



A RS485 component designed to terminate RS485 network segment.

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**

• 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



#### **Product benefits**

· Display with 2 lines (16 characters per line) RJ45 female connector for fast connection.

117 × 79 × 24 mm
IP 30
Ref. 9 017 142

#### 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**

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

Ref. 9 019 244



#### **Product benefits**

· This intuitive tool makes commissioning much easier, from configuration to diagnostic.

For additional information, please contact SOMFY.

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

The all-inclusive tool for

#### **Further features**

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

#### 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.

Ref. 1 811 272

#### Smoove IB Origin

For flush-mounted installation.



#### 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

#### 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 fulfill all commands accessible at the front.

Overall dimensions (without wall plate)	36.51 x 69.85 x 38.10 mm
Degree of protection	IP 20 (mounted)
Protection class	II
Operating temperature	0 ° C to 45 ° C
Supply voltage	+ 24 V DC, supplied by Somfy Digital 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

presets.

up, down, stop, eco mode and

#### **Motors**



#### 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

#### 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

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

# animeo IP/RS485

## **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**



.....

animeo IP Building Controller io Ref. 1 822 314



.....

animeo IP Sub Controller io Ref. 1 860 201



Sensor Station Extended Ref. 9 013 727



DecoFlex Ref. 1 811 289



Web remote Ref. 9 019 244

.....

## animeo IP/RS485

## **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.

## System topology

Local control options



Building Controllers | 1–16 zones



#### **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 façades 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 façade 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.

Motor Controller



Wind direction and wind speed

Control - Locking Command FACADE BAST PACADE SOUTH 2 ACADE SOUTH FACADE WEST 2





#### **Building Controller**

#### KNX Master Control W2/W8

The animeo KNX Master Control

W2/W8 is a building controller

which enables a zone-based

shadow tracking of 16 or more

facade areas for a selection of

The configuration of the façade

which reduces the commission-

19 different types of blinds.

areas is realized with the animeo KNX Operating Software

ing time.



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  $2 \times (W2)$  or  $8 \times (W8)$  wind speed, wind direction, rain, snow, frost, ice, outside temperature and  $8 \times \text{sun zones}$ .
- 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 ( $w \times h \times d$ )	180 × 254 × 110 mm
Degree of protection	IP 20
Protection class	III
Operating voltage	24 V AC
Operating temperature	0° C to + 55° C

Ref. 1 860 193

KNX Master Control W8 For wall-mounted installation. For 8 wind speed sensors



#### **Building Controller**

#### 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.

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.

• Connects easily through standard RJ45 network connector to the animeo KNX Master Control.

#### **Further features**

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

Dimensions (w × h × 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.

#### **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 userfriendliness 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.

For roller shutters, screens, exterior Venetian blinds and windows. To control 4 × 230 V AC motors.

#### **Further features**

- Position feedback per motor output during movement and when reaching the top and bottom end position.
- 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.

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
Max. current consumption	max. 3.15 A per output
KNX 4 AC Motor Controller	Ref. 1 860 114
For wall-mounted installation.	
Dimensions (w × h × d)	90 × 210 × 61 mm
KNX 4 AC Motor Controller DRM	Ref. 1 860 116
For DIN-rail installation.	

#### 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.

For interior blinds, interior Venetian blinds and windows. To control 4 × 24 V DC motors. External 24 V DC power supply required (see accessories).

#### **Further features**

• Output protected through current detection.

Ref. 1 860 288

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	Ref. 1 860 128

For wall-mounted installation.

KNX 4 DC Motor Controller DRM

For Din-rail installation.

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#### **Motor Controller**

#### KNX 4 DC/DC-E Motor Controller



#### **Product benefits**

- Easy installation: integrated 230 V AC power supply.
- Cost savings through use of 8 freely-definable binary inputs.
- Especially precise positioning of the slats in conjunction with the Somfy DC Encoder motor and the Somfy CTS winding system.
- Exact positioning of the Venetian blind.

