

## Online-Training - IEC 60870-5-101/104 (IK-TC-IEC)

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### Objectives

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Participants will be able to structure, parameterize and start up an IEC 60870-5 RTU based on the SIMATIC S7-PLCs S7-1200, Distributed Controller ET200SP and S7-1500.

### Target Group

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- Programmers
- Commissioning Engineers
- Engineering personnel
- Maintenance personnel
- Service personnel

### Content

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- What is IEC 60870-5?
- Introduction in IEC 60870-5 protocol
- System feature of the PLC based SIMATIC Net IEC 60870-5 RTUs
- Installation guidelines and configuring aids
- Startup of IEC devices TIM, CP (TIM1531, CP1542-SP-1 IRC, CP1243-8 IRC) and modems or router
- Network examples and network configuring
- Configuration in TIA Portal:  
Presentation/Demonstration of the configuration of a sample configuration for a PLC-based RTU with S7-1200 and S7-1500 using CP1243-1 and TIM1531.  
The demonstration includes the following points
  - basic IEC 60870-5 settings of TIM/CP (Device Configuration)
  - configuration of an IEC connection
  - time synchronization in IEC protocol
  - transferring analog values, counter values and Boolean values incl. time stamping and event-buffering
  - Transferring Commands and Setpoint (incl. variations Direct Operate, Select and Operate, Feedback)
  - peer to peer communication (communication between RTUs)
  - IP/Ethernet - based communication (-104) and serial communication (-101)
  - Demonstration of the configuring of the IEC 60870-5 process data communication in DataPoint Editor
  - Presentation of the diagnostic concept and remote programming/remote diagnosis (PG routing)

### Prerequisites

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- Basic knowledge in dealing with TIA Portal
- Microsoft Teams

### Note

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We also offer training for the German and American markets.

- SINAUT ST7 Training (IK-TC-ST7)
- DNP3 Training (IK-TC-DNP3)

### Type

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Online-Training

### Duration

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1 day

### Language

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