

# Replacing Fieldbus with Ethernet - the way to a modern industrial network (IE)

## Target Group

Decision makers, network designers, and sales personnel who require a concise overview of the possibilities of Industrial Ethernet.

## Objective

The participants learn in a compact form the most important technical fundamentals, as well as the possible applications of Industrial Ethernet networks.

## Prerequisites

No previous knowledge of the subject is required.

This knowledge will explain why Ethernet is increasingly gaining ground against fieldbusses in the industrial environment.

Successful data exchange requires a standardised communication technology, and all connected devices must "understand" this technology. In industrial communications many standards exist concurrently. These are known as fieldbusses. In the office environment, Ethernet is used in more than 90% of installations.

Over the last three years, the use of Ethernet in industrial environments has been increasing dramatically: for communication between PLCs, plant floor devices, and visualisation stations. Why?

## Languages:

IEe English  
IEd German

## Duration:

1 Day  
10:00 - 15:00

## Price:

£95 ex. VAT

## Schedule / Location:

<http://www.hirschmann.co.uk>

## Seminar Content

### What is Ethernet?

- From 10Mb/s to 10Gb/s
- Deployment possibilities
- What does a network look like?
- What hardware is required?
- Industrial redundancy



### How is data transmitted?

- Overview
- Protocols
- Addresses



### Remote access via the Internet

- Routing
- Network security

### What are the requirements for industrial use?

- Environmental considerations
- Real-time and determinism
- Guaranteed and fast delivery:  
TCP vs UDP

### Optimised availability - how?

- Network management and its advantages

