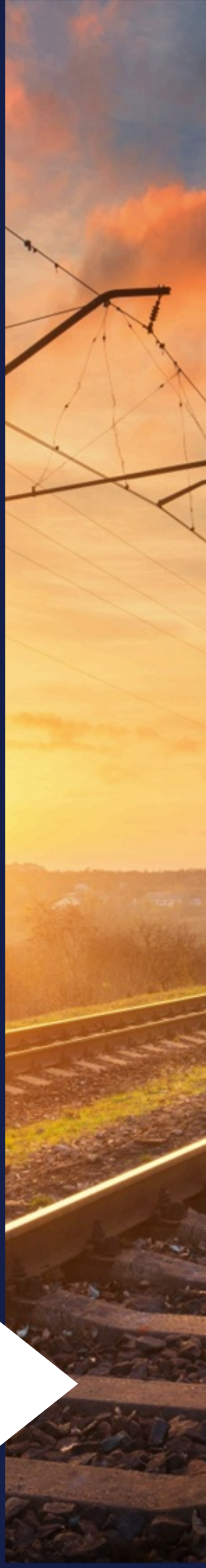
Transportation Rail Application

THE CONSTRUCTION OF FIBER OPTIC NETWORKS IS ESSENTIAL FOR THE MODERNIZATION OF RAILWAY COMMUNICATION NETWORKS.

Hungarian Railway

knet



Securing a safe and reliable communication network is essential for modern railway operations. As railways become faster and more intelligent, the need for a high-speed, secure fiber optic network becomes even more critical.

The construction of fiber optic networks is a key component in the modernization of railway communication infrastructure. By utilizing railway routes for optical cable installation, operators can significantly reduce civil work costs while efficiently establishing a robust backbone network.

Knet’s Microduct Solution offers a streamlined approach to long-distance fiber deployment with its air-blown fiber technology. Its compact design allows for easy installation using existing pipelines and facilities, minimizing disruption. Additionally, the system enables future expansion, allowing providers to reserve unused tubes and replace or install new cables without additional civil work. This innovative and scalable fiber optic solution ensures that railway networks remain resilient, cost-effective, and future-ready.

Microduct - Direct Buried, Direct Installed Duct
Example) 14/10mm 7way + Micro cable 144 Core * 7 tubes (1,008 Core)
16/12mm 7way X Micro cable 432 core * 7 tubes (3,024 core)

The Hungarian railway company MAV adopted the GSM-R system to modernize the existing railway network and adopted Knet's microduct solution to build an optical cable network to connect GSM-R base stations.

*GSM-R, Global System for Mobile Communications – Railway or GSM-Railway is an international wireless communications standard for railway communication and applications.