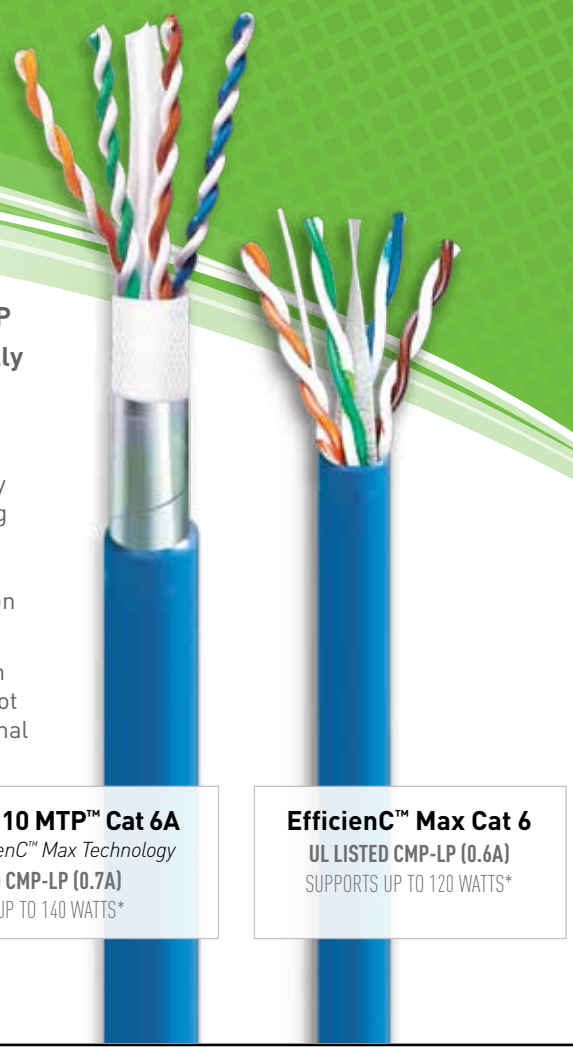
GenSPEED EFFICIENC MAX

UL LP Listing

Simplifying Considerations for PoE



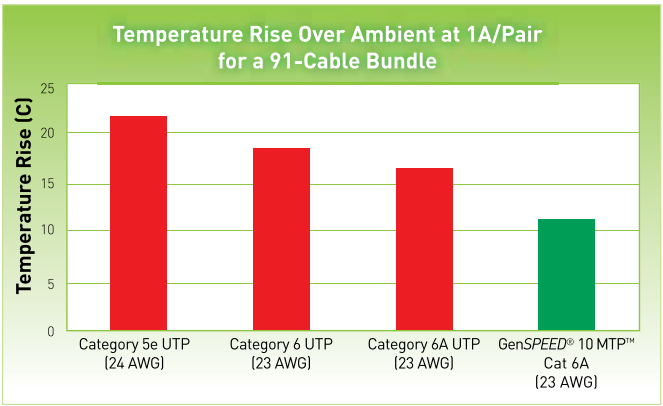
GenSPEED® 10 MTP™ Cat 6A
Featuring EfficienC™ Max Technology
UL LISTED CMP-LP (0.7A)
SUPPORTS UP TO 140 WATTS*

EfficienC™ Max Cat 6
UL LISTED CMP-LP (0.6A)
SUPPORTS UP TO 120 WATTS*

Protect your network infrastructure using the industry's first UL Listed LP cabling. LP ensures installations are future-proofed against the continually evolving Power over Ethernet (PoE) standards.

In the past decade, we have seen the progressive growth of PoE technology. With the current Institute of Electrical and Electronics Engineers (IEEE) standard allowing only a maximum of 30 W and industry pressure to increase power delivery, IEEE is working on a new revision with expected powering schemes up to a maximum of 100 W. Other technologies are also being developed with similar high-powering schemes, such as HDBaseT™ to power video displays using over 100 W while transmitting high-resolution signal and an internet connection.

As the power is increased across four-pair Ethernet cables, the heat generated within the cable increases as well. While extensively studied in the past, cable heating has not been a cause for concern with previous powering schemes. However, with the additional heat generated from the increased current load, it is not difficult to push the cables beyond their rated temperatures. The simplest method to counteract the added heat rise is to increase the copper diameter, but other cable design parameters have shown to improve the cable's effectiveness. The table below shows the temperature rise of various data cables of different constructions.



Recognizing the amount of confusion and considerations to be had for PoE-use cases, Underwriters Laboratories (UL) has developed a new listing category called Limited Power (LP). The new LP listing provides a simple way to ensure installations are future-proofed against the ever-increasing PoE standards, not susceptible to performance issues caused by heat generation. It accounts for large bundle sizes, high ambient temperatures and other issues related to environmental effects such as enclosed spaces or conduits.

The new LP listing is denoted as a suffix and is followed by the ampacity rating of the particular cable. The EfficienC™ Max Category 6 plenum cable is now UL Listed CMP-LP (0.6A) and supports up to 120 watts using 50 volts over four pairs, while the plenum version of GenSPEED® 10 MTP™ Thin-Profile Category 6A featuring EfficienC Max technology is UL Listed CMP-LP (0.7A) and supports up to 140 watts using 50 volts over four pairs.*

**UL Listing CMP-LP (0.7A) applies to plenum version. For UL Listing CMP (0.7A), 0.7A is the ampacity rating of the cable, which equates to 140 watts using 50 volts over four pairs. For UL Listing CMP (0.6A), 0.6A is the ampacity rating of the cable, which equates to 120 watts using 50 volts over four pairs.*

General Cable

4 Tesseneer Drive, Highland Heights, Kentucky 41076-9753

Telephone: 859.572.8000
800.424.5666 (U.S.)
800.561.0649 (Canada)
Email: info@generalcable.com
www.generalcable.com

Form No. DAT-0166-1015