animeo ® IB+

Sensor Interfaces and Sensors

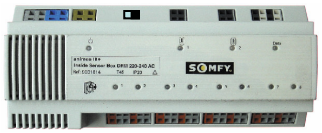
Outside Sensor Box
ref : 9001606



Outside Extension Sensor Box
ref : 9001607



Inside Sensor Box
ref : 9001615



Sun Intensity, Outside Temperature, Wind Speed, Wind Direction, Rain and Inside Temperature are monitored to control shades and windows depending on outdoor and indoor conditions to provide visual and thermal comfort, improve productivity and save energy.

The Sensor Interfaces centralize data coming from the sensors and transmit them in a digital way to the Building Controller(s) of the animeo IB+ system.

The Inside Sensor Box provides also dry contact inputs for manual control of the zones of the installation or to enable the control of them by the Building Management System.

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animeo IB+ Sensor Interfaces and Sensors
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SENSORS FOR animeo IB+ SENSOR INTERFACES

SENSOR Reference		SUN INTENSITY 915043	OUTSIDE TEMPERATURE 915043	LARGE WIND SPEED 915043	SMALL WIND SPEED 915043	WIND DIRECTION 915043	RAIN 915043	INSIDE TEMPERATURE 915043
SENSOR CAPACITY	Outside Sensor Box	8	1	2*		1	1	-
	Outside Extension Sensor Box	4	-	2*		-	-	-
	Inside Sensor Box	-	-		-	-	-	2**
RANGE OF MEASUREMENT		5 to 55 klux	-40°F to 158°F -40°C to 70°C	4 to 67 mph 7 to 108 km/h	4 to 67 mph 7 to 108 km/h	N, NE, E, SE, S, SW, W, NW		-58°F to 221°F -50°C to 105°C
HOUSING	Material	Lexan	Nylon	Anodized Aluminum	Luran S	Anodized Aluminum	ABS	-
	Color	White	White	Light Blue	White and Black	Light Blue	White	-
	Protection Index	IP55	IP65	IP65	IP43	IP65	IP65	IP65
	Overall Dimensions	H 1⅜" x W 3" x D 1⅛" H 34 x W 75 x D 47 mm	H 3½" x Ø 3⅜" H 89 x Ø 85 mm	H 7⅔" x Ø 7⅔" H 195 x Ø 195 mm	H 3⅔" x W 6" x D 4¾" H 93 x W 150 x D 120 mm	H 6" x W 19⅞ x D 2½" H 152 x W 504 x D 64 mm	H 1⅜" x W 3⅜" x D 2" H 35 x W 85 x D 50 mm	-
CABLE	Number of Wires	2	2	2	2	2	3	2
	Cross Section of Wires	AWG 20 0.6 mm²	0.25 mm²	AWG 20 0.6 mm²	0.75 mm²	AWG 20 0.6 mm²	AWG 20 0.6 mm²	AWG 20 0.6 mm²
	Color of Cable	Black	Grey	Grey	White	White	not provided	Black
	Length	6¾ ft / 2 m	5 ft / 1.5 m	3 ft 2½" / 2.5 m	6¾ ft / 2 m	3 ft 2½" / 2.5 m		2 ft / 0.6 m
TEMPERATURE RANGES	Operating	-4°F to 140°F -20°C to 60°C	-40°F to 158°F -40°C to 70°C	-13°F to 167°F -25°C to 75°C	-4°F to 140°F -20°C to 60°C	-13°F to 167°F -25°C to 75°C	-22°F to 140°F -30°C to 60°C	-58°F to 221°F -50°C to 105°C
	Storage	-4°F to 140°F -20°C to 60°C	-40°F to 158°F -40°C to 70°C	-13°F to 167°F -25°C to 75°C	-4°F to 140°F -20°C to 60°C	-13°F to 167°F -25°C to 75°C	-22°F to 140°F -30°C to 60°C	-58°F to 221°F -50°C to 105°C
WEIGHT		5⅛ oz 145 g	15⅞ oz 450 g	26⅞ oz 750 g	5⅔ oz 160 g	2⅝ lb 1200 g	5⅔ oz 160 g	5⅔ oz 160 g