For interior blinds and interior Venetian blinds. To control 4 × 24 V DC or DC-E Somfy Encoder motors from the "Somfy Concept 25" series.

- Upgradable for local operation by radio.
- Local setting of intermediate position and user ergonomics.
- Clear, self-explanatory ETS index cards.

#### **Further features**

• Output protected through current detection.

Dimensions (w × h × d)	255 × 180 × 61 mm
Degree of protection	IP 20
Protection class	III
Operating voltage	230 V DC
Operating temperature	0° C to + 45° C
Output voltage	24 V DC
Max. current consumption	max. 0.5 A per output
KNX 4 DC/DC-E Motor Controller WM	Ref. 1 860 127

For wall-mounted installation.



#### KNX/RS485 Motor Controller

#### KNX RS485 Motor Controller WM



#### **Product benefits**

- Flexible installation: suspended ceiling/raised floor, underwindow 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
- > Daisy chaining of several RS485

motors.	
Dimensions (w × h × 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

#### **KNX RS485 Motor Controller WM**

For wall-mounted installation.

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 a one Byte telegram over the KNX, 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.

#### 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.

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

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  $1 \times 1$  PG, CD 2 × 1 P6, CD 1 × 4 P6, animeo 1 AC/2 AC Motor Controller PCB.

70 × 105 × 23 mm

Ref. 9 008 049

DIN-rail adapter	

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**°

#### 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 × h × d)	52 × 92 × 27 mm
Protection class	Ш
Supply voltage	5 V DC, from animeo KNX Motor 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	Ш
Supply voltage	5 V DC, from animeo KNX Motor 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**



#### **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.

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

#### 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.

#### 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.

#### Product benefits

- Enables control of all types of solar shadings and other applications (switch functions, lighting and dimming, HVAC) via the same remote control.
- Up to 10 universal radio inputs with max. 5 transmitters per input. The application per radio in input is freely defineable.

#### **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)	81 × 81 × 25 mm
Protection class	II
Supply voltage from KNX bus	KNX voltage 21 32 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



#### **Compact Sensor**



#### **Product benefits**

- Wiring made easy as all sensors are integrated in the device.
- Monitored communication between KNX Master Control W2/W8 and Compact Sensor.

The complete weather station in a small format. 3 × sun, 1 × wind, 1 × outside temperature, 1 × rain. Additional requirements: 24 VDC power supply.

#### Further features

Integrated sensors:

- Three sun sensors in fixed direction 90° (east), 180° (south) and 270° (west).
- Wind speed sensor without moving parts.
- Outside temperature sensor.
- $\cdot$  Heated rain sensor.
- Bracket for wall or post mounting.

Dimensions (w × h × d)	96 × 77 × 118 mm
Degree of protection	IP 65
Protection class	111
Operating voltage	24 V DC ± 10 %
Operating temperature	– 25° C to + 50° C
animeo Compact Senor	Ref. 9 015 047

#### Lightning protection



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

Electronic lightning protection power supply	Ref. 9 001 629
Electronic lightning protection RS 485	Ref. 9 001 630

#### Outside Sensor Box



**Product benefits** 

· Convenient lightning protection

- only two cables (power sup-

ply 24 V AC/DC and data cable)

need to be laid to the outside.

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.

Dimensions (w × h × d)	235 × 207 × 90 mm
Degree of protection	IP 65
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.

#### Power Supply DRM 24 V 1.5 A



To supply the Outside Sensor Box (without heated sensors) or the animeo KNX Compact Sensor.

Dimensions (w × h × d)	78 × 93 × 56 mm
Degree of protection	IP 20
Protection class	П
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



#### animeo Power Supply DC



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

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
Forwall mounted and DIN rail installation	

For wall-mounted and DIN-rail installation.

#### 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 65
Wiring recommendations	2 × 0.8 mm <sup>2</sup>
Wind Sensor	Ref. 9 001 608

#### 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 mm <sup>2</sup>
Heated Wind Sensor	Ref. 9 140 180

Heated Wind Sensor

#### Rain Sensor Ondeis



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

To measure wind speed in

connection with the Outside

Sensor Box. Recommended for

geographical areas with strong

winter periods.

