COMMSCOPE®

Go further.
Go faster.
Go safer.

Wireless and wireline solutions
designed for railway networks

One partner is all you need to ensure that speed and safety are always onboard.

EXPECT MORE from CommScope's expanded portfolio of wireline solutions

The trusted partner of railways systems all over the world, CommScope provides mobility solutions that are built to meet the challenging requirements specific to railways.

Your networks must operate smoothly at any speed, in any location, under any circumstances—and that's why CommScope offers solutions that:

- **Connect railway employees** with each other

- **Connect trains** to critical automated safety systems

- **Connect passengers** to their digital lives, wherever they travel

FACT® ODF platform

Modular, flexible and quickly deployed, this optical distribution frame solution offers the density and forward-compatibility to power your expanding railway data network.
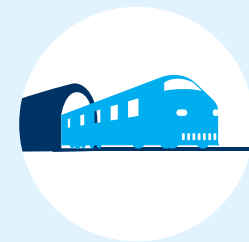
TENIO™ outdoor closure

Connect any kind of fiber in virtually any kind of environment with this easy-to-install, easy-to-maintain fiber management solution.

XAGA® 1000 series copper closure

Protect copper splices anywhere your railway goes with the durable, decades-long lifespan of the most trusted copper solution available.

CommScope's recent acquisition of TE Connectivity's broadband network solutions group means we now offer a more complete suite of fiber and copper solutions to ensure even more reliable, robust and durable wireline solutions.

CommScope gives railways the freedom to include advanced network services in existing and new routes. Durable enough to provide decades of reliable operation, CommScope solutions deliver value and performance, even in the harshest environments.

No tunnel too long.
No mountain too high.
No challenge too steep.

No destination remains uncovered with CommScope's wireless solutions

On the rails, wireless solutions must deliver exceptional coverage and capacity, wherever those rails go. That's why railways all over the world can EXPECT MORE from CommScope.

Our extensive portfolio of wireless in-train and tunnel coverage solutions is built on decades as an industry leader in the wireless technology sector. CommScope expertise has helped distributed antenna systems (DAS) evolve from a static, niche solution into a dynamic, responsive way to connect voice and data—even at bullet-train speeds.

Node AM repeater

Keep passengers connected through the universal, multiband, multiservice digital repeater. Card-based expansion lets you add capacity as needed—in minutes.
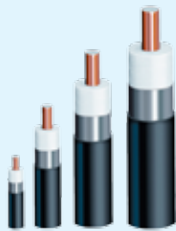
ION®-U DAS for 2G/3G/4G networks

A leader in fast-deployment scalability and flexibility, this unified optical DAS platform intelligently optimizes coverage and capacity. Installs easily, configures quickly and reduces OpEx.

ION®-M DAS platform for public safety

ETRA/TETRAPOL bands are supported by this intelligent optical distribution solution that's built for tunnels. Integrate GSM-R bands and add optional redundancy for even greater value.

RADIAX® cable and passive components

This radiating coaxial cable solution and its family of splitters, couplers and tappers allow homogenous signal distribution in tunnels and other confined spaces.

The results? Passengers stay seamlessly connected to their lives— even when traveling at 250 km/h under the Swiss Alps, as you will read on the next page— and public safety organizations have complete TETRA/TETRAPOL connectivity in tunnels and everywhere the rails go.

CommScope connects passengers and crew in the world's longest railway tunnel.

Completed in the summer of 2016, the Gotthard Base Tunnel is the longest railway tunnel in the world, running 2.3 kilometers below the Swiss Alps at 250 km/h.

Alcatel-Lucent Switzerland (now Nokia) looked to CommScope to develop a DAS solution that would allow wireless communication for passengers and crew alike—so that connecting in the tunnel was as effortless and reliable as doing it at the station.

CommScope answered the challenge with our innovative ION®-M solution, a highly-customizable, multiband, multi-operator, fiber-optic DAS platform that is fast and reliable enough to handle the lightning-fast handoffs required by bullet trains. Parallel networks for public and railway communications extend throughout the tunnel. Its network of support and service areas made connections as fast and reliable as they are in the center of Zurich or Milan.

That's CommScope innovation put to the test.

Everyone communicates. It's the essence of the human experience. *How* we communicate is evolving. Technology is reshaping the way we live, learn and thrive. The epicenter of this transformation is the network—our passion.

Our experts are rethinking the purpose, role and usage of networks to help our customers increase bandwidth, expand capacity, enhance efficiency, speed deployment and simplify migration. From remote cell sites to massive sports arenas, from busy airports to state-of-the-art data centers—we provide the essential expertise and vital infrastructure your business needs to succeed.

The world's most advanced networks rely on CommScope connectivity.

COMMSCOPE®

www.commscope.com

Visit our website or contact your local CommScope representative for more information.