

# Bridging the multi-gig Ethernet gap

## Demand for multi-gigabit connections

Fueled by the introduction of technologies like Wi-Fi 6E, the number of connected multi-gigabit devices is surging. Many center on 2.5 and 5 Gbps applications.

## The multi-gig donut hole

The 2.5G/5G “donut hole” is a challenge for enterprise network managers.

Can't ensure standard-based support with conventional Cat 5e or Cat 6 cabling

**BUT**

Not enough bandwidth demand to justify a complete upgrade to 10G-capable Cat 6A

## What are your options?

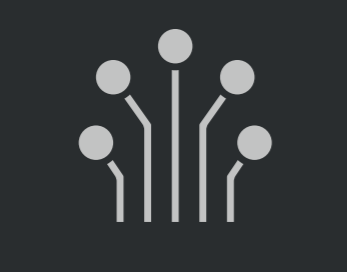
### OPTION #1:

#### Use existing Cat 6 according to NBASE-T Guidelines

NBASE-T Guidelines (2016) enable twisted-pair copper cabling to operate at 2.5 Gbps and 5 Gbps for distances of up to 100 meters, assuming the mitigation of any performance risks. Therein lies the problem.

At 2.5 GbE, the Cat 6 risk is low, and at 5 GbE it's medium. The risks for Cat 5e are even more severe.

Mitigation involves one or more steps:



Separating equipment cords



Setting equipment ports to “auto-negotiation” mode



Unbundling horizontal cabling



Using non-adjacent ports for higher speed

If mitigation fails then...

### OPTION #2:

#### Rip out the Cat 6 cabling and replace with Cat 6A



Significant network downtime



Highly disruptive to daily workflow



Costly and resource intensive



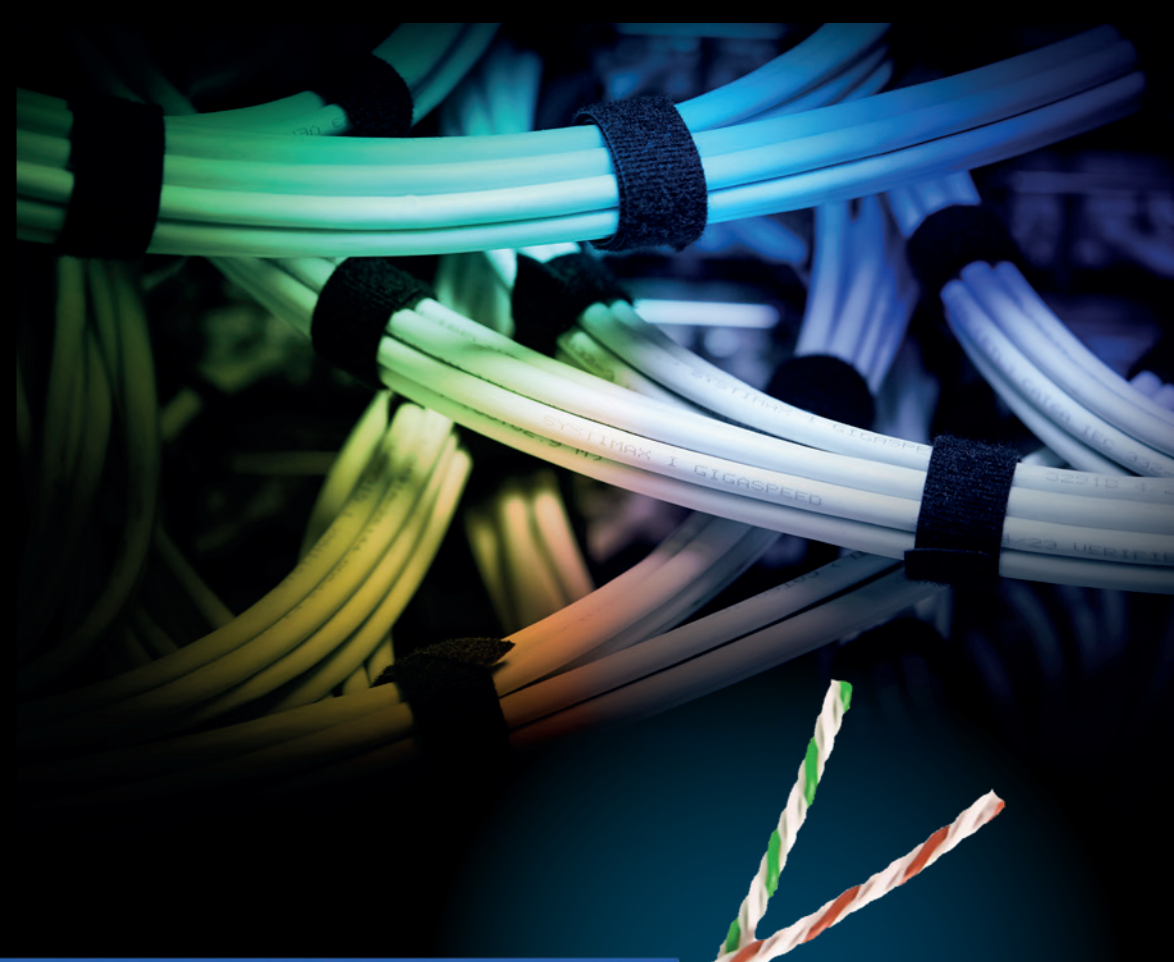
Difficult to justify if you're only using half the available bandwidth

## ...or think outside the category!

## SYSTIMAX<sup>®</sup> GigaSPEED<sup>®</sup> XL5

A Cat 6 solution that supports 2.5 and 5 GbE up to 100 meters... no mitigation or upgrades required.

