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# PROGRAM FOR PD22 DATA LOGGER SERVICE PD22WizEN.exe

## **USER'S MANUAL**



Zielona Góra 2007

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#### **1 INTRODUCTION**

PD22Wiz is a program destined for the configuration of the PD22 data logger.

- It is composed of two basic modules:
- main program window,
- archiving servicing module.
- The program enables:
- connection configuration with PD22,
- setting such PD22 parameters as: time, PD22 transmission parameters, etc.
- creation of the object list,
- write of the object list to PD22,
- testing of the object list by means of the monitor function,
- archive servicing.

#### 2 PROGRAM INSTALLATION

The program is delivered on a CD. One must start the PD22Wiz Setup.exe. installation program. The program start follows after a double click on the PD22Wiz.exe file icon or after choosing Start/Programs/PD22Wiz from the menu.

#### **3 MAIN PROGRAM WINDOW**

The principal assignment of the main program window is the creation and testing of the object list (PD22 configuration). Remaining functions (e.g. archive servicing module) are accessible from the main program window.

Examplary sequence of operations carried out by means of the PD22Wiz program:

- connection configuration with PD22 (Configuration/Connection with PD22 menu),
- setting such PD22 parameters as: time, PD22 transmission parameters with devices, etc. (Configuration/PD22 menu),
- object list creation (Object list menu, pop-up menu),
- write of the object list to PD22,
- testing of the object list by means of the monitor function (Working mode/Monitor),
- introduction of corrections to the object list,
- write of the corrected object list to the file and to PD22,
- archive servicing.

#### Description of the main program window menu:

File

- <u>Load object list...</u> Load of the selected object list from the file.
- Save object list...

The write of the object list to the selected file. Two file formats are accessible – the configuration file (\*.PD22) and the report file (\*.htm). Report files include the configuration in the shape of a report, one can review them by means of any internet browser and by its means, print in (the configuration in this format cannot be read out by the PD22Wiz program).

• <u>End</u>

Exit program.

#### **Object list**

• <u>Add...</u>

Addition of a new object to the object list. The menu is displayed with the choice of the object type which is to be added – Device/Register Group from the given device.

• <u>Delete</u>

Erases the chosen object from the list.

• <u>Display</u>

The window with the graphical configuration presentation is displayed. All PD22 indexes are presented in the window.

After clicking on the chosen PD22 index, information about this index is displayed at the top of the window:

- device address and register number which is read out from,
- how often value of register is refreshed,
- devices address and register number where value of register is written to,
- if a configuration error occurs by reason of consisting on the readout of different registers to the same PD22 index, information about it is displayed.
- <u>Read from PD22</u> Read of the object list from PD22
- <u>Write to PD22</u> Write of the object list to PD22
- <u>Verification</u>

Comparison of the object list written in PD22 with the current object list (list of objects in the "Object list" window).

- <u>Autoindexing</u>
  - <u>Automatic indexing</u>

Turning this option on cause set automatically PD22 indexes to objects. In case modify objects list, all indexes are set again during configuration save or after make choice option from menu ("Change indexing now"). If this option is switch off, then user should set indexes manually."

For the user, "Index PD22", values can have matter, e.g. in the case when data from PD22 are collected by the visualization program then, the change of existing indexes would force the modification of the visualization application. In such a case, one must disable the automatic indexing option.

- Change indexing now

Causes the immediately reindexing of PD22 (it is necessary only in the case when the user wants to see immediately actualized "Index PD22" values). This option is disabled if the Automatic indexing is disabled.

#### Working mode

• Edit

Default program working mode. In this mode, the edition of object list, its write, readout, is possible.

• <u>Monitor</u>

In this mode, one can review values which PD22 read out from connected devices to it. To take advantage from this mode, the object list in PD22 and the current object list must be identical (one can check it, performing the Object list/Verification function), in the other case, values shown in the monitor window will be incorrect.

#### Configuration

• <u>Connection with PD22</u>

Enables to give the access code, the choice of PD22 address in the MODBUS network, the choice of the connection type (through the serial port/through TCP/IP) and transmission parameters between the program and PD22.

- <u>PD22</u>
  - <u>Access code</u>
    - Enables the configuration write protection to PD22.
  - <u>Time</u>

Enables the readout and time setting in PD22.

- Connection PD22 with computer

Enables the readout and setting of PD22 communication parameters with the computer. If PD22 transmission parameters are not known, one must press the push-button in the upper part of the concentrator housing, in order to switch default parameters on: Address 254, RTU8N1 mode, baud rate: 115.2 kbs (see the PD22 user's manual). Next, one must start the connection with PD22 with default parameters and then, one can proceed to set up required transmission parameters. After the write of new parameters to PD22 – one must set up the same PD22 parameters values in the *Configuration / Connection with PD22* menu

- Connection PD22 with devices

Enables the readout and setting of PD22 communication parameters with devices.

– <u>Modem</u>

Enables the introduction of the initialization sequence which PD22 transmits to the modem after the supply switch on.

#### Archives

• <u>Read</u>

Causes the start of the archive service module with the chosen archive data Read tab from PD22.

• <u>Conversion</u>

Causes the start of the archive service module with the chosen Conversion tab of assembled on the archive data disk (read out previously from PD22) to the chosen format

• <u>Clear</u>

Causes the erasing of archived data being in PD22. If these data were not previously read out then, they will be irrevocably lost.

#### Help

• <u>About...</u>

Information about the program.







Fig. 2. View of the window of graphical PD22 index presentation.

#### 4 ARCHIVE SERVICE MODULE

The PD22 archive service is divided on two parts:

- Readout of archived data assembled in the PD22 memory; data are assembled in the archive folder, in internal program format ( *"Read"* tab).
- Conversion of the whole or a part of previously read out data from PD22 to the selected format ("*Conversion*" tab).

The archive service should proceed in the following way:

- the user assembles data on the disk, performing every now and again (e.g. once a week) the readout of archived data from PD22,
- in order to analyze assembled data, the user performs the conversion of selected data from the selected time interval to the selected format.
- One can review converted data by means of any text editor or such programs as, e.g. : Microsoft Excell, Micorsoft Access.



Fig. 3. View of the PD22Wiz.exe program Archive Readout.

D22Wiz - Read Cor	- Archive	A	rchive to be conve	lder of the convertion	<u> </u>
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A CONTRACTOR OF A CONTRACTOR A		C Selected in	nterval data	Dev1_Grp00_Prd8 Dev1_Grp00_Prd9 Dev1_Grp00_Prd10	
From	9 listopada	2007 🗾	09:16:34	Dev1_Grp00_Prd11	
То	16 listopada	2007 💌	09:16:34 😤	Dev1_Grp00_Prd12	

Fig. 4. View of the PD22Wiz.exe program Archive Conversion