#### **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	3 × 1.5 mm
Rain Sensor Ondeis 24 V DC	Ref. 9 016 344
Rain Sensor Ondeis 230 V AC	Ref. 9 016 345



#### 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.
- 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

#### 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 43
Wiring recommendations	2 × 0.8 mm
Angle position	150°
Soliris sun sensor (without mounting brackets)	Ref. 9 154 217
Mounting brackets for sun sensor	Ref. 9 127 888
Kit Soliris sun sensor incl. brackets	Ref. 9 154 043

#### **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

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

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

#### Sensor Station extended



#### **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.

Concor Station outonded	
Dimensions / mast height	

The sensor station extended consists of an aluminum mast with a pre-mounted 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 direction.
- · Position of pre-mounted and pre-wired sun sensors is clearly indicated for exact façade orientation.

3200 mm

Ref. 9 013 727

1	

Mast without sensors

Dimensions/mast height

Mast without sensors

#### Mast extended without sensors



Mast extended without sensors and Outside Sensor Box. Incl. accessories for wind direction sensor.

3 200 mm

Ref. 9 014 301

Individual mast for sun, wind

and rain sensors.

Dimensions/mast height	3 200 mm
Mast extended without sensors	Ref. 9 014 302



#### 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 × h × d)	18 × 90 × 56 mm (1 SU)
Degree of protection	IP 20
Protection class	
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

#### **KNX IP Router**



The KNX/IP router enables telegrams to be forwarded between different lines through a LAN (IP) as a fast backbone. In addition, this device is able to connect a PC to the KNX network e.g. for ETS programming. The IP address can be obtained by a DHCP server or by manual configuration (ETS) respectively.

The KNX Line Master combines

the essential functions of a

KNX bus line: power supply with choke, IP router and IP

Interface.

Dimensions (w × h × 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 Alternative: Power – over – Ethernet
Power consumption	< 800 mW
KNX IP Router	Ref. 9 018 248

#### **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

#### KNX IP Line Master



In addition to the bus voltage the power supply offers an auxiliary voltage of 24 V. The IP router in the Line Master enables telegrams to be forwarded between different lines through a LAN (IP) as a fast backbone. Using the embedded IP interface, the KNX line can be connected directly to a PC (e.g. by ETS).

Dimensions (w × h × d)	108 × 90 × 61 mm (6 SU)
Degree of protection	IP 20
Protection class	III
Operating temperature	– 5° C to + 45° C
Supply voltage	Mains voltage 230 V AC/50 Hz
Power consumption	< 1.2 W (idle) < 48 W (full load)
KNX IP Line Master	Ref. 9 018 249



#### 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 O	rigin
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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 flush-mounted installation.

## Smoove 1 RTS



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

50 × 50 × 10 mm
IP 30
II
3 V (battery model CR 2430)
0° C to + 60° C
dry living rooms
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
<b>F H F H H H H H H H H H H</b>	

For wall-mounted installation.

#### 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



#### Local controls



1 channel handheld radio transmitter, control of one or several motors by radio.

Telis 1 RTS = 1 channel: single or group operation possible.

#### Telis 1 RTS

• Pure	Ref. 1 810 630
• Silver	Ref. 1 810 637
• Lounge	Ref. 1 810 649
• Patio	Ref. 1 810 642

Scope of delivery: handheld transmitter including wall brackets and battery.

#### Telis 1 Modulis RTS



1 channel handheld radio transmitter, manual control of one or several Venetian blind motors by radio.

Comfortable manual alignment of the slats using the scroll wheel.

#### Telis 1 Modulis RTS

• Pure	Ref. 1 810 974
• Silver	Ref. 1 810 975
• Lounge	Ref. 1 810 976

Scope of delivery: handheld transmitter including wall brackets and battery.

