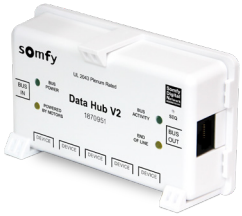
DESIGN GUIDE

SOMFY DIGITAL NETWORK™
SDN CONNECT









DESIGN GUIDE

SOMFY DIGITAL NETWORK™ - SDN CONNECT

VERSION 1.0 | AUGUST 2024 | Prepared by PROJECT SERVICES

TABLE OF CONTENTS

I. INTRODUCTION ---------- 3

II. OVERVIEW ---------- 4

SDN CONNECT BENEFITS

RESOURCES

TERMS TO CONNECT WITH

SDN CONNECT PRODUCTS

SDN CONNECT DESIGN GUIDELINES

GLOBAL SDN CONNECT REQUIREMENTS

POWER OPTIONS

III. PRECAUTIONS ---------- 13

LEGACY PRODUCT COMPATIBILITY

PROJECT PREPARATION

IV. PROJECT DESIGN ---------- 14

SYSTEM TOPOLOGY EXAMPLES

AC MOTOR SYSTEM – POWERED BY MOTORS

AC MOTOR SYSTEM – POWERED BY BUS

DC MOTOR SYSTEM – POWERED BY POWERCONNECT PANELS

DC MOTOR SYSTEM – POWERED BY BUS

AC & DC MOTOR SYSTEM – POWERED BY MOTORS & POWERCONNECT PANELS

AC & DC MOTOR SYSTEM – POWERED BY BUS

APPENDIX ---------- 20

A. SDN CONNECT PRODUCT LIST

I. INTRODUCTION

The Somfy Organization's strength has been demonstrated with 50 years of experience in motorization. As leaders in the shading industry with innovative and modern solutions for homes and commercial buildings, Somfy offers the widest range of strong, quiet motors and controls for all types of applications and technologies.

Who is this Guide for?

This guide is aimed at providing support and guidance to Somfy dealers designing a Somfy Digital Network™ (SDN) with the new SDN Connect line of products.

What does this Guide contain?

The sections of this guide contain descriptions and methods of designing a Somfy Digital Network™ (SDN) with the new SDN Connect line of products.

For questions or assistance please contact technical support:
(800) 22-SOMFY (76639)
Get answers to your questions from our Somfy FAQ page: www.somfysystems.com/en-us/support/faq
Follow the steps to access Service & Support.

How should this Guide be used?

This guide is intended to be used as a reference manual.

II. OVERVIEW

We understand that time is the most precious resource, which is why Somfy designed SDN Connect. This new line of Somfy Digital Network (SDN) products optimize time by being incredibly easy to specify, flexible to fit any space, and simple to deploy. Whether upgrading a single room, entire floor, or whole building, SDN Connect adapts to the project needs, making the process seamless and stress-free.

With a focus on user-friendly design, SDN Connect combines cutting-edge hardware and software to create a solution that's as intuitive as it is innovative.

SDN CONNECT BENEFITS

Simplified Design Guidelines

- Start or extend a Bus Segment from anywhere
- Power Data Hubs V2 and connected end devices with AC Motors

Reliable and Robust Features

- Mis-wire protection of system components
- Efficient distribution of bus power and data
- Automatic end of line termination
- LED indication of bus power and activity

Redesigned Products

- Compact rack-mount and surface-mount power panels
- Plenum-rated data hubs with quick access mounting brackets
- Isolated motor and device ports to reduce trouble propagation
- Improved front-facing status LEDs for at-a-glance visibility
- Sequence operation buttons for validation and troubleshooting
- Reduced power consuming controls

Set pro by Somfy

- New all-in-one SDN configuration software
- More productivity with streamlined operation and commissioning
- Import/export feature for offline editing of projects
- Built-in SDN troubleshooting tool

RESOURCES

Additional individual product information is available on somfypro.com
Discover more information about SDN Connect at www.somfypro.com/sdn-connect
Visit Somfy U for all the training you need – your pace, your place www.somfyu.com

TERMS TO CONNECT WITH

AC Motor: An alternating current (AC) or line voltage RS485 motor requires 120 volts AC power from an outlet/receptacle or hard-wired junction box.

Bus Distribution Device: A Bus Distribution Device is a connection point between the Bus Line and End Devices in an SDN Connect system. Bus Distribution Devices include SDN Data Hub V2 and PowerConnect Panels that may interconnect with each other.

Bus Line: A Bus Line or bus, in digital technology, is an electronic pathway through which data can be transferred. This pathway uses signals to communicate information between components within a digital network. Bus Distribution Devices are connected to the Bus Line.

Bus Power Source: A Bus Power Source supplies power over the Bus Line and Bus Distribution Devices to End Devices when they're not being powered directly by motors.

Bus Segment: A Bus Segment is a portion of the overall SDN Connect system. The distance of the segment depends on the number of devices on the segment and how they're powered. A Bus Segment can support up to 40 Bus Distribution Devices with up to 200 connected End Devices.

DC Motor: A direct current (DC) or low voltage RS485 motor requires 24 volts DC power from a Somfy wall-mount power supply or SDN PowerConnect panels.

End Device: An End Device includes any device that connects to an SDN Device Port. This includes RS485 motors (AC and DC) and SDN Connect local controls and Integration Gateways.

Home Run: A Home Run is cabling that extends from a centralized location to an End Device.

Integration Gateways: Integration Gateways, or interfaces, allow third-party control systems to integrate with the SDN Connect system.

Network Topology: Network topology is the arrangement of devices and their connections within a system. SDN Connect utilizes a perimeter or Home Run network topology.

Powered by Bus: A Bus Power Source provides power over the Bus Line to SDN Data Hubs V2, with less than 2 AC motors, to power connected SDN controls. There are multiple ways to power the SDN Bus Line via a Bus Power Supply, Bus Booster, or Data Panel.

Powered by Motors: Powered by Motors refers to powering an SDN Data Hub V2 and any connected controls by connecting 2 or more AC RS485 tubular motors to the SDN Data Hub V2.

RS485: RS485 is a standard serial communication method. Somfy uses a standard serial communication method.

Wire Stub: A Wire Stub is the low voltage cable run that connects the device port of a Bus Distribution Device to an End Device.

SDN CONNECT PRODUCTS

The following products are compatible with SDN Connect. Refer to the individual product pages at somfypro.com for complete specification sheets, installation instruction, technical drawings, or guides.
Refer to the Appendix for a complete list of SDN Connect products and accessories.

Bus Power Sources

An integral part of any SDN control, these devices support small to large SDN segments. The addition of the SDN Bus Booster allows for accomplishing even larger deployments.

Bus Power Supply - 1822440

The Bus Power Supply is a Bus Power Source that provides 24V power for a single Bus Segment. The Bus Power Supply does not power motors. This product is typically used to start an SDN Bus Segment that requires bus power.

