SIEMENS

DIGSI 5 - Basics incl. IEC 61850 GOOSE (DIGSI5-BI)

Objectives

Participants will learn the special features of SIPROTEC 5 devices and learn how to use the DIGSI 5 operating program. The participant is thus qualified to do the following:
• Planning & operation of SIPROTEC 5 devices
• Making protection settings in SIPROTEC 5 devices
• Parameterize control functions in SIPROTEC 5 devices
• Testing of SIPROTEC 5 devices

Target Group

Employees from the utility and industrial sectors who deal with the planning, parameterization, commissioning and operation of SIPROTEC 5 devices.

Content

• Introduction to the hardware and function group concept
• Basic functions of SIPROTEC 5
• Hardware overview
• Software components
• Communication concept
• Function groups and application templates
• Modularity of the hardware and the protection and control functions
• Determination of the order numbers with the SIPROTEC 5 online configurator
• DIGSI 5: One tool for all business processes
• Creating a single-pole diagram of a typical high voltage switchgear
• Parameterization of the analog measuring points for SIPROTEC 5
• Parameterization of the measuring transformer data
• Assignment of binary inputs and outputs to logical messages / functions
• Creation of display pages and user message lists
• Create and check logic functions with CFC
• Parameterization and testing of protection and control functions
• Control of switchgear, interlocked/non interlock control, local/remote
• Evaluation of information via log files and fault records
• Addition of function points
• Basics of communication networks and systems in substations with Ethernet and IEC 61850 (TCP/IP; IEC 61850 Model)
• Structure of Ethernet communication networks (topology, architecture, components, addressing)
• IEC 61850 redundancy concepts with RSTP, PRP and HSR protocol
• Structure of the substation communication bus IEC 61850 profile
• Implementation of IEC 61850 communication with the Digsi 5 and the system configurator
• Overview of IEC 61850 Edition 1 and Edition 2
• GOOSE communication between SIPROTEC 4 and SIPROTEC 5
• Online test for commissioning the SIPROTEC 5 devices: Check inputs/outputs
• Monitoring of the GOOSE messages
• GOOSE communication between Siprotec 5 devices and third party devices
• Practical exercises on all topics with a helpful DIGSI 5 exercise guide
• Commissioning, testing and diagnostic of IEC 61850 communication networks
• Practical exercises with DIGSI 5 and SIPROTEC Digital Twin

Prerequisites

• Basic knowledge of electrical engineering.

Note

• Theory/Praxis: 20/80 %

This training can be booked as VIRTUAL CLASSROOM Training too.

CONTACT
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Type

Face-to-face training

Duration

5 days

Language

en

Fee

4,540 EUR

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