# animeo **KNX**<sup>•</sup>

#### Local controls



5 channel handheld radio transmitter, manual control of one or several motors by radio.

Telis 4 RTS = 5 channels: single or group operation possible.

#### Telis 4 RTS

• Pure	Ref. 1 810 631
• Silver	Ref. 1 810 638
• Lounge	Ref. 1 810 651
• Patio	Ref. 1 810 644

Scope of delivery: handheld transmitter including wall brackets and battery.

#### Telis 4 Modulis RTS



5 channel handheld radio transmitter, manual control of one or several Venetian blind motors by radio.

Comfortable manual alignment of the slats using the scroll wheel. Telis 4 Modulis RTS = 5 channels: single or group operation possible.

#### Telis 4 Modulis RTS

• Pure	Ref. 1 810 765
• Silver	Ref. 1 810 663
• Lounge	Ref. 1 810 664

Scope of delivery: handheld transmitter including wall brackets and battery.



## **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.



Links to sensors Bus line KNX Power supply Motor cable



## **Products installed**



KNX Master

Ref. 1 860 187

Control

.....





Sensor Station Extended Ref. 9 013 727



KNX-RTS Receiver

Ref. 1 860 191





Telis 4 Modulis Ref. 1 810 664 Smoove Origin IB 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 a an and 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

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



- System topology
- Benefits
- Products
- Project example

#### 

Interactive façade management system compatible with LON standards. Multifunctional Motor Controller to control all types of blinds and window coverings. RTS Module for flexible integration of remote controls with the LON network.

## System topology



## Benefits

#### Window based shadow tracking

This solution impacts the movement of the sun protection based on the shadow projected on the window.

Thus, each solar protection is individually controlled to ensure optimum comfort for the user and less artificial lighting.



#### Multi-functional radio control

With the animeo LON RTS Module up to 30 freely definable channels are available for free binding of Somfy RTS signals to the LON network.

Applications such as blinds, lighting, heating, cooling and ventilation can be controlled through local RTS remote or wall controls.



#### Meeting today's LONMark standards

4 integrated LONMark #6111 "sunblind controller" – objects with a variety of functions such as sun, sun tracking, wind, wind direction, rain, frost and temperature for maximum flexibility – in one unique product. Each output acts as an independent controller. The priorities for these functions are freely configurable.

#### More advantages

- Advanced pre-programmed functions such as sun tracking.
- Cost savings: up to 8 local push button binary inputs can be used additionally as universal LON inputs so that e.g. window contacts, temperature sensors or presence detectors can be connected.
- Using an input signal, a LON output signal can be generated: types are setting, switch, scene or occupancy.

The central logic, Building Controller, is embedded in the Motor Controller.



#### **Motor Controller**

#### LON 4 AC Motor Controller WM + DRM





#### **Product benefits**

Dimensions (w × h × d)

 Cost savings through use of 8 freely-definable binary inputs.

For roller shutters, screens, exterior Venetian blinds and windows. To control of 4 × 230 V AC motors.

#### LON 4 DC Motor Controller WM



#### **Product benefits**

- Cost savings through use of 8 freely-definable binary inputs.
- · Configurable slat turning speed for optimum user ergonomics.

For interior blinds, interior Venetian blinds and windows. To control 4 × 24 V DC motors. External 24 V DC power supply (see accessories).

#### **Further features**

• Outputs protected through current detection.

Further technical features are explained in full in the operating instructions.

Dimensions (w × h × d)	255 × 180 × 61 mm
Degree of protection	IP 20
Protection class	
Operating temperature	0° C to + 45° C
Operating voltage	24 V DC
Output voltage	24 V DC
Max. current consumption (motor)	max. 2.1 A per output
LON 4 DC Motor Controller WM	Ref. 1 860 281

- IP 20 Degree of protection Protection class 0° C to + 45° C Operating temperature **Operating voltage** Output voltage Max. current consumption (motor) max. 3.15 A per output LON 4 AC Motor Controller WM Ref. 1 860 277 For wall-mounted installation. Dimensions ( $w \times h \times d$ ) 210 × 90 × 61 mm
  - 230 V AC 230 V AC N 4 DC Motor Controller WM For wall-mounted installation.