Access the Bus Power Supply product page





SDN Bus Booster - 9027694

The SDN Bus Booster is a Bus Power Source that provides 24V power to the Bus Line. It can act as an in-line power extender that can be connected anywhere on the Bus or provide power to start a Bus Segment.

Access the SDN Bus Booster product page

SDN Data Panel - 1870260

The Data Panel is a Bus Power Source and Bus Distribution Device used to start or expand an SDN system. This device adds 4 isolated Bus Segments, perfect for a riser installation. The in-wall or on-wall mountable enclosure offers separated line and low-voltage areas for ease of installation.

Access the SDN Data Panel product page



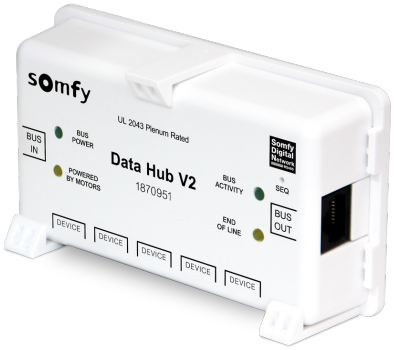
Bus Distribution Devices

These devices serve as the system backbone, relaying communication and providing power to connected End Devices. SDN PowerConnect™ Panels combine power and communication for centralized control for low-voltage solutions.

SDN Data Hub V2 - #1870951

The SDN Data Hub V2 is a Bus Distribution Device used to add 5 SDN device ports to a Bus Segment to connect End Devices. The device ports support Wire Stubs with a maximum length of 200 feet. The SDN Data Hub V2 can be powered over the Bus Line or locally by connecting 2 or more AC RS485 motors.

Access the SDN Data Hub V2 product page





SDN PowerConnect™ Surface-Mount Panel - #1871026

The SDN PowerConnect™ Surface-Mount Panel is a Bus Distribution Device used to connect 10 isolated low-voltage motor ports and two isolated SDN device ports to a Bus Segment. The in-wall or on-wall mountable plenum-rated enclosure offers easily accessible line and low-voltage areas for simplified installation. This power panel can be used in small SDN systems with 2 control devices and 10 individual motors as a stand-alone solution or scaled for larger SDN systems.

Access the SDN PowerConnect™ Surface-Mount Panel product page

SDN PowerConnect™ Rack-Mounted Panel - #1871027 (Single Kit) / #1871312 (Dual Kit)

The SDN PowerConnect™ Rack-Mount Panel is a Bus Distribution Device used to connect 8 isolated motor ports and two isolated SDN device ports to a Bus Segment. The rack-mountable enclosure comes in a 1U single or dual kit that allows up to 16 motors to be installed in a standard 19-inch AV rack.

Access the SDN PowerConnect™ Rack-Mounted Panel product pages:
Single Kit | Dual Kit



Motors

Engineered for quiet operation, our RS485 motors come in various torque levels and are compatible with both AC and DC power. They feature position control and provide feedback for precise adjustment.

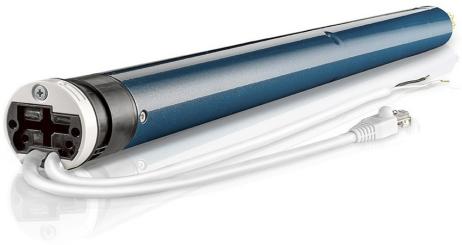
500 Series RS485 AC Motor

The 500 series RS485 AC motor range of line voltage motors are available in LT50, Sonesse® 50, and Sonesse® ULTRA 50 versions that require 120V AC power. Torque ranges from 6 to 35Nm. These motors connect to the Bus Line via an SDN device port with a grey data cable (sold separately).

Access the 500 Series RS485 AC Motor product pages:
Sonesse® ULTRA 50 | *Sonesse® 50* | *LT 50*



4-Conductor 26 AWG Modular Cable RJ9 to RJ45 (Power & Data, Grey)



Sonesse® 40 RS485 AC Motor

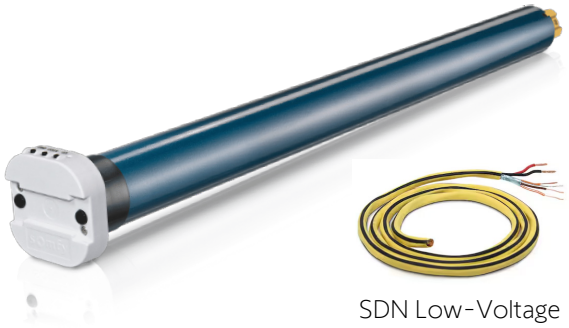
The Sonesse® 40 RS485 AC range of motors are line voltage motors that require 120V AC power. Torque ranges from 4 to 9Nm. These motors connect to the Bus Line via an SDN device port with a CAT-5e or higher cable connected to the 12 in. data pigtail and RJ45 coupler. The motors come standard with a 9.8 ft. open lead non-removable power cable.

Access the Sonesse® 40 RS485 AC Motor product pages:
4 Nm | *6 Nm* | *9 Nm*

Sonesse® ULTRA 50 DC RS485 Motor - #1134022

The Sonesse® ULTRA 50 DC RS485 Motor is a low voltage 24V 4Nm ultra quiet motor. These motors connect to the SDN system Bus Line via a PowerConnect™ Panel with SDN Low Voltage Power & Data Cable (sold separately).

Access the Sonesse® ULTRA 50 DC RS485 Motor product page



SDN Low-Voltage Power & Data Cable

Sonesse® 30 RS485 Motor - #1241144

The Sonesse® 30 RS485 Motor is a low voltage 24V motor 2Nm motor. These motors connect to the SDN Connect system via a PowerConnect™ Panel with SDN Low Voltage Power & Data Cable (sold separately).

Access the Sonesse® 30 RS485 Motor product page





SDN Module for Glydea® ULTRA Motors - #1871412

The SDN Module for Glydea® ULTRA Motors integrates Somfy's range of Glydea® ULTRA drapery motors into an SDN system. The SDN module connects to an SDN device port with a CAT-5e or higher cable. The module receives power directly from the motor.

Access the SDN Module for Glydea® ULTRA Motors product page

SDN Connect Controls

SDN controls must be Powered by Bus or Powered by Motors. Somfy keypads and remotes offer visual appeal and familiar ease of use. They are available in different configurations and colors.

DecoFlex SDN Keypad V2

The DecoFlex SDN Keypad V2 is a control that provides a wired, in-wall user interface for stand-alone SDN systems. Each keypad connects via an SDN device port. A DecoFlex SDN Keypad V2 communicates directly with SDN motors without the need for a centralized system controller. Controls are available in both 6-Button and 8-Button configurations in multiple colors with default engraved buttons.

