The world of commercial real estate is embracing the smart building concept, where multiple in-building systems converge and communicate over a single infrastructure to optimize operations, sustainability, and tenant experience. Within the walls of these smart buildings, more connected devices come online every day, and emerging technologies like 5G and the internet of things (IoT) demand greater in-building bandwidth. Communications infrastructure is now considered the fourth utility, just as crucial to your smart building as electricity, water, and gas.

With connectivity driving your need for future-ready smart building networks, only fiber can go the distance to handle the requirements of multiple in-building applications and technologies at the edge.

Corning’s in-building fiber deep solution allows you to:

- Deliver virtually unlimited bandwidth and reliable connectivity that lasts the life of your building
- Support multiple integrated applications – in-building cellular, Wi-Fi, audiovisual (AV), BMS, LAN, security, and more
- Reduce your construction cost, energy consumption, and materials and space requirements
- Enable lower-cost, safe delivery of remote power to the network edge
- Simplify network management, control, and upgrades through single-pane-of-glass visibility
- Provide a strategic framework for smart building automation, tenant experience, and overall value

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Smart Buildings Need Smart Network Designs

Networks today are expected to deliver more tenant experiences and greater operational efficiencies than ever before. And that requires bandwidth and power that reaches to the edge of the network. In the past, needs were addressed reactively across multiple, disparate copper-based systems through costly, disruptive upgrades that required more cables, components, and space than a building could support. This is why many are searching for a way to design their network differently.

Considering bandwidth, power consumption, distance, and space, there is now a strong case for fiber deep infrastructure that makes the expensive rip-and-replace cycle caused by copper’s distance and bandwidth limitations a thing of the past.

The Corning In-Building Network Solution

**Software-Defined LAN (SD-LAN)**
Decoupling hardware and software for better network control and customization, Corning SD-LAN is self-organizing and centrally managed to simplify operation, integration, and scalability. SD-LAN provides high-bandwidth connectivity to building devices through composite cable with single-mode fiber that connects to software-defined access nodes (SDANs) that sit close to the network edge.

**Remote Powering**
Complementing the distance and simplicity of fiber, Corning remote powering solution consists of power supplies and Class-3 rated copper fiber composite cables for low-cost, safe delivery of reliable data and high and low voltage, as well as bulk power, to remote edge devices like SDANs. In turn, SDANs offer multiple software-managed ports that deliver fast network connections and Power over Ethernet (PoE) to any device at distances up to 2,000 feet.

**In-Building Cellular**
For 5G-ready in-building connectivity, Corning offers carrier-grade, approved signal source options — resulting in speedy installations of cellular coverage. These small cell, distributed antenna systems (DAS) and hybrid wireless solutions deliver a variety of services and frequency bands for maximum capacity and coverage across any property.

Corning’s in-building network solution—
the only solution you need for your smart building’s fourth utility.

Learn more at [corning.com/fiberdeep](http://corning.com/fiberdeep)