



Go the Distance with Corning Long-Reach Solutions

Providing Connectivity at the Edge

In today's world, campus-wide security cameras, blanket Wi-Fi, and perimeter access control prove essential for colleges and universities — but enabling these seemingly simple devices across a campus is often quite complex. These technologies often test the 100-metre distance limitation of copper cable networks, leading to maxed-out pathways, space constraints, and costly local power outlets. Fortunately, Corning's long-reach solutions can provide the cost-effective, "set it and forget it" connectivity you need at the edge.

What Long Reach Means For You

Connectivity isn't just for the classroom — safety and security depend on internet access at the far edges of your network. Whether you're powering a student's laptop or 24/7 blue light phones in a distant parking garage, speed and reliability are essential. When you need to go beyond the 100-metre distance limitations of traditional category cable, long-reach solutions help achieve connectivity up to 600-metres away without sacrificing bandwidth or power delivery.

Corning's portfolio of long-reach solutions includes the ActiFi® Hybrid Cable, the CIP (Corning Intelligent Power) Solution, and fibre-fed devices such as the 10G HPoE Media Converters.

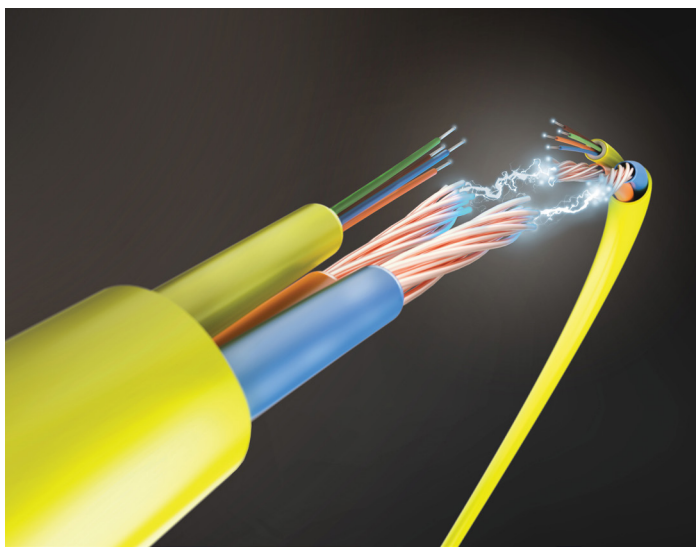
Corning's Long-Reach Network Architecture Key Components:

- Long-reach flexible cable infrastructure
- Intelligent remote power solutions
- Connectivity at the edge

Long-Reach Flexible Cable Infrastructure

ActiFi® Hybrid Cable

Achieve ultimate flexibility with Corning's ActiFi® Hybrid Cable, which delivers data and power to the very edge of your network by using both fibre and copper conductors under the same cable jacket. ActiFi is a Class-3 rated hybrid cable that supports low voltage (Class 2, 57 VDC/100 W) power. Because ActiFi can reach distances over 600 metres, this cabling choice is also ideal for long-reach or remote applications such as security cameras in a parking area or outdoor campus-wide Wi-Fi. Use this distance table to build the right end-to-end network for your project based on the specific power requirements at the edge.



ActiFi Composite Cable Distances
1 pair | Low voltage (57 VDC)

	30 Watts	60 Watts	75 Watts
20 AWG	179 m	90 m	71 m
18 AWG	286 m	143 m	114 m
16 AWG	457 m	228 m	182 m
14 AWG	>600 m	362 m	289 m
12 AWG	>600 m	557 m	457 m

Intelligent Remote Power Solution

Corning Intelligent Power (CIP)

The CIP Units are compact, scalable, low-voltage power supplies (Class 2, 57 VDC/100 W) that achieve ultimate port density to deliver more power with less space. 1-, 16-, and 32-port options are available and can be aggregated to provide more power (up to 800 W to a single device) and redundancy at the edge. Step down converters support both 56 V and 24 V loads from the same power supply. Various mounting options are available to gain deployment flexibility.

Connectivity at the Edge

Media Converter

The media converter provides a cost-effective solution to extend individual ports to devices at the edge, as it is interoperable with existing copper or fibre switches and is compatible with Corning's end-to-end fibre, power hardware, and connectivity solutions. Corning's 10G HPoE Media Converter supports 10G speeds and is backward compatible to support 1G or 2.5G as well as 90W PoE++ (HPoE) and is backward compatible to support PoE, PoE+, PoE++ (60 W) / 802.3bt. Additionally, it allows for deployment flexibility with small-form-factor and DIN-rail mounting over a wide range of operating temperatures.

Choose a Fast and Secure Campus Network

Corning's long-reach solutions offer cost-effective, reliable, and scalable connectivity that can enable the deployment of complex technologies across campuses. We offer a streamlined architecture that can adapt to future needs and grow with educational institutions. Contact us today to learn more about how our long-reach solutions can benefit your campus.

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