Access the DecoFlex SDN Keypad V2 product pages:
White: 6-Button | 8-Button
Black: 6-Button | 8-Button
Group Control, White: 6-Button | 8-Button





RTS Receiver for SDN V2 - #1871471

The RTS Receiver for SDN V2 allows RTS transmitters to control SDN groups as part of a stand-alone SDN system. The RTS receiver connects via an SDN device port with a CAT-5e or higher cable connected to the receiver. The RTS receiver pairs with up to 5 RTS channels for UP/STOP/DOWN group control.

Access the RTS Receiver for SDN V2 product page

Integration Gateways

Integration devices enable a smooth connection with AV systems, lighting controls, or BMS systems for optimized comfort.



Somfy Connect™ Universal Automation Interface (UAI) Plus - #1870272

The Somfy Connect™ UAI Plus allows for commissioning and integrating SDN over an IP network. The embedded motor commissioning web interface streamlines SDN system configuration. The UAI Plus leverages the Somfy Synergy™ API with drivers from third-party control systems, making it easy to integrate with preferred third-party systems.

Access the Somfy Connect™ Universal Automation Interface (UAI) Plus product page

Somfy Connect™ BMS Interface V2 - #1871168

The Somfy Connect™ BMS Interface V2 provides communication and control between Building Management Systems and SDN systems. The BMS Interface communicates to the building management system via IP or serial protocols such as BACnet IP, BACnet MS/TP, and others to send and receive communication.

Access the Somfy Connect™ BMS Interface V2 product page





SDN 0-10V Interface V2 - #1870857

The SDN 0-10V Interface accepts the lighting industry standard 0-10V analog dimming signal and converts it to an SDN or animeo® IP commands to drive a single or groups of motors. The control is housed in a junction-box-mountable, plenum-rated enclosure and powered by line voltage.

Access the SDN 0-10V Interface V2 product page

SDN CONNECT DESIGN GUIDELINES

The SDN Connect design guidelines are simple to follow and are the key to integrating a reliable system. Refer to the following best practices.

Global SDN Connect Requirements:

Wiring

When creating an SDN Connect Bus Line, Category 5e (CAT-5e) or higher cable is required. All Cat5 cabling shall be terminated following the T-568B industry standard. To achieve the maximum 240 ft. distance for low voltage motors, the Somfy SDN Low-Voltage Power & Data Cable is available in plenum or non-plenum versions. Ensure plenum rated cabling is used for both Bus Line and motor wiring when required.

Bus Segments

Bus Segments are used to connect the Bus Distribution Devices in a system. The maximum distance between any two Bus Distribution Devices cannot exceed 2000 feet in any scenario. The maximum number of Bus Distribution Devices is 40 with up to 200 total connected End Devices per Bus Segment. These rules apply regardless of how the Bus Distribution and End Devices are being powered.

NOTE: Motors, Keypads, RTS Receivers, and Integration Gateways all count as End Devices.

The following scenarios are possible for SDN Bus Segments:

- 40 PowerConnect panels with up to 200 total connected End Devices
- 40 SDN Data Hubs V2 with up to 200 total connected End Devices
- A combined total of 40 PowerConnect panels and SDN Data Hubs V2 with up to 200 total End Devices

Stubs

A stub is the cable run from the Bus Distribution Device to the End Device. The connection will be made at the SDN device port of a Bus Distribution Device or the motor port for a DC motor. The distance must be measured according to the actual run of cable. The maximum distances and the type of cable per End Device is detailed in the table below.

End Device Type	Maximum Distance of Stub	Type of Cable
AC Motor, SDN Keypad RTS Receiver & Integration Gateways	200 ft.	CAT-5e or higher
DC Motor	240 ft.	SDN Low-Voltage Power & Data Cable

Somfy SDN Low-Voltage Power & Data Cable is recommended to achieve stub distances of 240 feet.

Power Options:

Powered by Bus

Each SDN Data Hub V2 can support up to 5 End Devices powered by the bus.
The maximum quantity of End Devices per Data Hub V2 is detailed below.

A keypad = 1 End Device Powered by Bus
An RTS receiver = 2.5 End Devices Powered by Bus

For example:

- 5 Keypads on 1 SDN Data Hub V2 = 5 End Devices Powered by Bus, this configuration is allowed
- 1 RTS Receiver and 2 keypads on 1 SDN Data Hub V2 = 4.5 End Devices Powered by Bus, this is allowed
- 1 RTS Receiver and 3 keypads on 1 SDN Data Hub V2 = 5.5 End Devices Powered by Bus, this is not allowed

When using a Bus Power Source (Bus Power Supply, SDN Bus Booster, or Data Panel) the distance from the power source to the last SDN Data Hub V2 and the total quantity of End Devices powered by the Bus must be considered. If a Bus Segment requires bus power, then use the table below for distance and bus distribution limitations.

Number of Bus Powered Data Hubs	Maximum Distance from Bus Power Source to last Data Hub V2 powered by the Bus	Maximum Number of Bus Powered Devices Allowed **1 Keypad = 1 Bus Powered Device & 1 RTS Receiver = 2.5 Bus Powered Devices*
6	2,000 ft.	30*
9	1,500 ft.	45*
13	1,000 ft.	65*
18	750 ft.	90*
24	500 ft.	120*
27	250 ft.	135*

Integration Gateways connect to any available SDN device port and do not require bus or motor power. These devices will require external power.

Powered By Motors Devices

Each SDN Data Hub V2 can be powered by connecting 2 or more tubular AC RS485 motors. The devices that can be powered by the motors depends on the number of motors connected. This method will supply enough power for DecoFlex SDN Keypads V2 or RTS Receivers for SDN V2 connected to the SDN Data Hub V2. Otherwise, bus power is required to power the End Devices.

Number of AC Motors (using Grey Data Cables)	Maximum End Devices on 1 Data Hub	End Device Options
2	3	Up to 3 Keypads OR 1 RTS Receiver
3	2	Any combination of 2 End Devices
4	1	Any single End Device

These limits can be repeated with an SDN Bus Booster until the Bus Segment limit of 40 Bus Distribution Devices with up to 200 connected End Devices per Bus Segment is reached, not to exceed 3 SDN Bus Boosters.

III. PRECAUTIONS

LEGACY PRODUCT COMPATIBILITY

Due to the advancements of the SDN Connect products, when expanding an SDN system built with legacy SDN products, it is recommended to start a new Bus Segment to ensure a stable and reliable system. Refer to the SDN Connect Design Guidelines section of this guide to start a new SDN Connect Bus Segment.

The Data Hub V2 is compatible with all current RS485 motors. Be sure to only use the Grey RS485 Data Cable RJ9 To RJ45 (with power) when connecting AC powered 500 Series RS485 motors. RJ45 Modular tee adaptors, splitters, or passive hubs should not be used with SDN Connect.

