



Cisco Digital Ceiling

Digital Ceiling Opens Door to New Business Opportunities

What if your building was not only smart, but the systems in it were easily and securely connected? What if, for instance, a lighting system could do far more than just illuminate? What if your building could help you save money, improve worker productivity, and sell more? And even help you make better business decisions?

That's the potential of Cisco® Digital Ceiling solutions. With a growing Digital Ceiling partner community, Cisco helps customers converge disparate building systems, including lighting, heating, cooling, sensors and other types of actuators on a single IP network. This can increase building efficiency and enable new user experiences across building domains.

The easiest way to move to the Digital Ceiling is to begin with flexible, LED lighting powered by the network and relying on Cisco Catalyst® switches.

Enhance Customer and Worker Experiences

In the Digital Ceiling, sensors are embedded in luminaires. These sensors track information and share this data with other building systems on the network. Now, users can customize temperature, as well as lighting color, intensity, and direction. The high color-rendering index (CRI) in the latest generation of LED lights allows you to closely approximate natural light, which has been shown to increase sales, improve student learning and employee productivity, and even help reduce pain.¹

At the same time, sensors on those luminaires know not only that someone is in a room, but also how many people. It can also communicate increases or decreases directly to HVAC systems on the combined IP network to alert that system when to pipe more fresh air in a crowded conference room.

Benefits

- **Boost user productivity and comfort** with spaces, lighting, and temperatures that match individual preferences.
- **Lower costs** across your building with quick, easy-to-install and managed Power-over-Ethernet (PoE) LED lighting.
- **Reduce energy consumption** using building systems with integrated sensors on a single IP network that automatically adjust temperature, and light intensity and usage.
- **Increase revenue opportunities in retail environments** by using special colors to feature items, match sales to ad campaigns and guide customers to items they want to find.

¹ Jasmin Malik Chua, "Natural Light Gives You Smarty Pants," Treehugger, August 28, 2007, <http://www.treehugger.com/culture/natural-light-gives-you-smartypants.html>; Anjali Joseph, "Impact of Light on Outcomes in Healthcare Settings," The Center for Health Design, 2006, <https://www.healthdesign.org/chd/research/impact-light-outcomes-healthcare-settings>; Bristolite Daylighting Systems, "Retail and Daylighting: How Natural Light Can Improve Big-Box Retail Revenue," October 8, 2013, <http://www.bristolite.com/blog/retail-and-daylighting-how-natural-light-can-improve-big-box-retail-revenue/>.

Save Money

A Digital Ceiling can bring significant savings in both installation and ongoing energy costs. Because it's powered by your IP network, there's no need to install expensive electrical conduit. You use Cat5e, Cat6, or Cat6a cables to connect to Cisco Catalyst switches, which have been optimized for PoE lighting with a number of Cisco and industry technology innovations. Converging lighting with other disparate networks, such as HVAC, metering, closed circuit television (CCTV), and physical security, helps further lower capital and operational expenses across your architecture.

Next Steps

If you are planning a new building or a major retrofit, are considering a move to just lighting powered by the network, or a complete Digital Ceiling framework, find out how Cisco and its global partner community can help with your project. Contact us at DigitalCeiling@cisco.com or visit <http://www.cisco.com/go/digitalceiling>.