

The logo consists of a dark blue square with a yellow square in the top right corner. The text "Blue Box" is written in white, with "Blue" on the top line and "Box" on the bottom line.

Blue
Box

We are making your liquids transparent



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BlueBox



BlueBox is an ideal measuring and controlling system. The intelligent connection between sensors and actuators!

Beside the sensors and actuators of our own product portfolio we integrate sensors and actuators of almost every manufacturer in our system.



NETWORKING OF THE SYSTEM

BlueBox-systems are linked via LAN, Wireless-LAN or by internet.

Messages and measured values can be sent as SMS, e-mail or fax.

REMOTE CONTROL

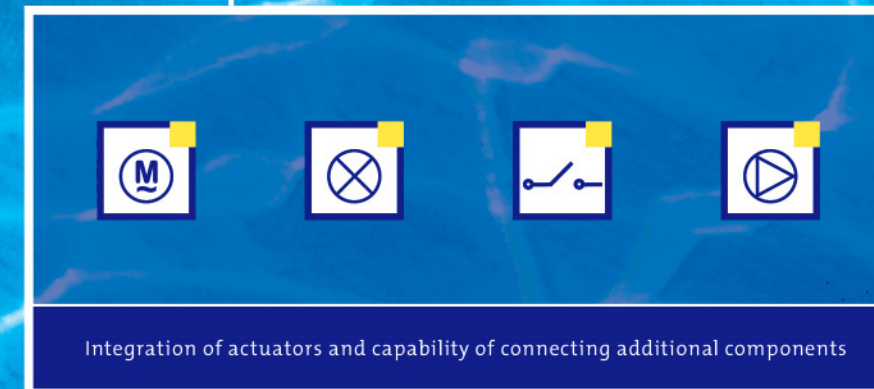
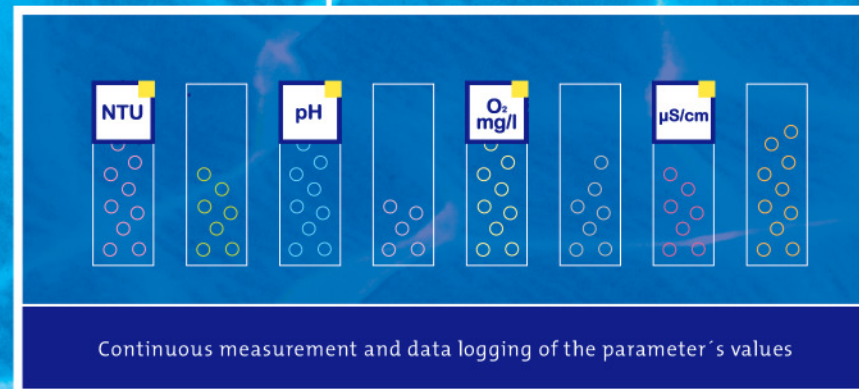
All settings and functions of the BlueBox can be done local or by remote control. An external PC can be connected via GSM-modem or LAN (Internet).



APPLICATIONS

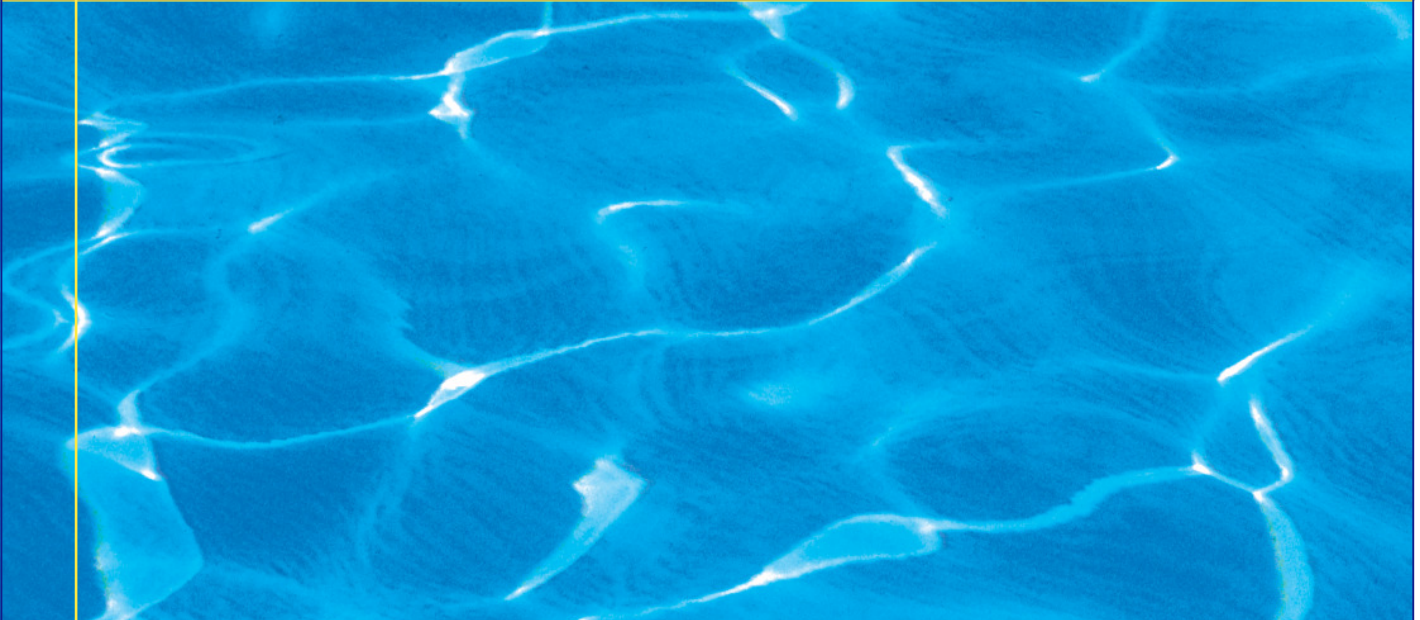
- Process water control in the industry
- Surveillance of sewage plants
- Measurements at pump stations (detection of polluters)
- Observational network for the localisation of pollutet discharges
- Controlling of closed-loop-systems in the aquaculture
- Surface water monitoring