An SDN Device Adaptor is required to connect device ports to legacy SDN devices, such as SDN keypads, RTS receivers, or RS485 (SDN) Module for Irismo™ Motors. These devices are currently not compatible with the new Set pro by Somfy configuration software. For any scenarios where a mix of products may be required, contact Somfy for project assistance.

PROJECT PREPARATION

Somfy recommends a list of prerequisites when estimating and designing SDN projects. Refer to the below checklist to prepare for the next SDN Connect project.

- ❑ Obtain the project Plans & Specifications.
- ❑ Determine the Description of Operations defining the scope of work, specific functions of the system per the project specification, and the owner expectations of operating the system.
- ❑ Determine if the project will be a standalone SDN system, or when integrating with a third-party control system, be sure to identify the method of integration and the Somfy integration gateway to be used.
- ❑ Identify all power and data source locations (electrical rooms, IT closets, Main Distribution Frame - MDF, Independent or Intermediate Distribution Frame - IDF, routers, network switches, etc.) related to the scope of work, including the point of demarcation where a third-party control system connects.
- ❑ Obtain all documentation required for the project pertaining to the physical installation or specifications of any finished products, including blinds, shades, drapery tracks, or other applicable products.
- ❑ Determine the quantity and location of all motorized window coverings in the project, documenting the types of motors according to power needs per building, floor, room, group, etc.
- ❑ Determine the quantity and location of all keypads, RTS receivers, and RTS remotes in the project per building, floor, room, group, etc.
- ❑ Determine the quantity and location of all Bus Distribution Devices required to connect all End Devices according the quantity of AC or DC powered motors, SDN keypads, RTS receivers, etc.
- ❑ Determine the pathways of the Bus Segment and stub cabling where it may travel through the project spaces (interior, exterior, plenum, etc.), considering applicable codes and the SDN Connect Design Guidelines.
- ❑ Create a Bill of Materials documenting part numbers and quantities of each product and their accessories. Refer to the Appendix for a complete list of SDN Connect products and accessories.
- ❑ Create an itemized list of all responsibilities being assigned to all trades.

IV. PROJECT DESIGN

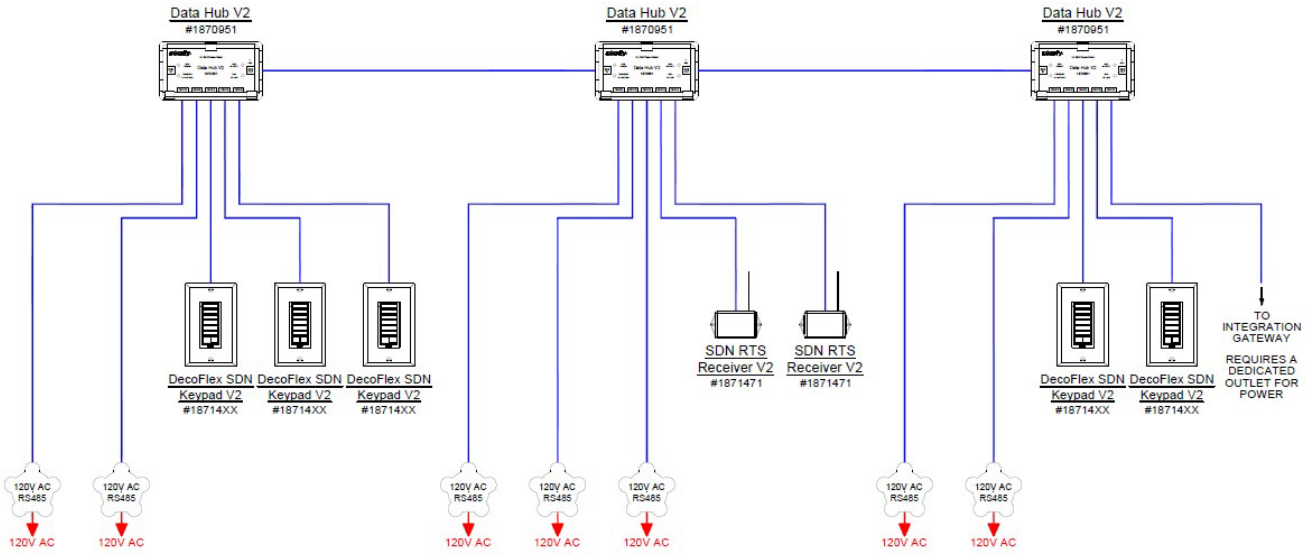
SYSTEM TOPOLOGY EXAMPLES

Each SDN Connect project can be approached in a simple manner. Determine if the SDN segment will require a Bus Power Source (Bus Power Supply, SDN Bus Booster, or Data Panel), then add the End Devices to the appropriate interconnected Bus Distribution Devices. Determine the type and quantity of motors to establish which system topology to build.

The following are basic system topology examples that meet the SDN Connect Design Guidelines. Visit the individual product pages at somfypro.com to view or download typical wire details and other document resources.

