

Data communication with Industrial Ethernet (WT-IEOSI)

Short Description

The tutorial program consists in five content-relevant chapters and one non-mandatory final test. It describes the functional principle of data communication with Industrial Ethernet in relation with the ISO/OSI data communication model using the analogy to parcel shipment.

Objectives

This webbased training is part of the "Siemens Initial Training for Industrial Networks" and gives a first overview on Industrial Ethernet. After processing the tutorial program, the learners will know and understand the meaning of Industrial Ethernet as well as its principle and function in connection with the ISO/OSI data communication model.

Target Group

Decision makers, sales personnel
Commissioning engineers, Service personnel
Operators, users
Maintenance personnel

Content

Introduction to Industrial Ethernet

- The Ethernet standard
- What is Industrial Ethernet?
- Ethernet in the automation levels
- ISO/OSI data communication model

Application-oriented layers

- Application-oriented layers, based on the example of parcel shipment
- Assignment of services through ports
- Application-oriented layers in the ISO/OSI model

Addressing and transport of data packets

- Layer 4: Transport layer
- Layer 3: Network layer
- Layer 2: Data link layer

Transmission media and procedures

- Transmission media
- Cabling systems
- Transmission technologies
- CSMA/CD - Access procedures

Type

E-Learning

Duration

1 hour

Language

en