Touchless Networking: A self-provisioning, simple way to network

Corning Touchless Networking is a self-provisioning network that leverages the benefits of a fiber- and power-deep architecture to enable applications like security cameras and simple access controls in hard-to-reach places.

Set it, and forget it. Or, upgrade it.

This simplified solution consists of a software-defined data plane (SDDP), Corning® ActiFi® composite cable, software-defined access nodes (SDAN), a power supply unit (PSU6), and a one-time software license fee.

As networks grow to add more devices and more users, this solution is easily upgradeable to a fully-featured software-defined LAN (SD-LAN) solution without ripping-and-replacing equipment or cables. A full SD-LAN solution is able to adapt to more complex networks like WLAN (multiple SSIDs) or audio/visual applications.

With minimal training, all members of Corning’s Network of Preferred Installers (NPI) Program are qualified to install the Touchless Solution.

Go the distance with Corning remote power solutions.

Leverage our remote power solutions to make distance and simplicity a reality. Our remote power solutions include:

- Power supply unit (PSU6), which offers up to 12 ports and requires only one rack unit per chassis
- Modular, 57 VDC power supply module (PSM-I)
- Class 3 rated copper/fiber ActiFi composite cabling that supports low voltage (Class 2, 57 VDC/100 W), as well as bulk power solutions.

Corning ActiFi cable is available in a variety of jacket types, fiber counts, copper conductor counts, and gauges to address different applications and infrastructure needs. Reel-in-a-box offering is available in lengths of 500 feet and 1,000 feet for certain configurations of indoor, tight-buffered composite cables.

Self-Provisioning Solution Enables Simple Networks Like Cameras
Enable IP applications at a distance.

Security cameras and access controls can be found almost everywhere these days, including parking garages, K-12 schools, retail facilities, and higher-education campuses. How to deliver those services can be a challenge.

Corning Touchless Networking can take power and data from the central telecommunications closet and power cameras via Class 2 low-power distribution along with PoE/PoE+ to help monitor the premises. It can also provide the data and power required for these simple networks over 1,800 feet from the equipment room without the need for installing a new electrical cable and outlet or mid-span equipment.

Provide power and connectivity to over 350 devices.

Touchless networking is compatible with Corning software-defined access nodes (SDAN) which are available in a variety of port counts and PoE capabilities. Leverage the 8-port SDAN at the edge to enable over 350 end devices from each touchless switch or software-defined data plane (SDDP). Various enclosures and edge hardware options are available for different environments.

Ordering information

Each 8293 SDAN kit can support either two PoE cameras or one PoE+ camera. Each Touchless Switch can support up to 44 SDAN kits. Please consult your local Corning Sales Engineer or local distributor for kitted options.

### Corning® ActiFi® Cable Distance Lengths

<table>
<thead>
<tr>
<th>AWG</th>
<th>30 W</th>
<th>60 W</th>
<th>75 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>590 ft</td>
<td>295 ft</td>
<td>235 ft</td>
</tr>
<tr>
<td>18</td>
<td>940 ft</td>
<td>470 ft</td>
<td>375 ft</td>
</tr>
<tr>
<td>16</td>
<td>1,500 ft</td>
<td>750 ft</td>
<td>600 ft</td>
</tr>
<tr>
<td>14</td>
<td>&gt; 2,000 ft</td>
<td>1,190 ft</td>
<td>950 ft</td>
</tr>
<tr>
<td>12</td>
<td>&gt; 2,000 ft</td>
<td>1,895 ft</td>
<td>1,500 ft</td>
</tr>
</tbody>
</table>

Notes: Consult Corning Solutions Architecture Team for Distances over 2,000 ft. Calculations in table based on following assumptions:
1. Temperature: +45°C
2. Wire type: Stranded copper
3. Power supply: PSU6-1U with PSM-I power supply modules
   a. 5 V maximum voltage output
   b. 100 W maximum power output
4. Minimum ONT input voltage: 48 V
5. These distances are estimated

### Edge Kit

- **1LAN-SDAN-8293**: SDAN, 1P+3GE PoE, 30 W composite PoE, -40°C to +60°C/5% to 90% humidity
- **1LAN-OA-UPC**: UPC Optical Attenuator
- **1LAN-SFP-4305BC**: BIDI SFP, 1,490 Tx/1,310 Rx (SFP installed in SDDP for each SDAN kit)
- **1LAN-SDAN-SCMRD**: 8293 Surface Mount Cradle — Surface mount with slack tray for indoor installation
- **1LAN-D600-ENC-3**: Outdoor enclosure for micro SDAN family (81XX, 82XX)
- **NID-FO-1724-AT**: Outdoor Enclosure (Rated IP43) — Fiber network integrated device with one fiber splice tray and one SC APC adapter

### Headend Kit

- **1LAN-SDDP-48P**: Touchless Switch — SDDP, 48-port (supports up to 44 SDAN kits)
- **1LAN-SDDP-SA54**: Touchless License
- **1LAN-SFP-10GB-LR**: 10 Gb/s SFP+ Transceiver Module, SMF, 1310 nm, 10 km
- **PSM-I**: Power Supply Module (supports up to 4 SDAN 8293 per PSM-I)
- **PSU6-1U**: 57VDC Power Supply Unit (supports up to 6 PSM-I)
Touchless Networking

Locations need bandwidth and power to enable networks like security cameras and simple access controls. Often, these devices are in remote locations with limited local power options and farther away from telecommunication rooms. Corning Touchless Networking with remote power is the solution for quick deployments at far distances.