AC Motor System – Powered by Motors

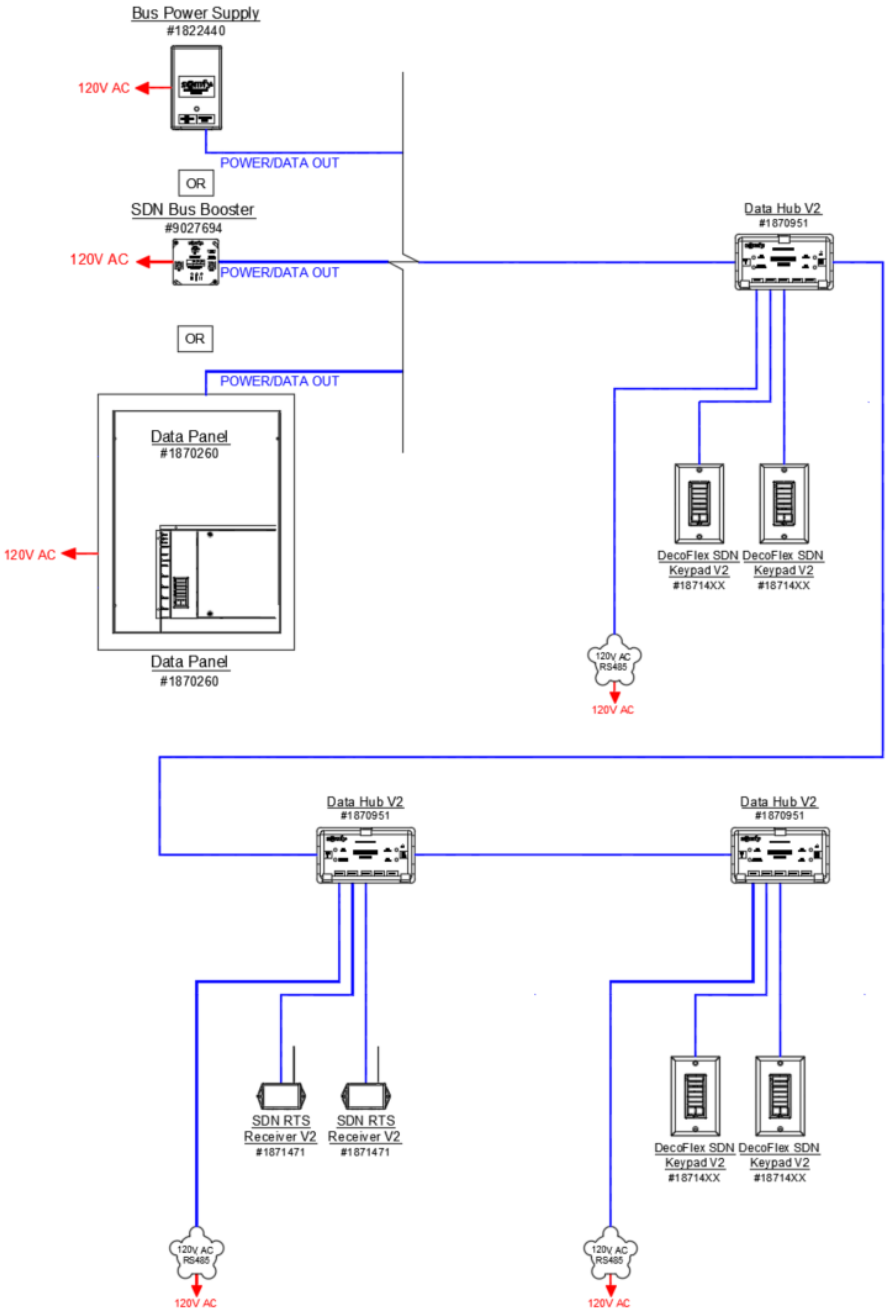
Refer to the SDN Connect Design Guidelines section for distance limitations



- The blue lines connecting to the End Devices are stubs. Each stub in this scenario can extend up to 200 feet from the connected Data Hub.
- There are 2 or more AC powered motors connected to each SDN Data Hub V2, which provides adequate power to the connected SDN Data Hub V2 and End Devices. Up to 5 AC powered motors can be connected to a Data Hub via the device ports.
- 3 AC powered motors need to be connected to a Data Hub to power 2 RTS receivers.
- An additional Bus Power Source (Bus Power Supply, SDN Bus Booster, or Data Panel) is not required in this configuration.
- Integration Gateways connect to any available SDN device port and do not require bus or motor power. These devices require a dedicated external power source.
- This Bus Segment can be expanded to include up to 40 Data Hubs with up to 200 connected End Devices.

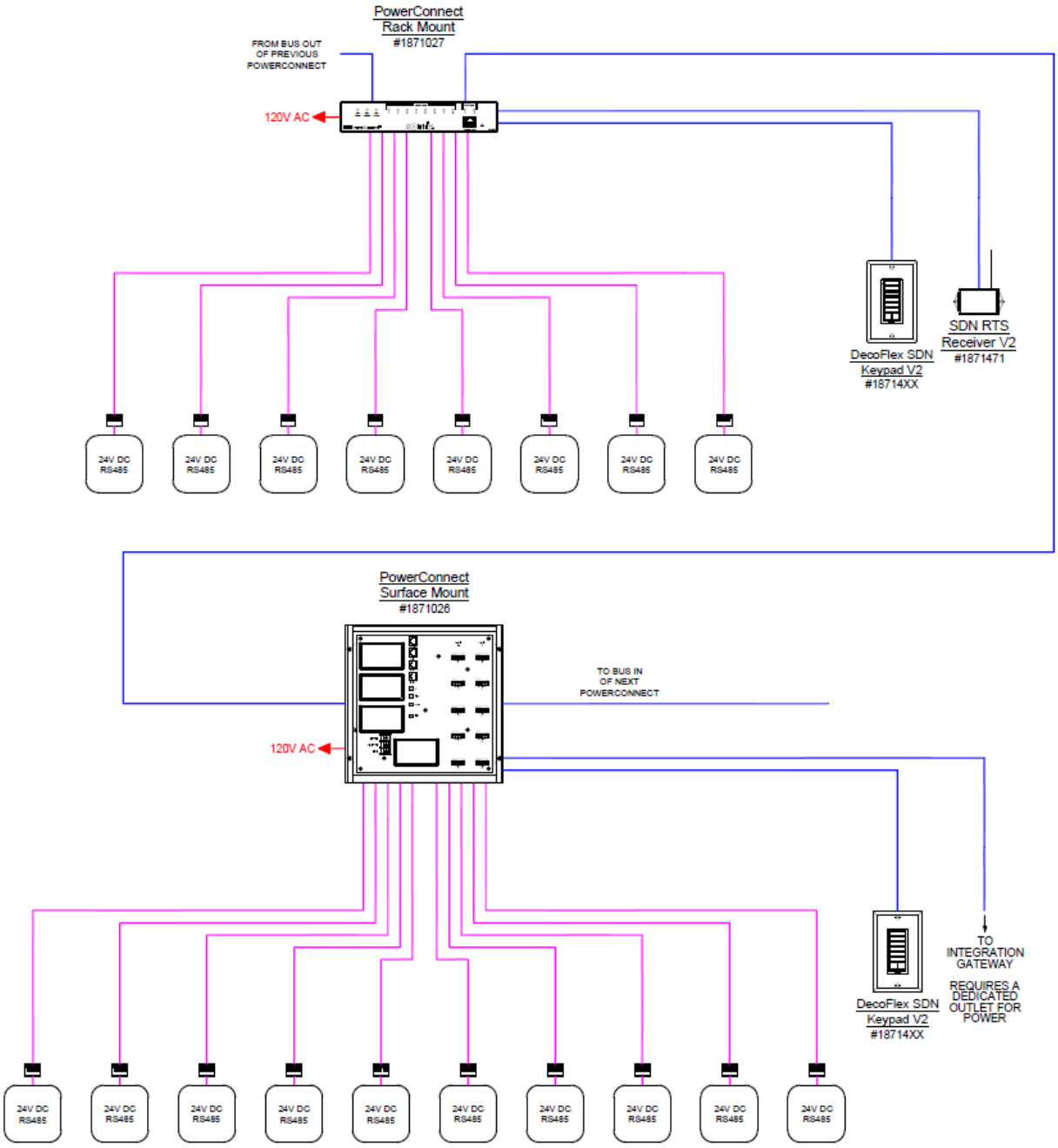
AC Motor System — Powered by Bus

Refer to the SDN Connect Design Guidelines section for distance limitations



- The blue lines connecting to the End Devices are stubs. Each stub in this scenario can extend up to 200 feet from the Data Hub.
- Since fewer than 2 AC RS485 motors are connected to each SDN Data Hub V2, a Bus Power Source is required for this configuration.
- This Bus Segment can be extended with an SDN Bus Booster until the Bus Segment limit of 40 Bus Distribution Devices with up to 200 connected End Devices per Bus Segment is reached, not to exceed 3 SDN Bus Boosters.
- If exceeding the Bus Segment limit, then create up to 4 segments using the Data Panel.

