Set 22 – Data Communication between S7-1200 and SENTRON PAC3200 via MODBUS TCP Task



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 The energy consumption of two sets of lamps is to be captured and displayed.

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- If the value falls below or exceeds a certain consumption that can be defined, a message with a time stamp is to be generated to record the fact.
- The overall energy consumption of all streets is to be displayed as a time course.
- The daily energy consumption is to be depicted in a weekly overview.
- After one week, the weekly energy consumption is calculated from the daily energy consumption.
- The operating hours are to be captured and be reset after maintenance.

http://support.automation.siemens.com/WW/view/en/40614428

Set 22 – Data Communication between S7-1200 and SENTRON PAC3200 via MODBUS TCP Automation Solution



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Set 22 – Data Communication between S7-1200 and SENTRON PAC3200 via MODBUS TCP Main Components

	Product	Function description
1	Power supply S7-1200 PM 1207 Article no. 6EP1 332-1SH71	Power supply for the CPU 1215C and KTP700 Basic
2	Compact Switch Module CSM 1277 Article no. 6GK7277-1AA10-0AA0	Ethernet switch for expanding the number of ports to 6 ports
3	CPU 1215C, DC/DC/DC Article no. 6ES7 215-1AG40-0XB0	Evaluation of the power consumption
4	PMD SENTRON PAC3200 Article no. 7KM2112-0BA00-3AA0	Device to be fitted in a switchboard for measuring the power and its transmission to the control system
5	SIMATIC HMI KTP700 BASIC 2nd Generation PN Artikel-Nr. 6AV2 123-2GB03-0AX0	 Displaying the energy consumption for a day, a week and the whole year Displaying warning if the values fall below a certain power consumption or exceed it

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Set 22 – Data Communication between S7-1200 and SENTRON PAC3200 via MODBUS TCP Main Components



		Product	Function description
6	SIMATIC	SIMATIC STEP 7 BASIC V14	 Software for programming the CPU 1215C Configuration of the KTP700 Basic Panel
		Article no. 6ES7822-0AA04-0YA5	

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Set 22 – Data Communication between S7-1200 and SENTRON PAC3200 via MODBUS TCP Further Information



Benefits

- Maintenance work considerably reduced since short-circuits and lamp failures are reported
- Since the operating hours are recorded, the time when the lamps must be replaced can be calculated

Range of use

Street lighting

Similar topics

 Detecting overloads and automatic switch-off of prioritizable loads by means of SENTRON PAC3200 via the Modbus-on-TCP communication (Set 24) https://support.industry.siemens.com/cs/ww/en/view/58856464

Further information

- Topic page "Easy Entry in LOGO! and SIMATIC S7-1200": <u>https://support.industry.siemens.com/cs/ww/en/view/35923253</u>
- SIEMENS Industry Online Support Portal: <u>https://support.industry.siemens.com/cs/ww/en/</u>

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Set 22 – Data Communication between S7-1200 and SENTRON PAC3200 via MODBUS TCP Security Information



In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

Customer is responsible to prevent unauthorized access to its plants, systems, machines and networks. Systems, machines and components should only be connected to the enterprise network or the internet if and to the extent necessary and with appropriate security measures (e.g. use of firewalls and network segmentation) in place.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit

http://www.siemens.com/industrialsecurity.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends to apply product updates as soon as available and to always use the latest product versions. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

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