

TIA-1500_1 / К y п c TIA-1500_1 (TIA-1500_1)

Short Description

The course TIA-1500_1 — a system course on studying of the principles of a configuration and programming of controllers of new generation of S7-1500 in the environment of TIA Portal V13. The course is intended for experts who will program, put into operation and to serve systems of automation on the basis of SIMATIC S7-1500 c controllers use of panels of the operator, tire PROFIBUS and PROFINET system. During a course possibilities of creation and commissioning of S7-1500 controllers and the periphery with use of the software of TIA Portal V13 are studied, and also the main differences and new opportunities in comparison with controllers of series 300/400/1200 are studied.

Objectives

Obtaining skills of work with hardware of SIMATIC S7-1500 systems, the touch Siemens panels and tire Profinet (Profibus) systems for management of the distributed periphery and Sinamics G120 drives. During a course, listeners receive skills of creation and commissioning of the hardware, network connections and creation of programs for SIMATIC S7-1500 controllers by means of the software of TIA PORTAL V13 and the option Startdrive.

Content

- Review of family of Simatic S7 controllers
- Introduction to TIA Portal V13
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- Configuration of devices and networks
- Work with the global and local PLC tags, creation, control and management of them
- Programming of the controller in TIA PORTAL, architecture of blocks, work with system memory. Work in the editor
- Operations of binary logic
- Processing of numbers. New functions in mathematics and comparators
- Work with blocks of data. The optimized blocks in S7-1500/1200
- Work with the distributed periphery on PROFINET. New generation of ET200SP stations
- Work with HMI stations in TIA PORTAL
- Functions and functional blocks
- Organizational blocks and processing of mistakes
- Search of mistakes and elimination of malfunctions
- Function of the analysis of TRACE for record of process data in CPU
- Integration of the Sinamics drive into the project for management on the Profinet and Profibus networks

Prerequisites

Experience with SIMATIC controllers is desirable

Note

The course contains a large number of the practical exercises which are carried out with use of educational stands with SIMATIC S7-1500 controllers and the touch Comfort TP700 panels, stations of the distributed periphery of ET200SP, frequency Sinamics G120 converters, a programmer of FieldPG or RS (with the established software of TIA PORTAL V13) and conveyor models.

The course provides individual training on separate computers in small groups

Type

Face-to-face training

Duration

5 days

Language

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