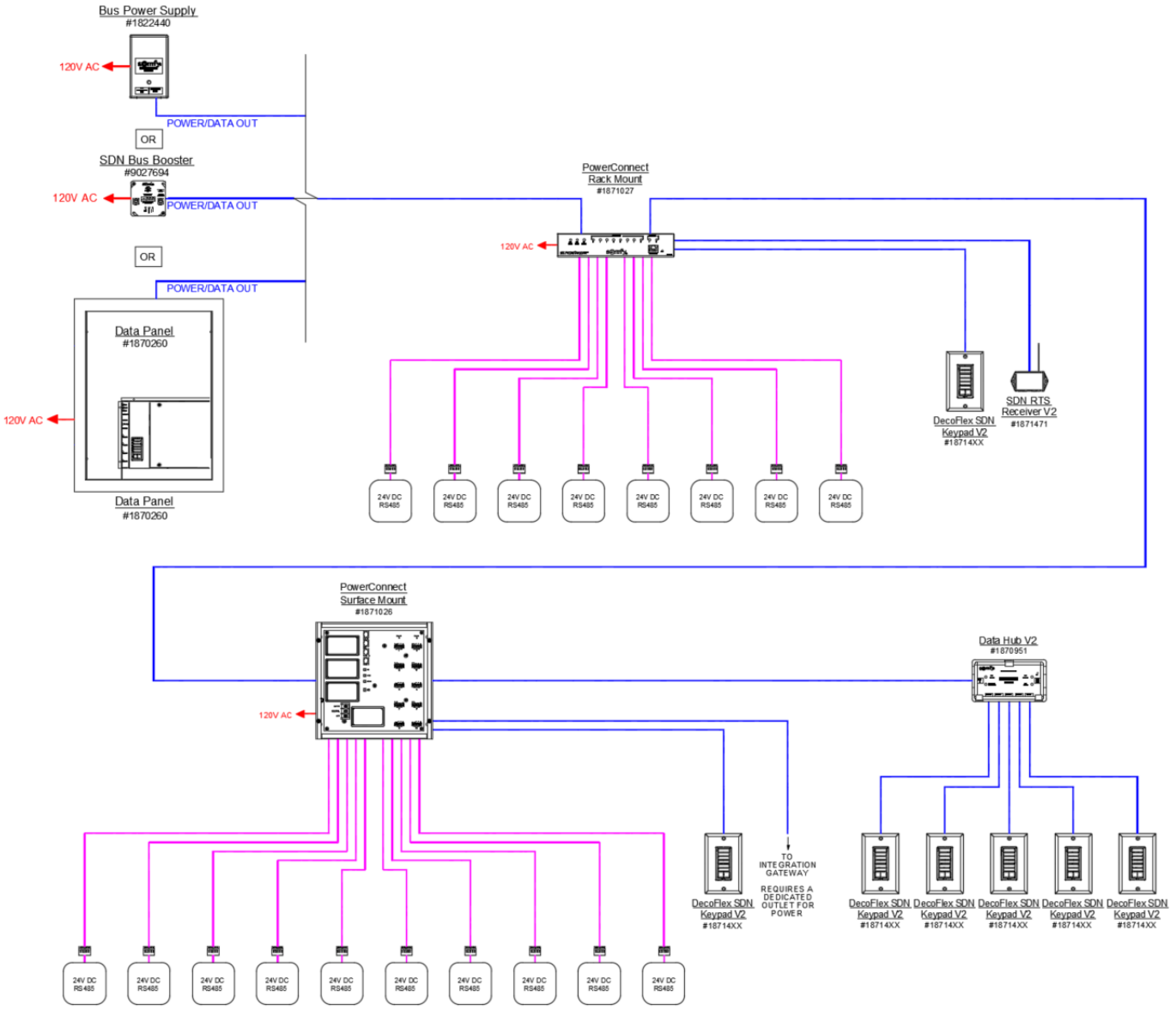
DC Motor System — Powered by PowerConnect Panels



- Blue and pink lines used for connecting End Devices are stubs:
    - Device port stubs can extend up to 200 feet from the PowerConnect Panel.
    - Low-voltage DC motor ports can extend up to 240 feet from the PowerConnect Panel.
- PowerConnect panels directly power their device ports and do not require bus or motor power.
- 8 DC motors can connect to PowerConnect Rack Mount Panels, and 10 motors can connect to PowerConnect Surface Mount Panels.
- An additional Bus Power Source (Bus Power Supply, SDN Bus Booster, or Data Panel) is not required in this configuration.
- This Bus Segment can be extended by interconnecting PowerConnect Panels until the Bus Segment limit of 40 PowerConnect Panels with up to 200 connected End Devices per Bus Segment is reached.

DC Motor System – Powered by Bus

Refer to the SDN Connect Design Guidelines section for distance limitations



- This scenario requires bus power because the SDN Data Hub V2 does not have any motors connected to power the Data Hub and End Devices.

- Blue and pink lines used for connecting End Devices are stubs:
    - Device port stubs can extend up to 200 feet from the PowerConnect Panel.
    - Low-voltage DC motor ports can extend up to 240 feet from the PowerConnect Panel.

- 8 DC motors can connect to PowerConnect Rack Mount Panels, and 10 motors can connect to PowerConnect Surface Mount Panels.

