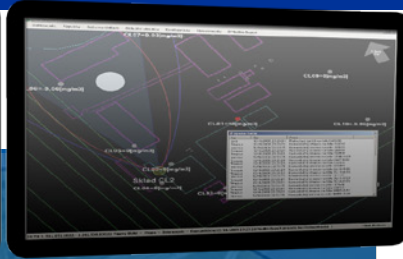
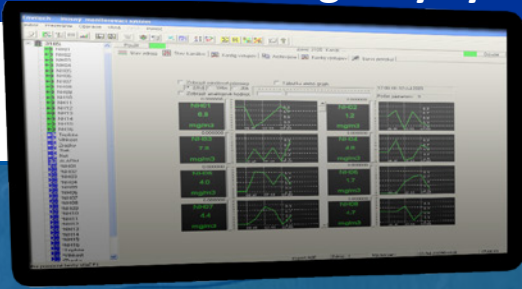


Emergency system - WinMODIMExpert v.5



WinMODIMEXPERT is designed to display, interpret and predict data from real-time leakage monitoring.

Its main role is to assist in solving crisis situations in case of leakage of hazardous substances and to provide the operator with sufficient information for decision-making in order to protect health and property of citizens.

The core of the system is a combination of several mathematical models automatically chosen according to predefined criteria. The results of the calculations are displayed to a digital map supported by vector graphics tools.

Basic features:

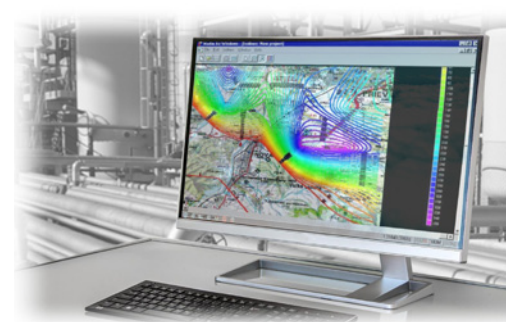
- Scanning and evaluation of monitored quantities directly in operation
- Integration of scanned data - analog inputs and outputs, digital inputs and outputs to the WinImag data concentrator
- Universal configuration of sensors
- Variability of outputs (possibility to connect sirens, semaphores, blocking devices) and universal programming
- Connection of meteorological sensors
- Sending data to ModimExpert and ModimExpert_Terminal (Unlimited) via PC LAN
- Archiving of measured data and incidents
- Evaluation of the monitored quantities at the superior workplace
- Possibility of surveillance at terminal workstations

Data concentrator WinImag

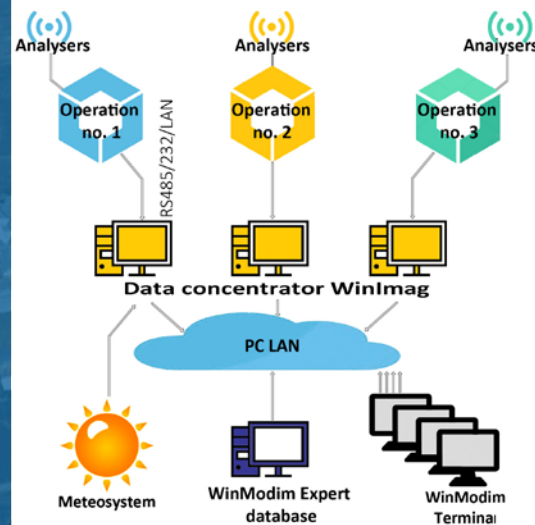
The data are concentrated in the monitoring system at regular intervals. At these intervals, MODIM EXPERT displays the detected concentrations, technological parameters, and direction of expected leakage flow so the operator has information about the foreseeable threat location. Concentration evaluation is done every time the data is changed, according to the pre-defined conditions. The starting point is the limits for toxicity, technological limits of operation and meteorological limits. For each operation are defined custom's criteria based on which is automatically generated signal „CAUTION“ and „ACCIDENT“.

Other possibilities

- Pasquill Gifford's scattering formula
- Scattering parameters for 6 atmospheric stability categories and modes typical for urban area and rural landscape
- The starting point for the calculation is data from the detector and the dispersion conditions in the atmosphere
- Transformation of data obtained from the detector into a scatter map using a mathematical model
- Functionality of the model even when saturation of detectors - calculation of SLAB heavy gas scattering.
- Data input about the meteorological situation in real-time and range of accident according to the emergency plan and risk analysis
- Output predictions of concentration at the observed area
- Selection possibilities of areas by particular importance, increased risk of danger to persons, time data about the incident, and a combined selection of risk scenarios based on risk analysis.
- Permanent predictions of dispersion of hazardous substances



Permanent predictions of the dispersion of hazardous substances in the operation area



Vector map showing objects

- Data about sensors and their location
- Controlled area data
- Dangerous substances data
- Toxicity limit values
- Limit values for technological parameters
- Limit values for time intervals
- Limit values of time changes
- Logical continuity of monitored data
- Accident scenarios

Configuration

Configuring WinMODIMEXPERT v.5 is only done by an authorized administrator because it has a major impact on the program's activity. The range of entered parameters are checked for errors in the range of mathematical rules.