

# What's Big Data And Ethernet Have To Do With Commercial Vehicles?

FIND OUT

To meet today's needs in the industrial and commercial transportation industry, bandwidth is crucial. So too is having a highly sophisticated infrastructure. And that's where big data, ethernet, and TE Connectivity solutions come into play. We've been serving the unique needs of the truck, bus, and off-highway markets for more than 30 years. We are the vital link in your data chain because we understand the challenges you face today and tomorrow:

## Challenge #1

# Buried in big data?

## Big data is big, and it's exploding even more. Why?

Because more people with more tools are generating more information than ever before. Think advanced analytics, artificial intelligence (AI), deep learning, machine learning, and more. Are you staying on top of the data trends?



## 2.5 quintillion bytes Of data created every day, according to many analyst estimates.

\$260 billion

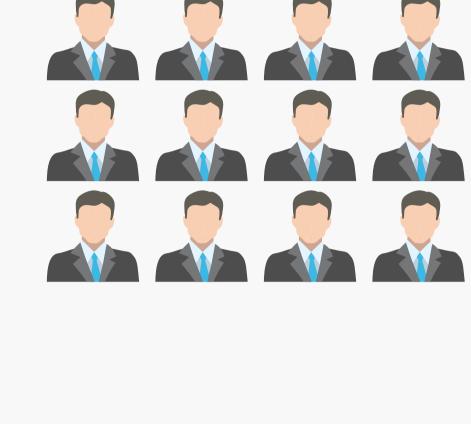
Value of data analytics market by 2022,



# Of enterprise executives agree that companies who do

according to IDC<sup>1</sup>.

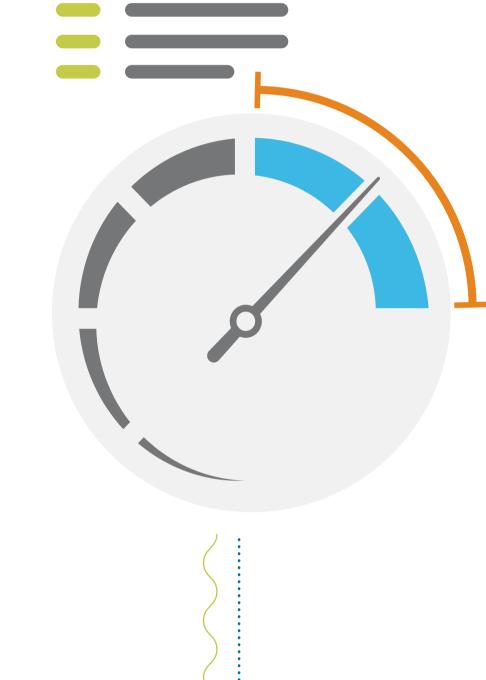
not embrace Big Data will lose their competitive position and could face extinction. (Source: Accenture study)<sup>2</sup>



### Of executives are pursuing Big Data projects to seize a competitive edge.

Challenge #2

## Got bandwidth for more content? Your need for speed. Big data is driving broadband connections for industrial and



### development. In fact, your organization may be constantly looking for larger bandwidth and connectivity. As commercial vehicles, like their automotive counterparts, become increasingly connected and defined by software, these software-enabled features are generating massive amounts of data — with data distribution now critical. Enter even faster Ethernet. It has become a way to accommodate faster transmission and more data delivery in the industry, offering increased data speeds across the entire network. It allows you to attach a larger number of devices to a network in addition to offering more efficient data management. Are you keeping up with bandwidth and speed requirements?

commercial vehicles and, in turn, driving new product

100 Mbps By 2025 Broadband speeds will Downstream speed will be even more critical for be widespread in most

the digital economy

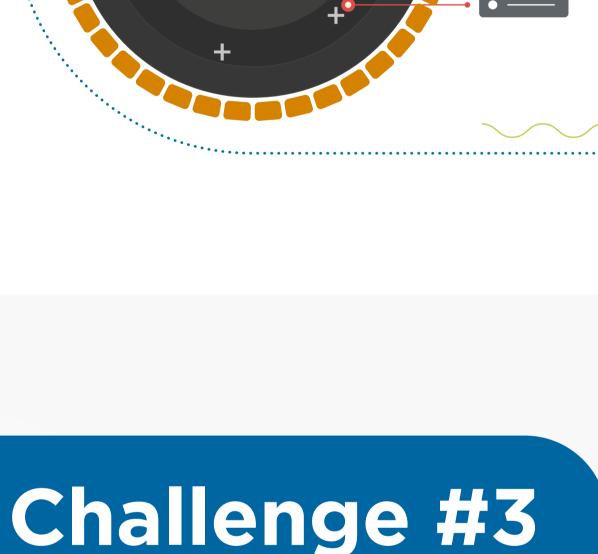
### 10X Growth of data exchanged today by vehicles is 15,000 pieces and will grow to 100,000