* : ALL WIND SPEED SENSORS IN AN INSTALLATION MUST BE OF THE SAME TYPE. IT IS RECOMMENDED TO CHANGE THE SMALL WIND SPEED SENSORS EVERY 3 YEARS

** : THE INSIDE SENSOR BOX HAS 8 ADDITIONAL INPUTS FOR MANUAL CONTROL OF THE ZONES OF THE INSTALLATION OR TO CONTROL THE ZONES BY A BUILDING MANAGEMENT SYSTEM

SUN SENSOR



LARGE WIND SPEED SENSOR



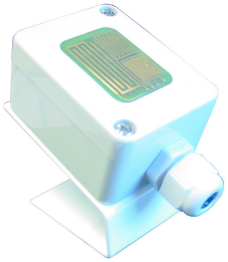
SMALL WIND SPEED SENSOR



WIND DIRECTION SENSOR



RAIN SENSOR



OUTSIDE TEMPERATURE SENSOR



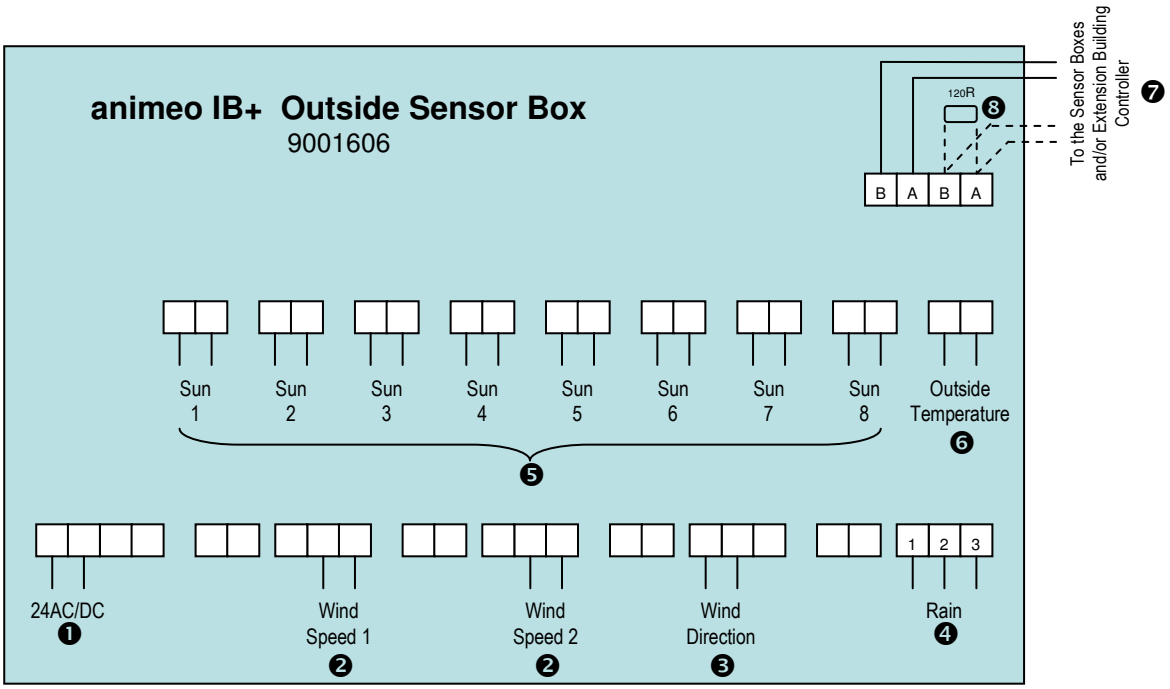
INSIDE TEMPERATURE SENSOR

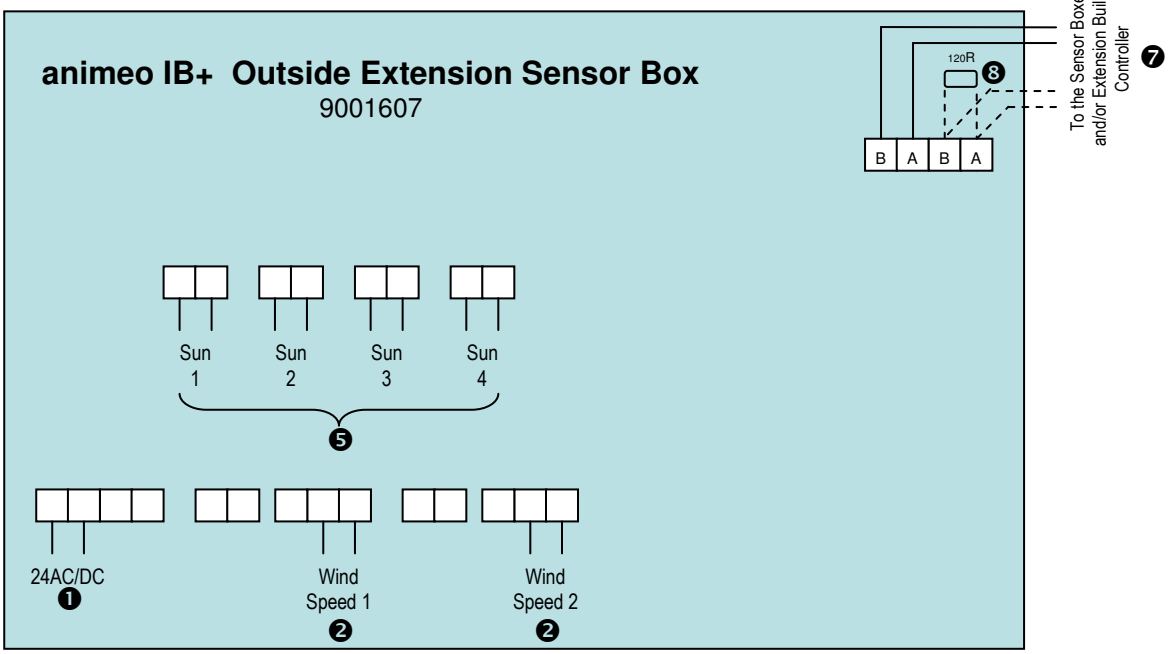


Pictures not at the same scale

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OUTSIDE SENSOR BOX
OUTSIDE EXTENSION SENSOR BOX





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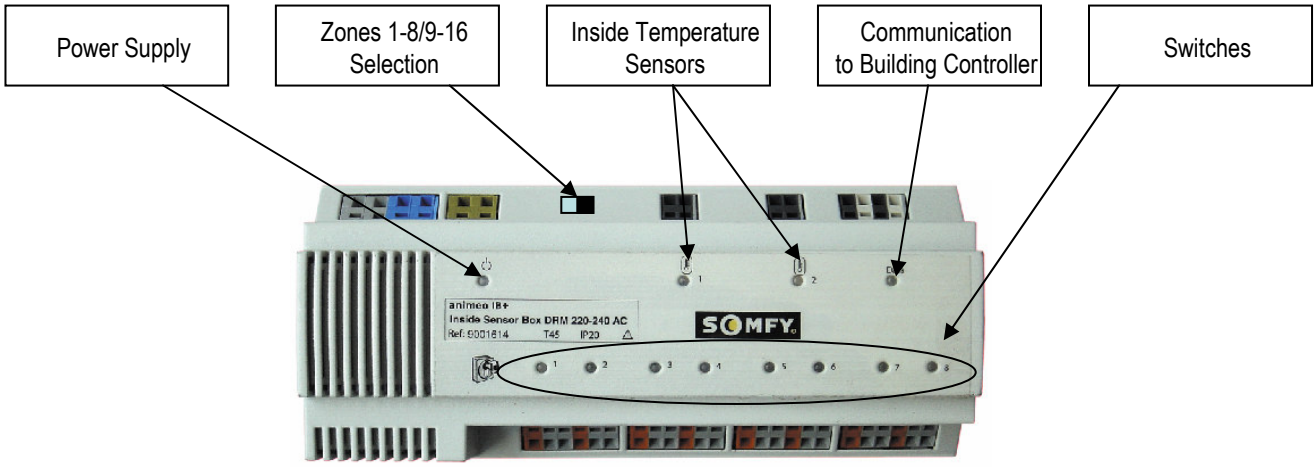
OUTSIDE SENSOR BOX
OUTSIDE EXTENSION SENSOR BOX

