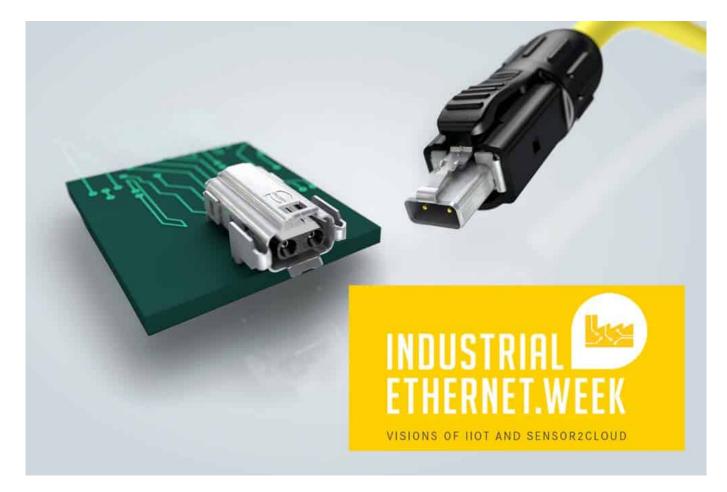# Discover new rail technologies at Industrial Ethernet Week

January 19, 2022

Industrial Ethernet is powering transformation, helping to turn the vision of IIoT and seamless sensor-to-cloud communication into reality.

To learn more and discover solutions for driving industrial change, join HARTING for their Industrial Ethernet Week from the 8 – 10 February 2022.

Across three inspiring days, you'll hear keynote speeches, expert talks and enjoy technical sessions with solution experts, thought leaders, IIoT pioneers, and representatives from a range of global brands.

This topic is particularly important in rail as vehicles need powerful network and data interfaces to run entertainment and information systems and provide fast, reliable internet access.

HARTING solutions include the ix Industrial®, a robust, space-saving Ethernet connector to replace the traditional RJ45. It has a 70% smaller PCB jack and a high current-carrying capacity that supports Power over Ethernet (PoE) applications. It complies with IEC 61076-3-124 and conforms to the shock and vibration resistance levels set out in EN 50155.

Experts have also suggested that Single Pair Ethernet (SPE) will be one of the technological cornerstones that helps to deliver high data streams amid increasing demand.

The T1 Industrial supplies both data and power via Power over Data Line (PoDL) across a single pair of wires in an IEC 63171-6 industrial interface. The compact T1 allows Ethernet interfaces to be designed onto simple sensors, cameras, reading/ID devices or similar miniaturised equipment.

An Ethernet train cable weighs approximately 4.6kg per 100 metres, whereas an SPE cable weighs only 3kg. Over an average train carriage lifetime of 40 years, each kilogramme of saved weight delivers savings of around £12,000 per carriage. When you consider how many miles of cable are found in trains for entertainment, safety and control technologies, it soon becomes apparent that significant cost and weight savings are possible.

Click here to see the agenda and register for Industrial Ethernet Week.