1.6 Terabits/s

pieces of data by 2020

of the world

As it rolls out will enable multi-gigabit speeds and massive capacity over short distances — fertile ground for new applications



# 2018 Ethernet Roadmap (Ethernet Alliance)<sup>3</sup>

frame — with dust, dirt, moisture, and temperature

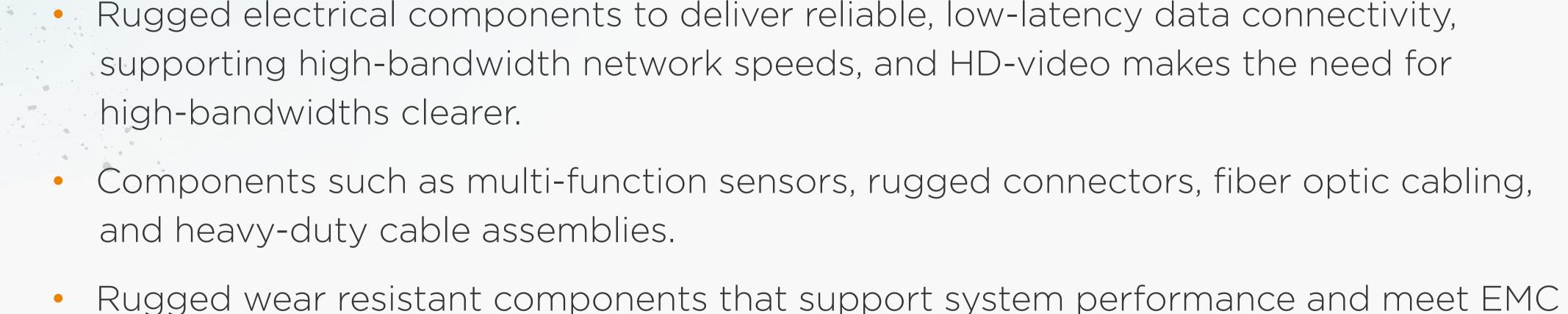
extremes. Can the sensors and connectors you use

withstand these tough environments?

Future speed of Ethernet, according to the

## Face harsh conditions? Data today goes where it has never gone before. That means the harshest of environments — the chassis,

# It means that your design engineers require:



and strong mechanical requirements for commercial vehicles.

Error-free, efficient operation and access to real-time information

- Challenge #4
- Need more flexibility? Newer devices are available to meet your needs. Devices

# Challenge #5 Understand the evolving



If you're like most of our customers today, you are looking for increased connected vehicles/connectivity, increased reliability, and decreased total cost of ownership (TCO). You also want a solution that is future proofed for emerging technologies. For products to be successful, your design engineers need to know the best

technology, applications, and protocols, and select the best partner

communicate on a coaxial or twisted pair medium. Automotive

physical layer protocols complement the cable mediums to provide

options that meet your specific data communication needs. New

protocols are also developed to meet your future needs. Talk to

TE Connectivity about the options best for your application.

### to work with to meet their needs. TE Connectivity is that partner... We understand the emerging trends for commercial vehicles:

Autonomous vehicles Automotive ethernet

Advanced driver assistance systems

Connected vehicles Infotainment

Automated functionality

- High speed V2V and V2X communications

3 https://insidehpc.com/2018/03/new-2018-ethernet-roadmap-looks-future-speeds-1-6-terabits-s/

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1 IDC Worldwide Semiannual Big Data and Analytics Spending Guide, 2017H2 https://www.idc.com/getdoc.jsp?containerId=prUS44215218

2 https://www.forbes.com/sites/louiscolumbus/2018/05/23/10-charts-that-will-change-your-perspective-of-big-datas-growth/#68f61ae29268

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