

# DATA CONNECTIVITY SOLUTIONS

---

FOR INDUSTRIAL & COMMERCIAL VEHICLES

The vital link to your data chain





# INTRODUCING A WHOLE NEW WORLD OF DATA CONNECTIVITY

## The industry landscape is changing

Commercial vehicle designers are introducing advanced functionality, which was previously only developed for passenger vehicles. Driver assistance and automation, infotainment options, 360° camera systems, high speed V2V and V2I communication, and a wide range of essential safety features are now being integrated into commercial vehicles as well.

These types of technologies are delivering increased driver satisfaction, better productivity and lower Total Cost of Ownership (TCO) for vehicle owners, and far greater performance feedback for manufacturers.

In the future, commercial vehicles will 'know' much more about their immediate environment and the route ahead, and features such as truck platooning will become the norm – significantly reducing fuel consumption and environmental impact, while making for an even safer driver experience.

So when it comes to designing commercial vehicles, which have to stand the test of time while operating in harsh conditions, you need a robust network infrastructure.

# TE Connectivity – THE VITAL LINK IN YOUR DATA CHAIN

We specialize in designing and manufacturing the essential terminals and connectors which make these types of robust in-vehicle networks possible. We are an established leader in this market, leveraging our experience and proven performance in high-speed data, reliabilities in extreme environments, and co-creation with customers across the globe – to deliver solutions that are designed to meet the specific needs of truck, bus and off-highway applications.

Our design engineers take every element into account when developing and customizing new products – so everyone from your procurement team and your sales people, right through to your customers and their operators, get exactly what they need to do their job out there in the real world.



## 120 BILLION

Products Manufactured Annually

## The TE pedigree

- A champion of innovation, developing products that address future technologies
- Extensive application and system expertise, with proven product reliability in harsh environments
- A leading authority on connectivity requirements for increased power, data and signal
- Worldwide co-creation expertise with customers on a global scale
- The partner of choice for tough solutions that address new industry trends



A truly global industrial  
technology leader serving  
customers in

## 150 COUNTRIES

## A new challenge for design engineers

Technologies such as Advanced Driver Assistance Systems (ADAS) are made possible by a vehicle-wide set of sensors – including camera systems, radars/lidars and more. These must be interconnected via a sophisticated network which can transmit high speed data with low latency throughout the vehicle. Enabling all information gathered by the devices to be processed through on-board electronic control units, to create a complete model of the vehicle and its environment.

The transition to these type of technologies brings a whole new challenge for design engineers – who need to ensure that vehicles perform and stand the test of time even in the harshest environments. And that's where TE Connectivity comes in.



## Precision agriculture



The agricultural industry is facing increased demand for sustainable farming. To meet these requirements and pave the way for the sector, manufacturers of agricultural machinery must produce vehicles that can detect, identify, and make management decisions about every single plant in the field – ultimately reducing costs as well as improving sustainability. TE is the vital link – designing and manufacturing the innovative components that enable computer vision and artificial intelligence to be used in off-highway applications.



SMART. PRODUCTIVE.  
ADVANTAGEOUS.



# The three core application areas

Our products have been developed so that manufacturers of commercial vehicles and marine craft are able to design the sophisticated systems that their customers are now demanding.

## INFOTAINMENT

In addition to entertainment and communication systems that ensure driver satisfaction and enjoyment, this also includes access to vital information systems that allow the driver to monitor and pilot the vehicle.

- 360° SURROUND VIEW
- MULTIMEDIA      AUDIO/VIDEO STREAMING
- VEHICLE DASHBOARDS



## SAFETY

For any fleet manager, ensuring the safety of their employees is key. High speed in-vehicle communication enables a wide range of safety features.

- ▶ LANE KEEPING ASSISTANCE
- BLIND SPOT DETECTION      DROWSINESS MONITORING
- ADVANCED DRIVER ASSISTANCE SYSTEMS
- AUTONOMOUS VEHICLES



## NETWORKS

This is the backbone of the vehicle, the underpinning infrastructure which makes all communication possible. Within the vehicle, from one vehicle to another, or between the vehicle and another location - whether that's the owner's depot or control center, or even the manufacturer themselves. The network ensures the reliability of the information transmission, making sure that the driver is fully informed about every aspect of his vehicle, at all times.

- V2V AND V2I COMMUNICATION
- TELEMETRY      CLOUD COMPUTING
- VEHICLE PLATOONING
- AUTONOMOUS VEHICLE ARCHITECTURE



# NEW PRODUCTS FOR HARSH ENVIRONMENTS

Our specialized products all provide severe vibration and mechanical shock resistance, and allow field maintenance in harsh environments such as those in which commercial vehicles operate. This includes situations involving dust, dirt, and moisture, and temperature ranges of -40°C to +125°C. They can adapt to virtually any use, including:

- Radars/lidars
- Cameras
- Telematic units
- On-board diagnostics
- Infotainment applications
- Head-up displays
- Instrument clusters
- Ethernet architecture



## SEALED MCON ETHERNET CONNECTOR

Providing robust full duplex, wire-to-wire connections for multifunction displays, telematics, telemetry units, infotainment modules and media access controllers. Our connectors are ideal for use within many types of commercial vehicle including buses, heavy and medium duty trucks, plus agricultural and construction vehicles.



MCON 1.2 2-Pos Plug

MCON 1.2 2-Pos Tab

MCON 1.2 2-Pos 180° Header

## HEAVY DUTY SEALED CONNECTOR SERIES WITH MATEnet INSERTS

A rugged, heavy-duty thermoplastic connector, combined with TE's MATEnet interconnection system. This wire-to-wire and wire-to-device connector was designed to meet the reliability and quality needs of commercial vehicles, offering the flexibility to implement multiple hybrid interfaces and scalability, by using unshielded or shielded twisted pair.



MATEnet + six 1.5 AMP MCP Plug

MATEnet + six 1.5 AMP MCP Tab and AMP MCP Plug

MATEnet + six 1.5 AMP MCP Tab

### [te.com/ict](http://te.com/ict)

AMP MCP, MATEnet, MCON, TE Connectivity, TE, TE connectivity (logo), and EVERY CONNECTION COUNTS are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2021 TE Connectivity Corporation. All Rights Reserved.

ict-dc-br-a4-en Revision 10-2021

**China:** +86 21 339 809 65  
**Germany:** +49 898 991 570  
**Netherlands:** +31 736 246 246  
**USA:** +1 888 441 9982  
+1 800 223 1236