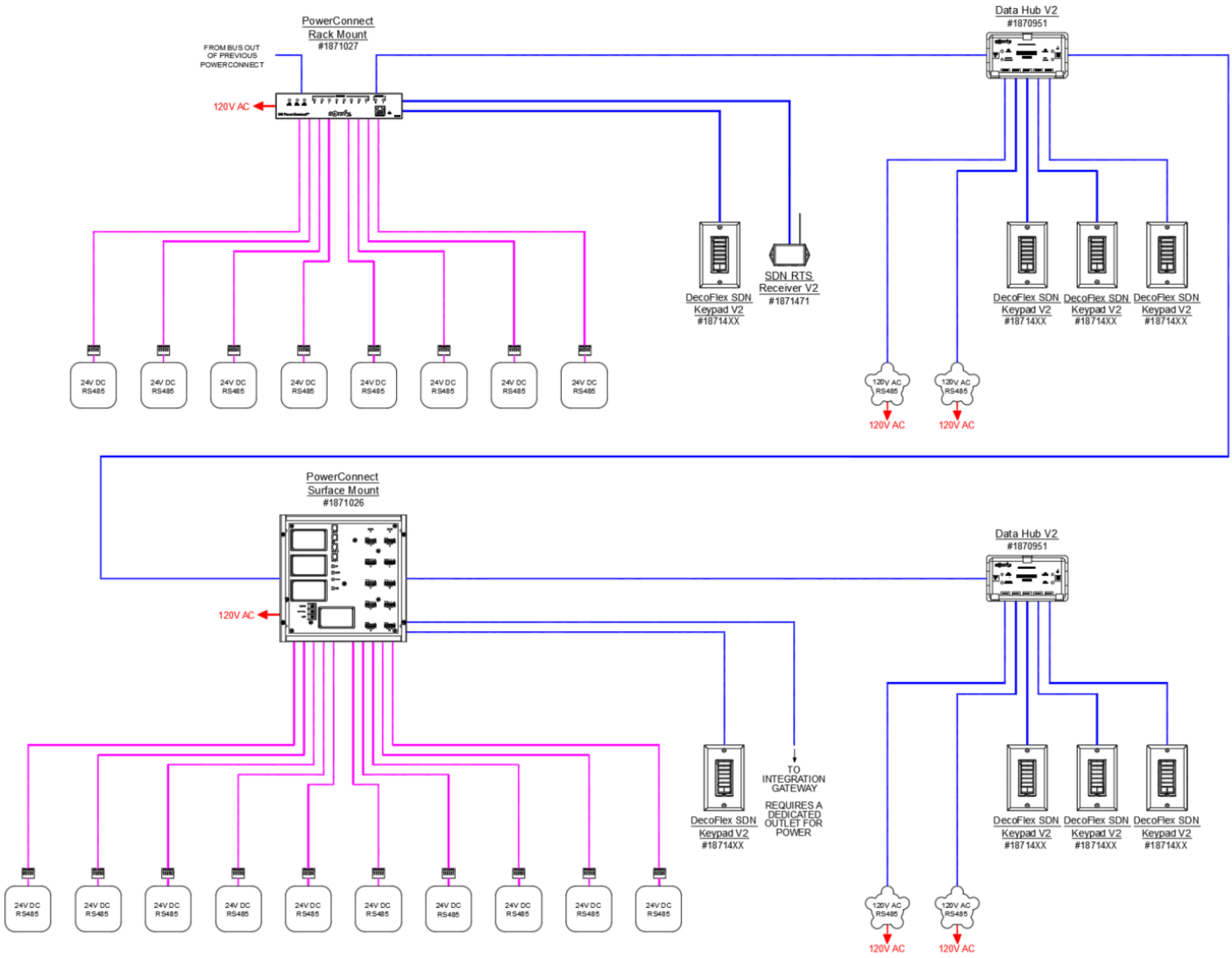
- A Bus Power Source (Bus Power Supply, SDN Bus Booster, or Data Panel) is required in this configuration.

- This Bus Segment can be extended by interconnecting Bus Distribution Devices until the Bus Segment limit of 40 Bus Distribution Devices with up to 200 connected End Devices per Bus Segment is reached.

- If exceeding the Bus Segment limit, then create up to 4 segments using the Data Panel.

AC & DC Motor System — Powered by Motors & PowerConnect Panels

Refer to the SDN Connect Design Guidelines section for distance limitations



- Blue and pink lines used for connecting End Devices are stubs:
  - Device port stubs can extend up to 200 feet from the PowerConnect Panel.
  - Low-voltage DC motor ports can extend up to 240 feet from the PowerConnect Panel.

- 8 DC motors can connect to PowerConnect Rack Mount Panels, and 10 motors can connect to PowerConnect Surface Mount Panels.

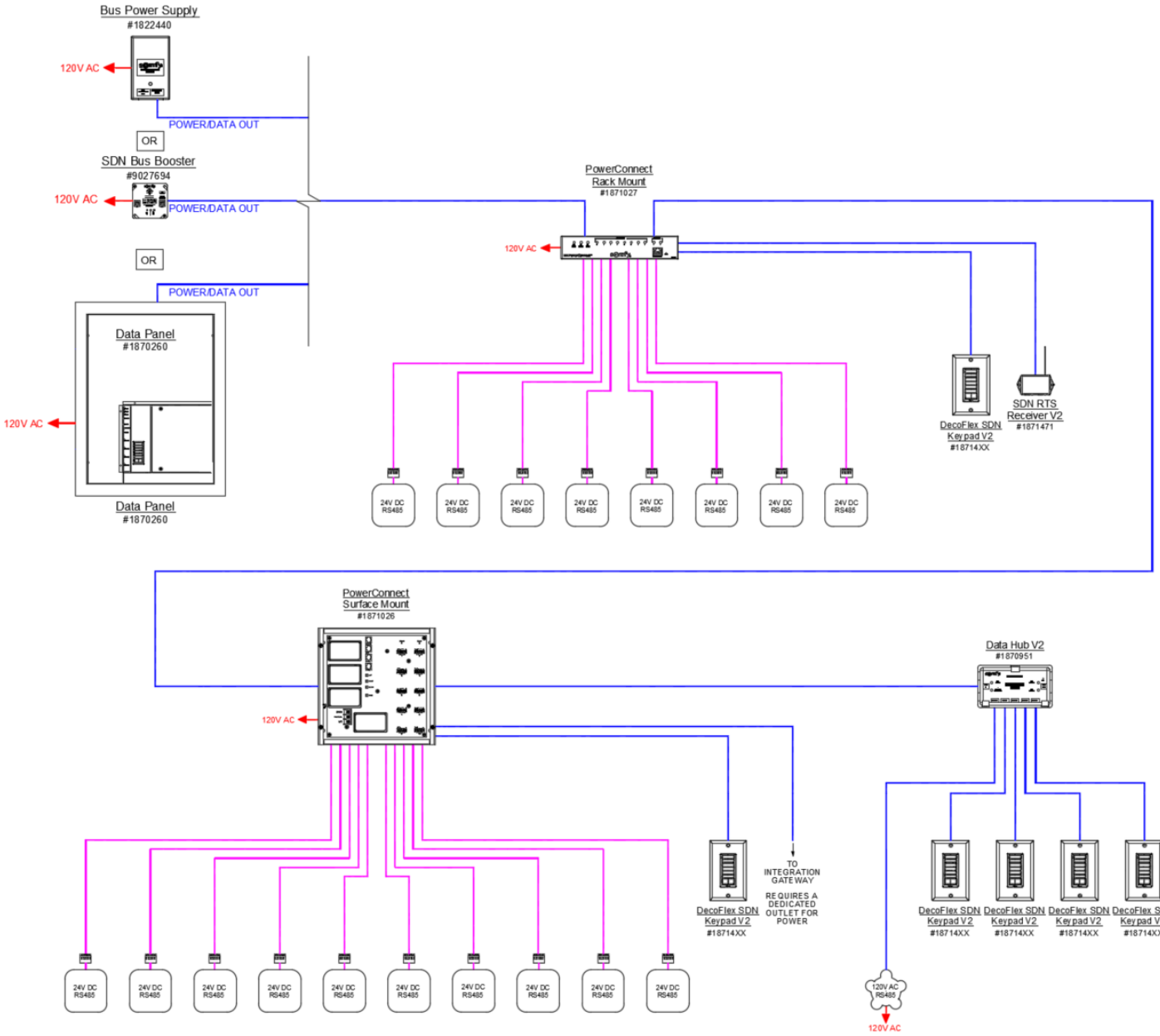
- There are at least 2 AC powered motors connected to each Data Hub, which provides adequate power to the connected Data Hub. Up to 5 AC powered motors can be connected to a Data Hub via the device ports.

