

SOFTWARE

# METER READING SOFTWARE

MOST PRACTICAL AND

ECONOMICAL SOLUTION FOR

MANUAL OR AUTOMATIC READING

OF METER DATA AND LOAD

PROFILES, ANALYZE THE VALUES

IN GRID, EXCEL OR AS GRAPH.

by





ZR software is a professional software which is dedicated to read, store, and analyze the data of electronic electricity meters that communicates in DLMS/COSEM, IEC62056-21 (formerly known as IEC 1107), IEC870-5-102 and MODBUS standards. It can also read load profiles of Elster, EMH, Itron (formerly known as Actaris), Landis&Gyr, Pozyton, Iskra, Köhler, Makel and all IEC870-5-102 standard meters. ZR lets user to store the read data in database and analyze in different formats as well as to monitor data on WEB. The software is compatible with all communication devices from different vendors, so it is not limited to be used with a specific brand of device.

The software supports current operating systems; Win 10, Win 8, Win 7 and also SP2. It supports both 64Bit and 32Bit versions. The software comes in English, Turkish, Spanish and Polish Language options with easy implementation of different language options. ZR software is designed in modular format and available modules are:

Settings Module

• Meter Registration Module

Counter Values Module

Load Profile Module

• Data Analysis Module

• Graph Analysis Module

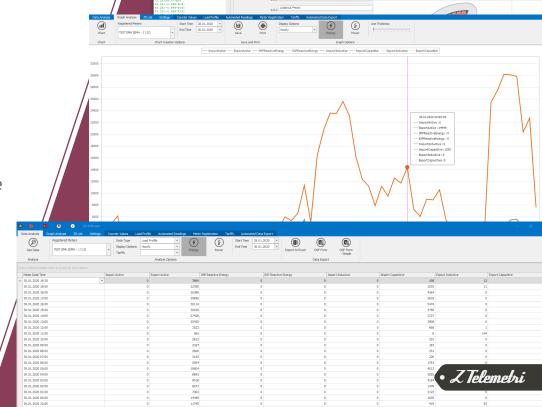
• Formulas Module

• Custom Reports Module

• Automated Data Export Module

• ZR Cloud - Cloud Integration





## MODULES

#### 01. SETTINGS MODULE

The language selection, licensing of the ZR Software, software version information, Server-Client settings and ZR Cloud connection is implemented via this module. Read data can be monitored on all WEBenabled devices via WEB with ZR Cloud.

## 02. METER REGISTRATION MODULE

Communication settings and the registration of meter type to the system can be realized via this module. You can perform the communication by Serial or TCP/IP based alternatives;

- Optical Probe
- RS232 port
- RS485 port
- VCOM (Virtual COM Port) that
  GPRS / EDGE / 3G modem is created via a network device such as GPRS Modem
- RS / ETH Serial Device Server
- RS / Fiber Optical Serial Device Server

  - BPL or PLC devices

### 03. COUNTER VALUES MODULE

The instant meter values at the measuring point are read by this module. You can display the read meter values on graph or you can save them in text, PDF, Excel formats for later use. You can also report the values in custom output formats and save them as a PDF file.

## 04. LOAD PROFILE MODULE

ZR Software lets user to read Load Profiles of selected meters manually or automatically. Automated reading can be done periodically at a specified minute, at a specific hour or on a daily, weekly or monthly basis. Usage of the system and analysis of existing data are carried out without any interruption while automated reading is in action. All readings are stored in a compact SQLite database. The system is designed to open several communication channels and read multiple meters simultaneously.

#### 05. DATA ANALYSIS MODULE

Load Profile values are stored in the system and can be reported hourly, daily, in periods of 30 minutes, 15 minutes or less for detailed reports. You can export those reported values to Excel or custom format or you can get PDF print of the reports. The reporting interval can easily be selected by user's own preference.

## 06. GRAPH ANALYSIS MODULE

You can use this module to create graphs using the Load Profile values you obtain, formulas you have created or information of your custom reports. The created graphs are displayed in preferred date range. Reporting can be hourly, daily, in periods of 30 minutes, 15 minutes or less. Also the arrays on the graph can be removed and you can zoom in any part of the graph.

#### 07. FORMULAS MODULE

You can use Formulas Module to create custom formulas using the saved meter load profile data. For instance you can summate the production values of several meters or you can subtract the consumption value from the production value at a substation and store the net production value at a different virtual measurement point. You can also perform the data analysis and graphical analysis of this newly created virtual measurement point.

## 08. CUSTOM REPORTS MODULE

You can use the Custom Reports module to create custom reports using virtual measurement points or Load Profile values of registered meters. This way the user can easily analyze any metering value in specific report format needed. In the same report, you can examine different measurement points side by side and you can add virtual points you have created at the Formulas Module just like adding values of different metering points to the columns of an Excel sheet.

### 09. AUTOMATED DATA EXPORT MODULE

The system can export the read billing values or the load profiles to user defined e-mail targets or user defined specific folder in computer in user defined periods.

During exporting data to a specific folder, format of the data can be selected or a specific format can be integrated thus transferring data to a 3th party software can be realized.

Sending data to target e-mails is generally used to share data with different users and generally Excel format used. In any case data interval is also defined by the user.

#### 10. ZR CLOUD MODULE

The load profiles which are read by the system can be transferred to the web by opening a ZR Cloud account and thus it will be possible to monitor read data from all mobile phones, tablets and computers with internet access.

The main and limited sub-accounts can be opened for data monitoring over the WEB and the related account subscription can be made easily according to the need.

ZR Cloud web interface lets users detailed analysis of the meter data as it is in the ZR software.



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