	INPUTS / OUTPUTS		MAX CABLE LENGTH	CABLE TYPE
❶	24AC/DC	Power supply can be either AC or DC	330 ft 100 m	14-16AWG
❷	Wind Speed Sensor (x2)	When 2 Wind Speed Sensors are used, they must be of the same type	330 ft 100 m	14-18AWG twisted pair recommended
❸	Wind Direction Sensor		330 ft 100 m	14-18AWG twisted pair recommended
❹	Rain Sensor	1 : Blue 2 : Black 3 : Brown	330 ft 100 m	14-18AWG
❺	Sun Sensor (x8)		330 ft 100 m	14-18AWG twisted pair recommended
❻	Outside Temperature Sensor		330 ft 100 m	14-18AWG twisted pair recommended
❼	Building Controller(s) and Sensor Box(es) Network	RS485 network 2 sets of terminals to daisy chain the network between controllers	1650 ft 500 m	18AWG twisted pair mandatory
❽	120R Resistor	Necessary on both ends of the RS485 network Do not remove the resistor if the connectors are not used to daisy chain the Outside (Extension) Sensor Box to the other controllers of the RS485 network		

TECHNICAL SPECIFICATIONS		
Power Supply	Voltage	24 AC/DC
	Current Consumption with all Sensors (each Sensor Box)	1 A
Housing	Housing Type	Waterproof, UV proof
	Weight	38 oz. / 1080 g
	Length x Height x Width	10" x 8¼" x 4" / 255 x 210 x 100 mm
	Plastic Type	Polycarbonate, recyclable
	Plastic Weight	29¼" oz. / 830 g
Temperature ranges	Operating	-22°F to 158°F / -30°C to 70°C
	Storage	-22°F to 158°F / -30°C to 70°C
Electromagnetic Compatibility		IEC 60 730-1
Standard Compliance		IEC 60 721-3-1, IEC 60 721 3-2