- A Bus Power Source (Bus Power Supply, SDN Bus Booster, or Data Panel) is not required in this configuration.

- This Bus Segment can be extended by interconnecting Bus Distribution Devices until the Bus Segment limit of 40 Bus Distribution Devices with up to 200 connected End Devices per Bus Segment is reached.

AC & DC Motor System — Powered by Bus

Refer to the SDN Connect Design Guidelines section for distance limitations



- Blue and pink lines used for connecting End Devices are stubs:
  - Device port stubs can extend up to 200 feet from the PowerConnect Panel.
  - Low-voltage DC motor ports can extend up to 240 feet from the PowerConnect Panel.

- 8 DC motors can connect to PowerConnect Rack Mount Panels, and 10 motors can connect to PowerConnect Surface Mount Panels.

- A Bus Power Source (Bus Power Supply, SDN Bus Booster, or Data Panel) is required in this configuration.

- This Bus Segment can be extended by interconnecting Bus Distribution Devices until the Bus Segment limit of 40 Bus Distribution Devices with up to 200 connected End Devices per Bus Segment is reached.

- If exceeding the Bus Segment limit, then create up to 4 segments using the Data Panel.

APPENDIX

[APPENDIX A] SDN CONNECT PRODUCT LIST

Refer to somfypro.com for SDN Connect products and accessories information.

Motor Products	Reference
Sonesse® 30 RS485 24V DC	1241144
SDN Low-voltage Power & Data Cable, Non-Plenum Rated	9020126
SDN Low-Voltage Power & Data Cable, Plenum Rated	9020127
Sonesse® 40 RS485 404S2 without Fast Connector	1240562
Sonesse® 40 RS485 406A2 without Fast Connector	1240563
Sonesse® 40 RS485 409R2 without Fast Connector	1240564
Sonesse® ULTRA 50 DC RS485	1134022
Sonesse® ULTRA 506A2 RS485	1002566
Sonesse® 506S2 RS485	1002286
Sonesse® 510S2 RS485	1002287
515S2 LT RS485	1002427
535A2 LT RS485	1002288
RS485 DATA CABLE W/POWER RJ9 4-Conductor 26 AWG Modular Cable RJ9 to RJ45 - 2.5 ft. (Power & Data, Grey)	9018545
RS485 DATA CABLE W/POWER RJ9 4-Conductor 26 AWG Modular Cable RJ9 to RJ45 - 8 ft. (Power & Data, Grey)	9018546
RS485 DATA CABLE W/POWER RJ9 4-Conductor 26 AWG Modular Cable RJ9 to RJ45 - 12 ft. (Power & Data, Grey)	9018547
RS485 DATA CABLE W/POWER RJ9 4-Conductor 26 AWG Modular Cable RJ9 to RJ45 - 24 ft. (Power & Data, Grey)	9018548
RS485 (2-Way) Module for Glydea® ULTRA Motors	1871412
Glydea® ULTRA 35 DCT	1246115
Glydea® ULTRA 35 RTS	1246116
Glydea® ULTRA 60 DCT	1246117
Glydea® ULTRA 60 RTS	1246118

Control Products	Reference
SDN Bus Power Supply	1822440
SDN Bus Booster	9027694
SDN Data Panel	1870260
SDN Data Hub V2	1870951
SDN PowerConnect™ Surface-Mount Panel	1871026
SDN PowerConnect™ Rack-Mount Panel Single	1871027
SDN PowerConnect™ Rack-Mount Panel Dual Kit	1871312
24V DC 1.67A Wall Mount Power Supply	1822209
DecoFlex SDN Keypad V2 6-Button, White	1871479
DecoFlex SDN Keypad V2 6-Button, Black	1871495
DecoFlex SDN Keypad V2 8-Button, White	1871472
DecoFlex SDN Keypad V2 8-Button, Black	1871494
DecoFlex SDN Group Keypad V2 6-Button, White	1871497
DecoFlex SDN Group Keypad V2 8-Button, White	1871496
RTS Receiver for SDN V2	1871471
RS485 Motor Limit Setting & Address Reader Tool	9017142
USB to RS485 Adaptor for SDN	9015260
Somfy Connect™ Universal Automation Interface (UAI) Plus	1870272
Somfy Connect™ BMS Interface V2	1871168
SDN 0-10V Interface V2 Plenum Module	1870857
Device Adaptor	9029460

FOR QUESTIONS OR ASSISTANCE PLEASE CONTACT TECHNICAL SUPPORT:

(800) 22-SOMFY (76639)

Get answers to your questions from our Somfy FAQ page: www.somfysystems.com/en-us/support/faq

Follow the steps to access Service & Support.

somfy®

Make the move

About Somfy®

For over 50 years, Somfy has been pioneering innovative motorization and automated solutions for window coverings and exterior shading products. With comfort, ease of use, security, and sustainability in mind, our seamless and connected solutions are designed to help people make the move to living spaces impactful for humans and with a reduced impact on nature.

A BRAND OF SOMFY GROUP

Somfy Systems, Inc.
T: (800) 22-SOMFY
www.somfypro.com

New Jersey
121 Herrod Blvd.
Dayton, NJ 08810
T: (800) 22-SOMFY
F: (609) 395-1300

Florida
1200 SW 35th Ave.
Boynton Beach, FL 33426
T: (877) 22-SOMFY
F: (561) 995-7502

California
15301 Barranca Parkway
Irvine, CA 92618-2201
T: (877) 72-SOMFY
F: (949) 727-3510

Somfy ULC
T: (800) 66-SOMFY
www.somfypro.ca

6411 Edwards Blvd
Mississauga, ON L5T 2P7
CN: (800) 66-SOMFY
F: (905) 564-6446

© Somfy Systems, Inc. • **AUGUST 2024**
All brands, products, and trademarks are the property of their respective owners.