

Disturbance Fault Recorder OPAZ



If there is a failure in the power system it is the necessary to find out the causes of these failures and have records about the reaction of each protective device. The OPAZ disturbance recorder enables evaluation of different events within the power system and is an important part of a station monitoring system. Any of the recorded analogue channels and binary signals can be programmed to start a recording. Pre-fault and post-fault time can be set in wide ranges.

Application :

- In the area of power engineering in transmission and distribution systems
- In power generation for tracking generator failures
- On large-scale consumption side in companies to document failures in electric power supply

Features :

- recording of 8 universal analogue and 16 binary inputs
- voltage range (U_n) - 0.01 - 666 kV,
- current range (I_n) 0.01-60 kA
- the nominal voltage of all the analogue inputs is 57.7 VAC, the currents being converted to voltage by an external converter ,
- possibilities of creating the analogue inputs also for another voltage range and/or current range even for DC analog values
- measuring range : 0-1.5 U_n , 0-6 I_n (modifiable)
- the A/D converter operates with 9 bit resolution, that is 512 levels
- sampling frequency is 1000 Hz
- pre-fault time 0.1s- 0.5s, post-fault time 0.3-9.9s , automatic extension post-fault time in case next triggers during post-fault time (maximum length of one record is 90 seconds)
- time synchronization
- versatile local human-machine interface
- powerful software PC for communication, evaluation and user configuration
- EMC compatibility
- compact 19 inches box mounted to the panel

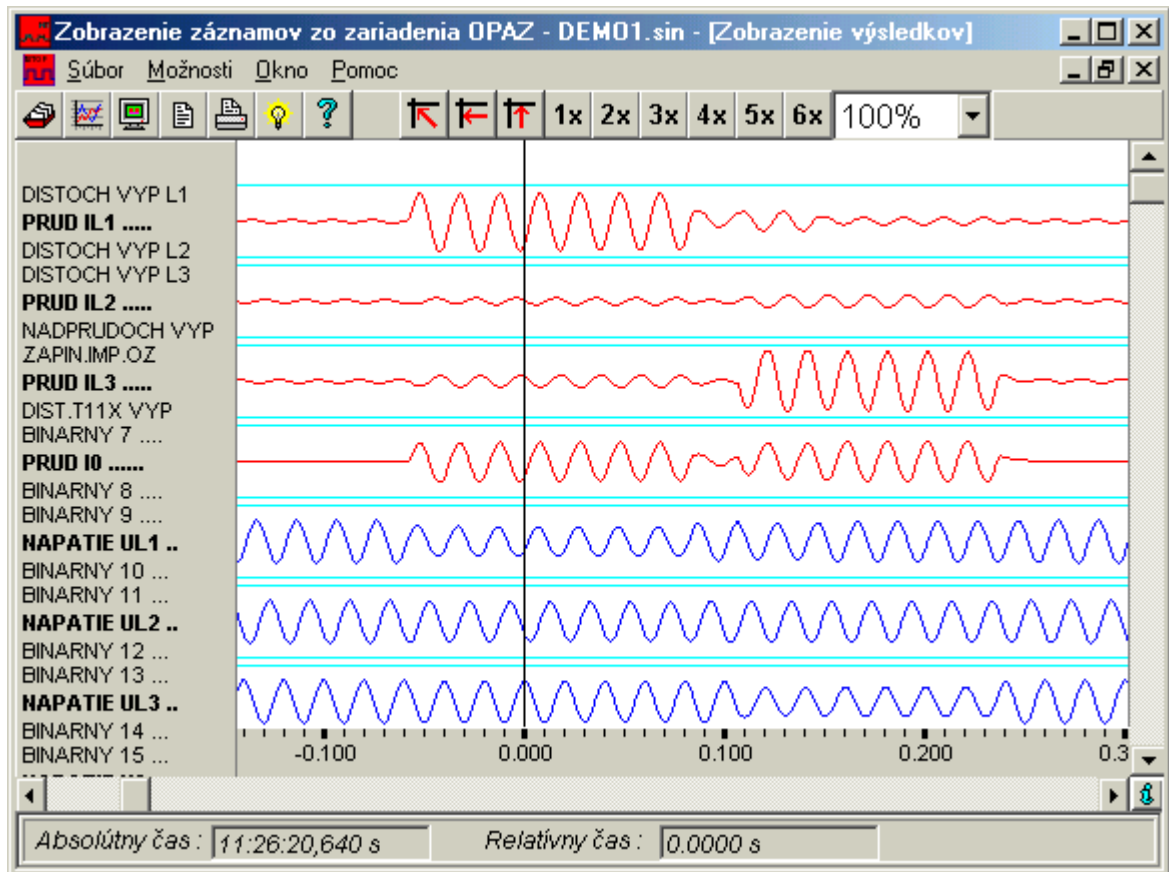
Triggers:

- 16 binary inputs / rising, falling or both edges /
- overrun limit of analogue values / overcurrent, overvoltage, undervoltage /
- external input for trigger the record

Memory medium :

1MB static RAM and 1GB FlashDisk.

The scanned failure is recorded into the static RAM memory first and then immediately written to FlashDisk, which is the main memory medium. Capacity of memory is about 80 000 seconds. / For example, the available 1GB enables recording of 50 000 records 1.6 seconds long . / Long-term registering of all the failures and manipulations enables statistical evaluation of failure rate.



Outputs of records

- local printer
- serial communication via RS232, RS485
- communication via modem or LAN / Ethernet /
- export into COMTRADE format

Power input:

- universal input 100..240VAC or VDC
- Internal accumulator included - for full operation during auxiliary voltage blackout