



Wireless LAN – Technologie (WLA)

Target Group

Technology training course for System Engineers, Network Designers and Support Technicians who are building and supporting an Industrial WLAN network.

Prerequisites

An understanding of Ethernet, for example "Industrial Ethernet (CT1)" and "Industrial Networking (CT2)" is required.

If available, the participant should bring a laptop with Ethernet and WLAN interfaces and an operating system CD. Administrator rights are required.

Objective

Participants acquire familiarity with the underlying technology of wireless networks and their specific requirements as to range, EMC and security. They are also given an overview of the current state of WLAN technology.

Due to the high flexibility Wireless LANs (WLANs) are increasingly being deployed in cooperate networks. This technology allows existing network structures to be modified and extended cost effectively.

The performance of modern wireless systems according to the IEEE 802.11 standard makes it possible to realize the most demanding wireless applications. However, increased security and planning requirements must be observed.

Languages

- WLAe English
- WLAd German

Duration

2 Days
9:00–16:30

Schedule / Location / Price

www.hicomcenter.com



Recommended for certification as Hirschmann™ Industrial WLAN Professional

Seminar Content

General overview

- Areas of application
- Advantages and disadvantages

Wireless LAN – the basics

- Physical layer/MAC
- Transmission technologies
- Access methods
- How it works
- Packet formats

The IEEE 802.11 standard

- Development history
- Contents
- Working groups

Statutes and regulations

- Frequency bands
- Communications systems

Security

- Encryption using WEP, WPA and WPA2
- Weaknesses
- Countermeasures



Electromagnetic compatibility

Planning a WLAN