LON 4 AC Motor Controller DRM For DIN-rail installation, 12 SUs

#### LON 4 DC/DC-E Motor Controller WM



#### **Product benefits**

- Easy installation: integrated 230 VAC power supply.
- $\cdot$  Cost savings through use of 8 freely-definable binary inputs.
- · Especially precise positioning of the slats in conjunction with the Somfy DC Encoder Motor and the Somfy CTS winding system.

For interior blinds, interior Venetian blinds. To control 4 × 24 VDC or DC-E Somfy Encoder Motors from the "Somfy Concept 25" series.

- · Precise positioning of the Venetian blind.
- · Local setting of intermediate position and user ergonomics.
- · Configurable slats-turning speed for optimum user ergonomics.

#### **Further features**

· Outputs protected through current identification.

255 × 180 × 63 mm
IP 20
II
0° C to + 40° C
230 V AC
24 V DC
max. 0.5 A per output
Ref. 1 860 279
Ref. 1 860 280

For DIN-rail installation, 12 SUs

- **Further features**
- Easy accessible safety fuse by output.

Further technical features are explained in full in the operating instructions.

255 × 180 × 61 mm

Ref. 1 860 278

Ш

#### **Radio control accessories**

#### LON RTS Module



#### Product benefits

- Three individually configurable binary inputs are available to integrate wired room sensors such as presence, temperature, brightness and window contacts. the Motor Controller
- Placement of the device within the LON topology fully independent of the location of the animeo LON Motor Controller or other LON controllers
- ·Flexible installation: suspended ceiling/raised floor, underwindow or wall-mounted wiring channels.

The RTS Module 433 MHz is a gateway for the transmission of Somfy RTS radio signals to the LON network. The device can be integrated into any LON network and is suitable for any Lonmark conform controller.

#### **Further features**

- Up to 30 freely definable channels are available for free binding of Somfy RTS signals to the LON network.
- Overriding of automatic commands: allows the setting of intelligent switching between manual and automatic operation to guarantee excellent userfriendliness and energy savings in conjunction with the animeo LON Motor Controllers.
- Allows the binding of Somfy RTS signals with Lonmark conform lighting controllers for switching or dimming of luminaires.

Dimensions (w × h × d)	90 x 180 x 45 mm
Degree of protection	IP 20
Protection class	
Supply voltage	100 - 240 V AC / 50/60 Hz
Operating temperature	0° C to + 45° C
Radio frequency	433 MHz
Radio range	20 m through 2 walls
LON RTS Module	Ref. 1 860 239

#### Sensors and accessories

#### LON Sensor Interface



Sensor interface to connect one Outside Sensor Box for transmitting sensor values to the LON Bus.

#### **Product benefits**

• Three universal inputs to connect additional sensors. For each of the universal inputs one of the following applications can be selected: 0–10 V, 4–20 m A or NTC.

Dimensions (w × h × d)	78 × 93 × 56 mm
Degree of protection	IP 20
Protection class	Ш
Operating voltage	230 V AC
Output voltage	24 V DC
Output current	1.5 A
LON Sensor interface	Ref. 1 860 161

#### Outside Sensor Box



 The Outside Sensor Box is the interface between external sensors and LON Sensor Interface.All measurement values are evaluated here and sent to the LON Sensor Interface. It requires an external 24 V AC/ DC power supply.

#### 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 Ouside

Dimensions (w × h × d)	235 × 207 × 90 mm
Degree of protection	IP 65
Protection class	III
Operating voltage	24 V AC/DC
Operating temperature	- 30° C to + 70° C

Sensor Box.

Outside Sensor Box For wall-mounted installation. animeo **ION** 

Ref. 9 001 606

#### Lightning protection



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

Electronic lightning protection power supply	Ref. 9 001 629
Electronic lightning protection RS 485	Ref. 9 001 630

#### Power Supply DRM 24 V 1.5 A



To supply the Outside Sensor Box without heated sensors.

