**Overview:**

The Bus Power Supply for Somfy Digital Network (SDN) provides 24V DC power for up to 100 controls and distribution devices on the SDN bus. A separate Bus Power Supply can be used for 1 Compact Sensor or 1 Sensor Station. The Bus Power Supply cannot be used to power motors. The Bus Power Supply is fault-tolerant, ensuring reliable operation should installation or wiring errors occur. Also provided is a SDN data pass-through input for in-line connection anywhere on the bus without splitters or hubs. For bus segments with more than 100 devices, multiple Bus Power Supplies can be joined through the pass-through connection providing power segmentation without additional wiring considerations.

**Technical Specifications:**

- Output: 24V DC 1.0A
- Input: 100–240V AC 0.55A
- IEC–320 C6 AC input (cord included - 26in.)
- Operating Temperature: 14°F to 140°F
- Size: 3.5"L x 2.12"W x 1.3"D
- Weight: 4oz
- UL Listed
- CE Approved

**Connections and Indicators:**

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>FUNCTION</th>
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</thead>
<tbody>
<tr>
<td>1 SDN Pass-through Input</td>
<td>SDN input connection for pass-through operation</td>
</tr>
<tr>
<td>2 SDN Power/Data Output</td>
<td>SDN output with pass-through data and power</td>
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</table>
| 3 Status Indicator | Blue = Powered normal operation
                  | Purple = Operating at excess of 80% capacity |
| 4 Power Input    | 100–240V AC                                   |
| 5 RST            | Reset (pin-button)                           |

**SDN Cable Pinout**

1 - Data +
2 - Data -
3 - N/A
4 - Power +
5 - Power +
6 - N/A
7 - Ground -
8 - Ground -
Wiring Best Practice:

1. **Powering a bus with data pass-through:** Utilizing the Bus Power Supply's SDN pass-through input, an active SDN bus can be plugged into the Bus Power Supply. The incoming data will be joined with the power output from the Bus Power Supply and routed to the output port. This scenario can be used in riser-based systems where the input is likely coming from a repeater. In larger systems with over 100 controls or distribution devices, an additional Bus Power Supply can be added in the middle of a wire run.

2. **Powering a bus without data pass-through:** Directly connecting the output of the Bus Power Supply to a SDN Data Hub (#9017623) will create a power-only connection. Use this configuration in systems where bus distribution is centralized in one location.

3. **Powering animeo IP® sensors:** The Bus Power Supply can be used to power the animeo IP Compact Sensor or Sensor Station. Connection is made from the Building Controller or Sub Controller sensor bus output to the Bus Power Supply's pass-through input. Then connect Compact Sensor or Sensor Station's outdoor sensor box to Bus Power Supply SDN Power/Data output. 

   **NOTE:** When powering an animeo IP sensor, one Bus Power Supply is required per Compact Sensor or Sensor Station.

4. **Powering devices during configuration:** The Bus Power Supply can be used for temporary power while configuring SDN components such as Keypads and RTS Receivers. Simply connect a USB to RS485 adapter (#9015260) to the SDN data pass-through input and the device to be programmed to the SDN Power/Data output.

**Wire Legend:**

- Standard category 5E data cable
- All data connections to power supply are standard RJ-45