- Patented variable twist/strand technology greatly improves internal/alien crosstalk performance
- An end-to-end solution
- Supports up to 5 Gbps in a four-conductor 100 m channel with fully bundled horizontal cables
- Ideal for connecting devices like in-ceiling Wi-Fi 6E access points, IP security cameras and more



### Use your existing XL installation tools and procedures



Cable diameter is nearly identical to GigaSPEED XL Cat 6 solution



Pack more bandwidth and performance in a compact footprint



Reduce your cost of installation, equipment and training

### Perfect timing

The transition from Wi-Fi 6 to more bandwidth-heavy Wi-Fi 6E or Wi-Fi 7 has begun.

But applications requiring 2.5G and 5G support are growing.



IP surveillance and security



Video conferencing /collaboration



Support Power over Ethernet (PoE)



Server-to-switch connectivity



High-performance workstations



Campus WLANs

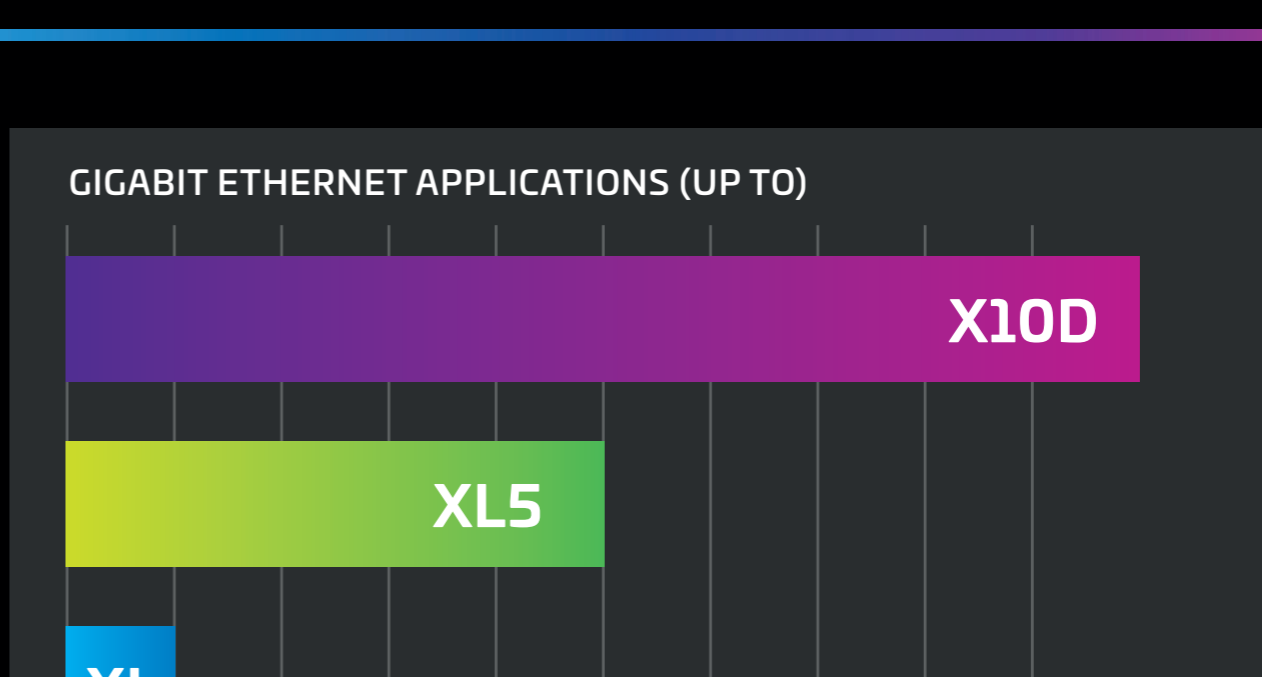
## Bridge the gap

A solution that supports 2.5 and 5.0 GbE bandwidth demands without mitigation or upgrades.

The latest addition to the SYSTIMAX GigaSPEED family of copper solutions.

Seamlessly evolve as your bandwidth demands increase.

Available now as part of the new SYSTIMAX 2.0 portfolio.



## GigaSPEED XL5: in a category all its own

### Cat 5e



**Not dead yet...**

Don't even think about pushing it to high speed

HIGH RISK

### Cat 6



**Keeps running**

Expect at least “moderate” maintenance if/when pushed to higher speed

MEDIUM RISK

### XL5



**Brand new**

Built to work at higher speed. Comes with bumper-to-bumper dealer warranty

ZERO RISK UP TO 5G

### Cat 6A



**Assured to work at highest speeds**

Most future ready

FUTURE READY

Contact your SYSTIMAX representative to find out more