Dimensions (w × h × d)	78 × 93 × 56 mm
Degree of protection	IP 20
Protection class	Ш
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

#### Power Supply DC



To supply power to the DC Motor Controller. In the application of "Somfy Concept 25" motors, up to 2 LON Motor Controller 4 DC can be supplied by one power supply (= 8 motors). Switchable also in parallel:  $2 \times 4.5 A = 9 A.$ 

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)
Power Supply DC	Ref. 1 860 093

#### **Power Supply DC**

For wall-mounted and DIN-rail installation.

#### 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 65
Wiring recommendations	2 × 0.8 mm
Wind Sensor	Ref. 9 001 608

#### Heated Wind Sensor



#### **Product benefits**

- 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 mm <sup>2</sup>
Heated Wind Sensor	Ref. 9 140 180

To measure wind speed in connection with the Outside Sensor Box. Recommended for geographical areas with strong winter periods.
### Sensors and accessories

### Wind Direction Sensor



#### **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.
- 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

To measure wind direction in

connection with the Outside

To measure exterior temperatures

in combination with the Outside

Sensor Box.

Sensor Box.

### **Outside Temperature Sensor**



#### **Product benefits**

- 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



#### **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.

Capacitive sensor to measure

precipitation with UV-opaque

24 V DC and 230 V AC version

and UV stabilized housing.

available.

#### **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 43
Wiring recommendations	2 × 0.8 mm
Angle position	150°
Soliris sun sensor (without mounting brackets)	Ref. 9 154 217
Mounting brackets for sun sensor	Ref. 9 127 888
Kit Soliris sun sensor incl. brackets	Ref. 9 154 043

## Sensors and accessories

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

Dimensions/mast height	
Sensor Station	

#### Mast without sensors

Individual mast for sun, wind and rain sensors

3200 mm

Ref. 9 013 726

The Sensor Station consists of

an aluminium mast with pre-

mounted and pre-wired Out-

side Sensor Box, 4 sun sensors,

temperature sensor. The Sensor

Station can be equipped with

additional sensors such as sun

sensors and a rain sensor. Wall

brackets included.

1 wind sensor and 1 outside

### Sensor Station extended



The sensor station extended consists of an aluminum mast with a pre-mounted 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.
- · 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

Sensor Station extended

Ref. 9 013 727

#### Mast extended without sensors

Mast extended without sensors and Outside Sensor Box. Incl. accessories for wind direction sensor.

Dimensions/mast height	3200 mm
Mast without sensors	Ref. 9 014 301

Dimensions/mast height	3200 mm
Mast extended without sensors	Ref. 9 014 302

## System accessories

#### Shadow Device



The LON Shadow Device stores the relevant data which is derived from building model provided through Somfy. It is essential in conjunction with the animeo LON Motor Controller to realize window based shadow tracking for buildings.

#### **Product benefits**

- The device is provided with a shadow data base which derives from a building model created by Somfy service and expertise.
- Stores up to 4,000 shadow zones based on a building model.
- Connects easily through a standard RJ45 network connector to the LON network.
- Further features • Intuitive network configuration (IP) through a Somfy web page.
- The shadow database can simply be uploaded through an USB port.

Dimensions (w × h × 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 LON	Ref. 1 860 253

▲ 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.

