iTOXcontrol

Integrated On-line Toxicity Monitoring System

microLAN
On-line Biomonitoring Systems



The iTOXcontrol is the most versatile screening and Early Warning System in the world with unique options:

- Integrated and automated cultivation of the bacteria inside of the instrument.
- Information can be sent to an internet database to support decision making for alarm monitoring and modelling.
- Integration of different optional sensors like a UV-VIS sensor or Algae sensor (for Chlorophyll-a and blue-green algae) which creates a combined system for Early Warning and Water Quality Monitoring (ask for more specifications and details).

Extended maintenance cycle

By integrating the cultivation of the bacteria into the iTOXcontrol, it is possible to extend the maintenance cycle to 1h every 2 weeks. This also decreases the usage of bacteria to 50%.
The new design of the bacteria (40 ml) module allows better mixing results.





Specifications of the new iTOXcontrol:

- Smaller footprint: 50x50x 183 cm (D x W x H).
- Communication: integrated 4-20 mA signal, TCP/IP
- Optional: modem for telephone connection or additional RS232 connection.
- Very reliable, low running & maintenance cost.
- TOXview software for data acquisition & evaluation.
- Can be used with automatic, in-line dechlorination.
- Optional UV-VIS sensor for TOC, COD, BOD, turbidity, SAC254, NO3-N.

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iTOXcontrol

Specifications



- Sample temperature: 15 - 30 degrees C.
- Working conditions (room temperature):

a. Standard: 15 - 30 degrees C.
b. Optional: 30 – 40 degrees. C. with additional cooling unit.

- Communication:

a. standard: TCP/IP, Analog output: 4 – 20 mA
b. optional: external USB modem 56k
c. optional: External COM port for MODBUS data communication.

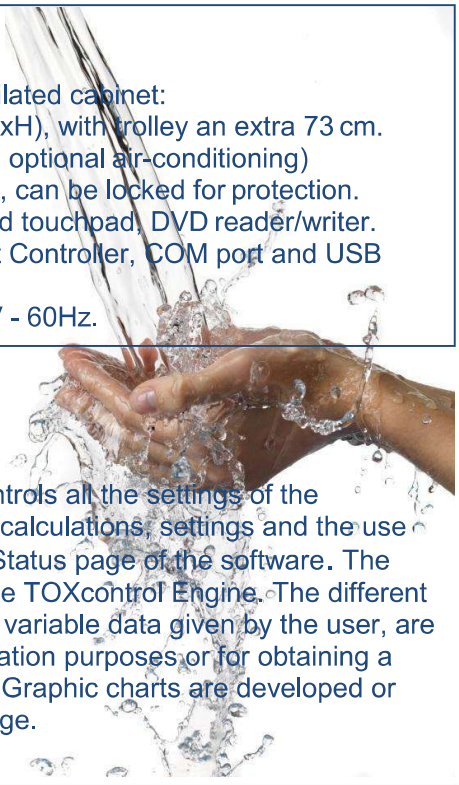
- Cabinet: protection class IP 31.
- Sample water: ± 10 ml/h (4,5 ml per measurement, 2 per hour)
- Reference water: ± 100 ml/h per measurement, not chlorinated, optional dosage with a magnetic valve.
- In-line, automatic dechlorination is possible
- Connections:

a. Drain : waste and positive control: 20 mm (external)
b. Feed : sample and reference: 4 mm (external, for silicone tubing)

Hardware:

The iTOXcontrol is placed in a ventilated cabinet:

- Size: 50 x 50 x 110 cm (DxWxH), with trolley an extra 73 cm.
- Weight: ± 90 kg (+ 20 kg with optional air-conditioning)
- Housing with glass front door, can be locked for protection.
- Build-in PC with keyboard and touchpad, DVD reader/writer.
- 17 inch TFT screen, Ethernet Controller, COM port and USB connectors
- Power: 220V - 50 Hz or 110V - 60Hz.



Software:

The TOXcontrol Engine software runs under Windows 7 and controls all the settings of the instrument. The TOXview data collection software is used for or calculations, settings and the use of alarm levels. The status of the instrument is displayed at the Status page of the software. The iTOXcontrol instrument is performing the instructions given by the TOXcontrol Engine. The different settings for the instrument as the readings for calculations using variable data given by the user, are loaded when the program is started. The required data for evaluation purposes or for obtaining a history file, will be saved during a run in the TOXview database. Graphic charts are developed or changed using TOXview, which can be selected in the Graph page.