

## SDN PowerConnect™ Surface-Mount Panel

Part #1050661

#### **OVERVIEW**

The SDN PowerConnect" Surface-Mount Panel is a Somfy Digital Network" (SDN) bus distribution device used to add 10 isolated motor ports and two isolated device ports to an SDN bus segment. The isolated motor ports support up to 240 feet of power and data wiring to Somfy's range of low-voltage SDN motors. The in-wall or on-wall mountable plenum-rated enclosure offers easily accessible line and low-voltage areas for simplified installation. This product can be used in small SDN systems with two control devices and 10 individual motors as a stand-alone solution, and it can be scaled for larger SDN or animeo® IP systems

#### **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 integration devices. SDN is scalable and suitable for both small and large projects. The same components are used whether an SDN system remains stand-alone, is integrated into third-party automation systems, or is connected with Somfy's animeo® IP automated total solar management system.



#### **TECHNICAL SPECIFICATIONS**

Input	120V AC, 7.2A 230V AC, 4.2A					
inpur	277V AC, 2.7A					
Motor Output	24V DC 2.2A					
Material	Powder coated steel enclosure					
Dimensions	Cover	12 in. (W) x 12 in. (H)				
	Enclosure	12 in. (W) x 12 in. (H) x 4 in. (D)				
Maximum Wiring Distance	To motors	Up to 240 ft. per motor port. Somfy requires the use of the SDN Low-voltage Motor Power and Data Cable, available in both Plenum (US: #1049445) and Non-Plenum (US: #1049444) versions.				
	To devices	Up to 200 ft. per device port				
Operating Temperature Range	Ambient temperature					
Shipping Weight	12 lbs.					
Indoor use only						
Plenum-rated (UL 2043)						

## **FEATURES SUMMARY**

- Enables control of 10 RS485 DC motors per panel
- New mounting options add flexibility to installation
- Smaller form factor approx. 50% smaller volume
- UP/STOP/DOWN and SEQ buttons allow for testing of motor operation directly at the power panel
- Provides power to SDN Device Ports from internal power supplies (add a bus power source when adding a Data Hub or other bus-powered device connected to the bus line)
- Two device ports isolated from SDN bus
- Includes bus segment status LEDs for:
  - Power Activity
  - End of line notification
  - Protecting system components

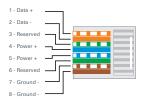
from mis-wire

- Can mount on-wall or in-wall (between
- c(VL)us

## **CABLE PINOUTS**

#### SDN Pinout

ANSI/TUA/EIA 568-B Standard



## Motor Input

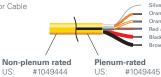


### **OPTIONAL ACCESSORIES**

- SDN Weidmüller 5-position Female Field Installable Connector 1049440
- SDN Weidmüller 5-position Male Field Installable Connector 1049441

#### SDN Low-voltage Motor Power and Data Cable

Somfy SDN Low-voltage Motor Cable Data and Power Cable 24V DC / SDN Contro 5 conductor cable



Orange = SDN RS485 (-) Orange/white = SDN RS485 (+) Red = power (+) Black = power (-) Brown = SDN RS485 ground

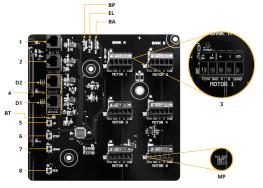
### WHAT'S IN THE BOX

- SDN PowerConnect™ Surface-Mount Panel
- (10) Low-voltage motor to panel connectors
- (2) Device adaptors
- 10 Female Weidmüller connectors

