animeo® IP Building Controller

Part #1822314

OVERVIEW

The animeo® IP Building Controller is an integrated hardware and software control point for Somfy Digital Network™ (SDN) installations. The Building Controller provides dynamic solar management using Somfy powered motorized window coverings and climate information provided by real-time weather sensors. The Building Controller features an intuitive graphical user interface to simplify programming, commissioning, operation and system status. For larger installations, the Building Controller's capacity can be expanded with the addition of the animeo® IP Sub Controller (#1860201).

The Building Controller features an integrated router for IP connectivity, which allows for a stable network connection between the Building Controller and Sub Controller(s). Connecting the Building Controller to the site's LAN allows for remote servicing and occupant-facing virtual keypads. The Building Controller is suitable as a stand-alone control solution for both new and existing SDN installations as well as part of third party BMS systems using the Somfy Connect BMS Interface.

SOMFY DIGITAL NETWORK SYSTEM OVERVIEW

Somfy Digital Network™ (SDN) is Somfy's intelligent wired shading network. An SDN system is comprised of bus distribution devices that create a network for user interfaces, motorized applications and sensors to be connected. SDN is scalable, and suitable for both small and large projects, and the same components are used whether an SDN system remains standalone, integrated into third party automation systems, or with Somfy's animeo® IP automated total solar management system.

ANIMEO IP SYSTEM OVERVIEW

animeo® IP is a total solar management system utilizing Somfy-powered intelligent motorized window coverings as well as digital keypads and weather sensors. The system's controllers, sensors and keypads can be added to both new and existing Somfy Digital Network installations for comprehensive solar management as either a stand-alone solution or integrated into third party control systems.

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

Every animeo IP installation includes an animeo IP Building Controller that supports up to 200 motors. Animeo IP is a scalable system and network capacity is expanded by adding one Sub Controller for each additional group of 200 motors. For systems exceeding 1000 motors the Building Controller is configured to only manage network traffic and not have any direct motor connections. The animeo IP Controller resides on a standard Somfy Digital Network (SDN) bus. Proper SDN system design must be respected for optimal animeo IP performance.

TECHNICAL SPECIFICATIONS

Input	Universal power supply 110V AC – 240V AC
Power Consumption	1.25 Amps
Material	ABS
Dimensions	6 7/8" W x 4" H x 1 ¾" D
ARM-based processor	
Internal OS	Linux™, Client OS: Windows 7 or higher
Dual SDN Bus (dedicated Motor & Sensor buses)	
Dedicated IP Bus with integrated router	
Integrated upgradeable 1GB flash storage	
Self-calibrating, hardware real-time clock with battery backup	
Dry Contact input & output for third party integration and alarm systems	
Shipping Weight	1 lb.

FEATURES SUMMARY

- Solar depth entrance management for dynamic facade control
- Sensor-threshold-based motor control
- Accurate time & astronomic motor control
- Network-based motor control with user account access
- Facility manager access to global system status & control
- Integration-ready for third party control systems and BMS systems
- System autodiscovery of motors, sensors and keypads
- IP connectivity for Sub Controller connections, virtual keypads, remote access and programming
- Windows 7-based drag-and-drop setup, configuration & operation
- System can be expanded with the addition of a Sub Controller

COMPLIANCE SPECIFICATIONS

UL Listed
CE Approved
IEC Appliance Protection Class II
SEQR Type 1 Action

NEMA Index Protection Rating	IP20
Operating Temperature Range	Ambient Temperature
Operating Relative Humidity	85%

RELATED ACCESSORIES

• animeo IP Sub Controller	1860201
• Bus & Sensor Station Power Supply	1822440
• animeo IP DecoFlex 6-Button White *	1049424
• animeo IP DecoFlex 8-Button White *	1049425
• RTS Receiver for animeo IP	1049434
• Sensor Station Mast	9013726
• Compact Sensor Station	9015047

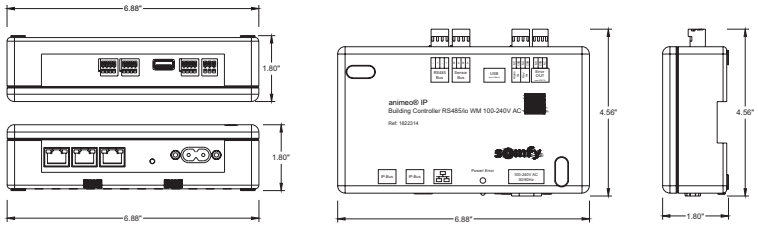
** Other color options are available*

WHAT'S IN THE BOX

- animeo IP Building Controller
- Power Cable
- Instructions

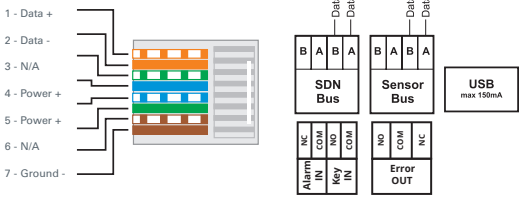
animeo® IP Building Controller

DIMENSIONS



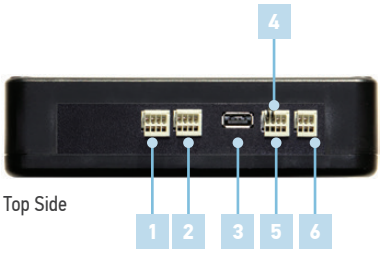
CABLE PINOUTS

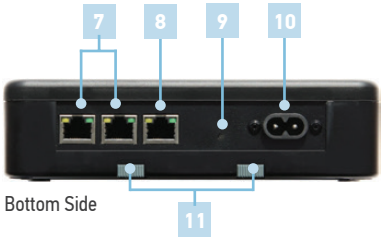
SDN Cable Pinout (RJ45 connector)
ANSI/TIA/EIA 568-B Standard



CONNECTIONS AND INDICATORS

	ELEMENT	FUNCTION
1	SDN Bus	Connection to SDN Bus
2	Sensor Bus	Connection to SDN sensor bus
3	Service	USB connection for service
4	Alarm Input	N/C input allowing for system override from 3rd party controller
5	Key In	N/O input allowing for system override from 3rd party controller
6	Error Out	Digital output for notification of system failure 24V DC @ 1A (N/C or N/O)
7	animeo IP Network	10/100 mbps Internal network for connecting to Sub Controllers
8	External Network	10/100 mbps Network connection to LAN for virtual keypads and remote access
9	Status Indicator	Solid Green = initial system boot up Rapid Green/Red Flash saving configuration Green Flash* = system normal Red Flash = system has experienced an error *Speed of flash indicates system load
10	Power Input	100V AC – 240V AC switching power supply
11	Din-rail mounting pins	For din-rail mounting





BEST WIRING PRACTICES

- **Alarm Input/Key IN/Error OUT:** Use two conductor 20-24 AWG cable
- **ALL Connections Below:** Category 5 or higher cable with a T568B pinout configuration
- **SDN Bus:** Wiring length to start of SDN bus should not exceed 30 ft
- **Sensor Bus:** The sensor bus should not exceed 4,000' in total wire length
- **External IP Network:** The external IP network cable should not exceed 330 ft
- **animeo IP Network:** The animeo IP network cable should not exceed 330 ft
- Max 200 Motors, but can be expanded to more using a Sub Controller

The diagram shown below is meant for illustrative purposes to show the connections from product to product. This device could be used in other configurations than shown below. For specification information on individual products see related product information. Follow all SDN wiring standards for distance limitations.