

10 YEARS
GUARANTEE



SandRA Z210 CONTROL STATION



ZAT



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The Z210 series extends the family of SandRA control stations by stations with compact design intended for applications with a smaller number of inputs and outputs, particularly in the following applications:

- Local control stations for separate technological parts connected to the control system of the technological unit
- Control stations for pro topologically extensive technologies (product pipelines etc.)
- Telemetric stations
- Autonomous control stations for operation of smaller technologies
 - approx. up to 100 I/O (not limited)

Control stations of the **SandRA Z210** series are suitable e.g. for controlling junction exchange stations, small hydroelectric power plants, monitoring and control of product pipelines, regulation and interchange stations in gas industry, waste water treatment plants and many other applications in different industrial branches

SandRA Z210 BASIC CHARACTERISTICS

- Compact design of the control module
 - small dimensions
 - simple integration in switchboard cabinets
 - assembly onto the DIN rail
- Large communication possibilities
 - 3 channels Fast Ethernet 100BASE-TX
 - 3 channels of serial interfaces (RS-232/RS-485/RS-422 optional by software)
 - 1 channel USB 1.1
- High-efficiency hardware
 - efficient Processor Freescale PowerQUICC II MPC8270 (855 MIPS@450MHz)
 - slot for a memory card of the SD type
 - backed up real time circuit (RTC)
 - power supply 24V DC, possibility of redundant power supply from two sources
- Connection of inputs and outputs
 - Control stations of the Z210 series use the system of remote inputs and outputs X20 for connection of technological signals. These inputs/outputs are connected to the control station by means of the communication interface (Ethernet). X20 stations can be located directly near the control station or can be placed on the controlled technology. This design enables to optimally adjust number and types of inputs to needs of the particular application
 - For applications with low demands of the number of inputs and outputs can be used Z210 workstation with integrated inputs and outputs.



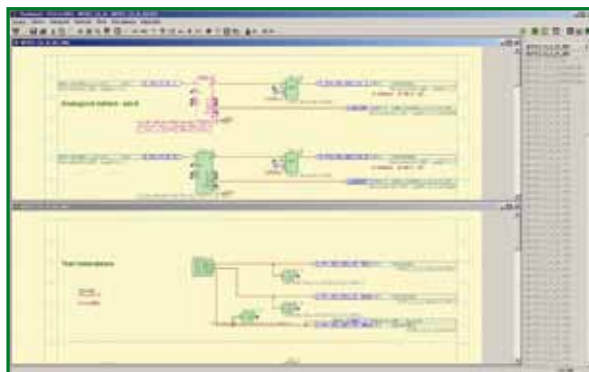
SandRA SOFTWARE

- Operating system Linux
 - Usage of the standardized operating system enables simple extension of SW features of control stations (e.g. in communication branch)
 - OS Linux is worldwide supported and developed and therefore it is very perspective. It isn't owned by one company and its usage isn't limited by licences.
- Large data and communication possibilities
 - Own company protocol Pernet based on TCP/IP
 - General communication standards (Modbus RTU and TCP/IP, POWERLINK and others)
 - Special protocols in energetic (CSN EN 60870-5-104, SPA Bus, M-bus)
 - Support of intelligent sensors and actuating devices (HART)
 - Many special protocols for different equipment communicating through serial interfaces (RS-232, RS-485, RS-422)
 - Possibility to programme special communication protocols

SandRA Z210 - TOOLS FOR CREATION AND ADMINISTRATION OF THE APPLICATION SOFTWARE

Pertinax - a tool for creation of the application software

- Uniform programming means for control stations in the ZAT systems
- Simple programming of applications by means of the pre-defined graphical objects (functional blocks)
- Debugging of algorithm functionality only in PC (without need to load it to the control station)
- On-line imaging of the algorithm current values
- Information on the control station status
- Nonimpact replay of the user SW (in running)
- Simulation of input and output signals values
- Remote parameterization of the user SW
- Support of the project database



Pertinax Project Database

- suitable particularly for data administration in large applications with more control stations and link to SCADA/HMI
- Basic tool for data administration in the whole application of the control system
- Ensures uniform system of data administration
- Guarantees availability, completeness and consistency of data
- Export of data to the tools for creation of the visualization and archiving system and to the Pertinax tool for creation of the application software of process stations
- Enables connection with the external database of the SQL and MS Access type (e.g. database of sensors, cables etc.)



Summary of types of control stations Z210

Type	Interface description
UC0005A1	3x Fast Ethernet 100BASE-TX, 3 x RS232 (RS485, RS422), 1x USB
UC0006A1	3x Fast Ethernet 100BASE-TX, 3 x RS232 (RS485, RS422), 1x USB, 2x Ethernet POWERLINK (redundant)
UC0007A1	3x Fast Ethernet 100BASE-TX, 3 x RS232 (RS485, RS422), 1x USB WiFi IEEE 802.11 54MBit/s 32x binary inputs, 12x Binary outputs 16x analog inputs (20 mA), 2x analog outputs (20 mA)



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