#### **CONNECTIONS AND INDICATORS**

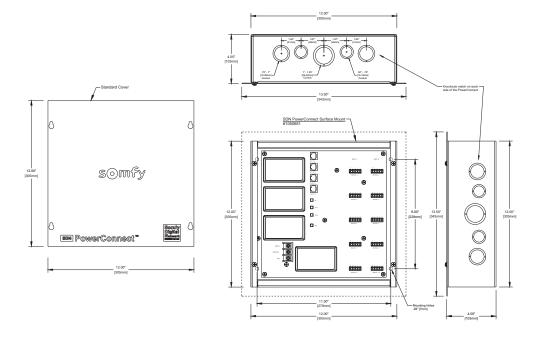
	INPUTS/OUTPUTS	DESCRIPTION	
1	SDN Bus Input	Input for bus signals	
2	SDN Bus Output	Output for bus signals	
3	Isolated Motor Port	10 low voltage motors to SDN network	
4	Device Ports	Connect SDN Device to Power Panel (1 SDN Device per port. max. 200 ft. each)	
	UP Button	Moves motors UP	
6	STOP Button	STOP motors	
7	DOWN Button	Moves motors DOWN	
8	SEQ Button	Moves motor sequentially UP/STOP/DOWN	

LED Indicators						
Label	Element	Color	Function ON	Function OFF		
	Device 1 LED	Yellow Green Red	Power (Green)	No power (Yellow) Power fault (Red)		
D2	Device 2 LED	Yellow Green Red	Power (Green)	No power (Yellow) Power fault (Red)		
	End of Line	Yellow	End of bus	Not end of bus		
	Bus Power	Green	Bus is powered	Bus not powered		
	Bus Activity	Green	Activity on bus	No bus activity		
	Button Activity	Yellow	Switch pressed	Switch not pressed		
МР	Motor Port Power	Green	Port powered	Port not powered		



# **SDN PowerConnect™ Surface-Mount Panel**

#### **DIMENSIONS**

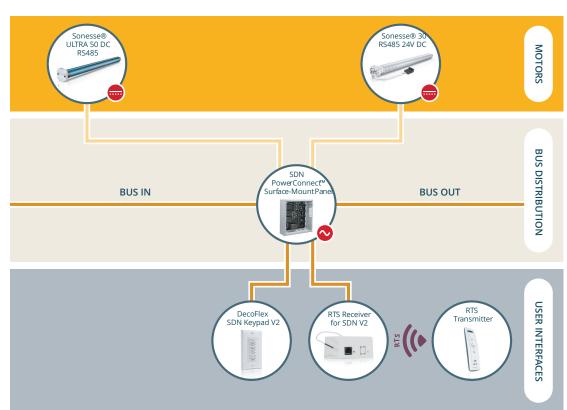


#### **BEST WIRING PRACTICES**

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

- Adds 10 isolated motor ports and 2 isolated device ports to a system.
- Each device port supports 1 device.
- Maximum 200 ft. per isolated device port.
- Motor wiring distance up to 240 ft per motor port. Somfy requires the use of the SDN Low-voltage Motor Power and Data Cable, available in both Plenum and Non-Plenum versions from Somfy.

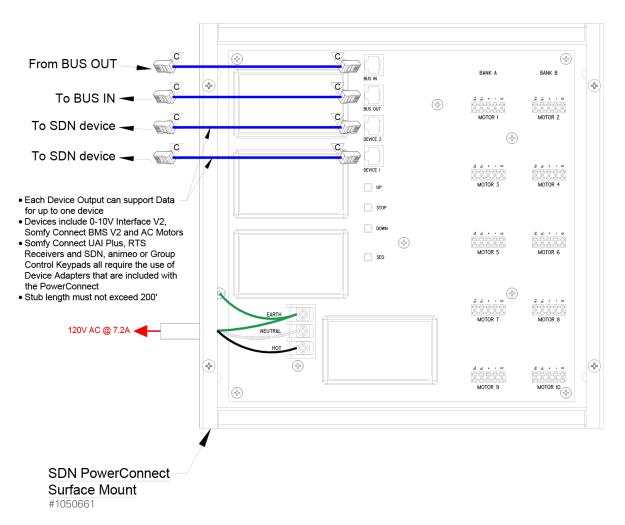
NOTE: Provides power to SDN Device Ports from internal power supplies. Consumes power from internal power supplies. Add a Bus Power Supply when adding a Data Hub, or other bus powered device connected to the bus line.



## **SDN PowerConnect™ Surface-Mount Panel**

## **PowerConnect Surface-Mount Wiring**





Wiring Distance to Motor

- · 240ft with 14AWG wire
- 150ft with 16AWG wire
- 100ft with 18AWG wire