### Local controls

#### Smoove IB Origin Smoove 1 RTS Origin Manual control of several Manual control of several motors over IB bus. motors over RTS. Comfortable Comfortable central control or central control or group 10.7 group operability. Operation operability. Operation via via the big UP, DOWN and the big UP, DOWN and STOP STOP buttons is possible at any buttons is possible at any time. time. Ref. 1 811 272 Smoove IB Origin Smoove 1 RTS Origin Ref. 1 811 218 Smoove 1 RTS **Smoove frames** ~ my my $\mathbf{v}$ V 1 channel on-wall radio transmitter to communicate with the RTS radio module. Dimensions ( $w \times h \times d$ ) 50 × 50 × 10 mm Degree of protection IP 30 Protection class Ш 3 V (battery model CR 2430) **Operating voltage** Operating temperature 0° C to + 60° C Smoove frames **Operational conditions** dry living rooms • Pure Ref. 9 015 022 Radio frequency 433.42 MHz • Silver Mat Ref. 9 015 025 • Black Ref. 9 015 023 Smoove 1 RTS · Light Bamboo - wood finish Ref. 9 015 027 • Pure shine Ref. 1 810 873 • Ambergris Bamboo - wood finish Ref. 9 015 026 • Black shine Ref. 1 810 902 Cherry - wood finish Ref. 9 015 236 • Silver shine

Ref. 1 810 904

Ref. 9 016 911

• Walnut - wood finish

• Double frame pure

Ref. 9 015 237

Ref. 9 015 238

For wall-mounted installation.

Adapter disc for other switching programs

### Local controls



1 channel handheld radio transmitter, control of one or several motors by radio.

Telis 1 RTS = 1 channel: single or group operation possible.

#### Telis 1 RTS

• Pure	Ref. 1 810 630
• Silver	Ref. 1 810 637
• Lounge	Ref. 1 810 649
• Patio	Ref. 1 810 642

Scope of delivery: handheld transmitter including wall brackets and battery.

#### Telis 4 RTS



5 channel handheld radio transmitter, manual control of one or several motors by radio.

Telis 4 RTS = 5 channels: single or group operation possible.

#### Telis 4 RTS

• Pure	Ref. 1 810 631
• Silver	Ref. 1 810 638
• Lounge	Ref. 1 810 651
• Patio	Ref. 1 810 644

Scope of delivery: handheld transmitter including wall brackets and battery.

## Telis 1 Modulis RTS



1 channel handheld radio transmitter, manual control of one or several Venetian blind motors by radio.

Comfortable manual alignment of the slats using the scroll wheel.

#### Telis 1 Modulis RTS

• Pure	Ref. 1 810 974
• Silver	Ref. 1 810 975
• Lounge	Ref. 1 810 976

Scope of delivery: handheld transmitter including wall brackets and battery.

## Telis 4 Modulis RTS



5 channel handheld radio transmitter, manual control of one or several Venetian blind motors by radio.

Comfortable manual alignment of the slats using the scroll wheel. Telis 4 Modulis RTS = 5 channels: single or group operation possible.

#### Telis 4 Modulis RTS

• Pure	Ref. 1 810 765
• Silver	Ref. 1 810 663
• Lounge	Ref. 1 810 664

Scope of delivery: handheld transmitter including wall brackets and battery.

## **Project example**

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

- Unlimited number of zones to control interior Venetian blinds and window openers.
- Window-based shadow tracking.
- Control of blinds and light through Somfy RTS and wired local control.
- Integration of local wired switches through binary inputs per Motor Controller.



## **Products installed**



LON 4 DC-E Motor Controller Ref. 1 860 129

LON 4 AC Motor Controller Ref. 1 860 115

Sensor Station Extended Ref. 9 013 727

LON RTS Module Ref. 1 860 239

Telis 4 Modulis Ref. 1 810 664

**IB** Ref

Ref. 1 811 272

## **Automatic functions**

- Wind safety, as well as wind direction dependent to monitor window openers.
- Sun automatic with sun tracking including window based shadow tracking to provide a maximum of user confort and energy saving.
- Integration with a Building Management System (BMS) via an OPC link.
- 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.



## Installation details

The LON network enables creation of any network topology for all LON products installed (Motor Controllers/

No zone or size limitation as a window can be defined as a single zone.

The sensor station is directly linked to the LON network without the need of a Building Controller.

1. Building Management System

- 2. Motor Controller LON
- 3. Sensor Station

Sensor Station).

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A BRAND OF **SOMFY<sup>5</sup>** GROUP



يرجعهم ا

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products from electric, electronic and heating & cooling industries.

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