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INSIDE SENSOR BOX

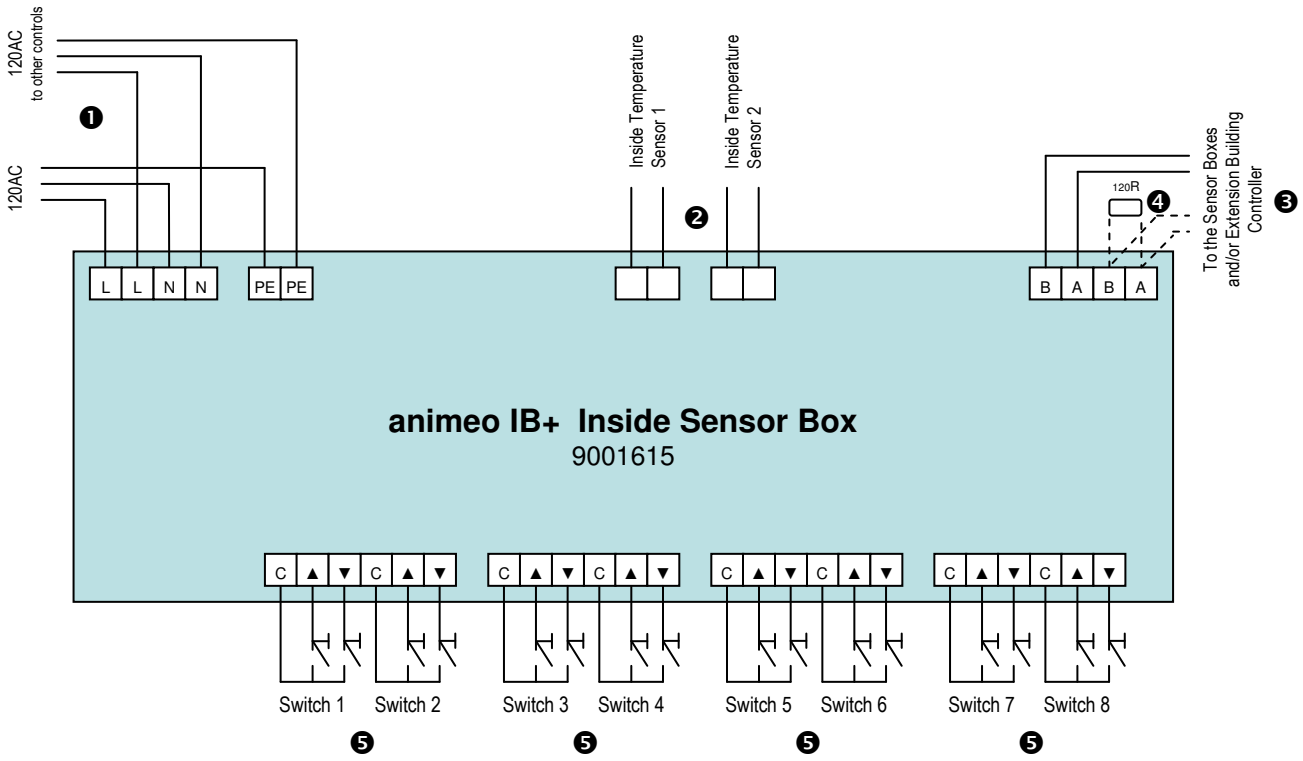


LED	SWITCH	COMMUNICATION TO BUILDING CONTROLLER	INSIDE TEMPERATURE SENSOR
on	as long as the input is active	-	-
pulse	-	every second when communicating	change in real time measurement
blinking	-	-	error

TECHNICAL SPECIFICATIONS		
Power Supply	Voltage	100-120AC Nominal
	Frequency	50-60 Hz
	Primary Max. Operating Current	74 mA
Housing	Housing Type	DIN Rail
	Weight	19 oz. / 540 g
	Length x Height x Width	12 TE = 8 ¼" x 2 ½" x 3 ½" / 210 x 63 x 90 mm
	Plastic Type	CC-ABS Polycarbonat, recyclable
	Plastic Weight	7 ½ oz. / 210 g
Protection Class		IP20
Fuse	Thermal fuse	Self resetable or Polyswitch
Switch Inputs (x8)		2 dry contacts, Normally Open
Temperature ranges	Operating	32°F to 113°F / 0°C to 45°C
	Storage	-4°F to 158°F / -20°C to 70°C
Humidity Rate		85% max.
Electromagnetic Compatibility		IEC 60 730-1
Standard Compliance		IEC 730 (electric safety), IEC 60 721-3-1, IEC 60 721 3-2
Approvals		cUL listed pending

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INSIDE SENSOR BOX



	INPUTS / OUTPUTS		MAX CABLE LENGTH	CABLE TYPE
❶	120AC	2 sets of terminals to daisy chain the 120AC between controls Cable must comply with local electrical codes		14-16AWG
❷	Inside Temperature Sensor Inputs (x2)	NTC Input	1650 ft 500 m	14-18AWG
❸	To Building Controller(s) and Other Sensor Box(es)	RS485 network 2 sets of terminals to daisy chain the network between controllers	1650 ft 500 m	18AWG twisted pair mandatory
❹	120R Resistor	Necessary on both ends of the RS485 network Do not remove the resistor if the connectors are not used to daisy chain the Inside Sensor Box to the Building Controller(s) and to the other Sensor Box(es)		
❺	Switch Inputs (x8)	2 Normally Open (NO) dry contact inputs ▲ : up (shades), close (windows), ▼ : down (shades), open (windows) ▲ and ▼ simultaneously : stop (shades / windows)	330 ft 100 m	14-18AWG

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