Sensors and Controlling – connected in one system





NETWORKING OF THE SYSTEM



BASIC QUALITIES OF THE SYSTEM

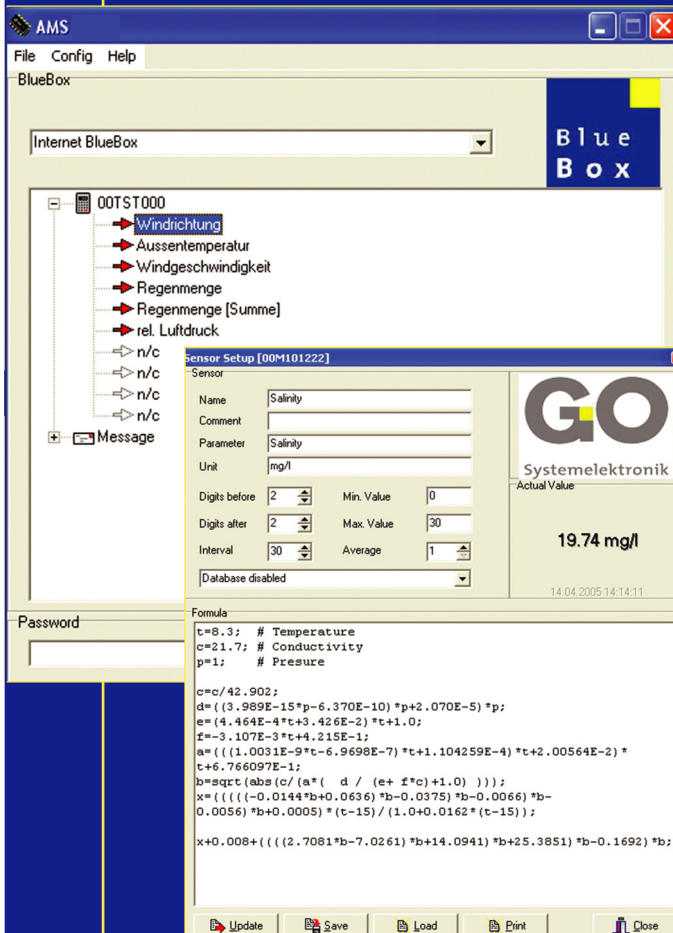
- ☐ Connection to sensors and actuators of almost all manufacturers
- ☐ More than 200 sensors and actuators (Bus-technology)
- ☐ Continuous measuring and data logging of the parameter's values
- ☐ "Log file functionality"
- ☐ PLC-functionality / event handling
- ☐ Plug-and-Play – simple replacement and automatic identification of sensors
- ☐ LAN, W-LAN, Internet, USB-port, GSM-modem, Bluetooth
- ☐ SMS, e-mail, fax
- ☐ Decentralised placement of sensors and actuators in any configuration over distances of many kilometres
- ☐ Modularity of the **BlueBox!**
Fulfilment of the customer's needs. Realisation of different requirements during changing needs
- ☐ Large assortment of software products for the "online-presentation", for the visualization and storage of the measured values – remote action
- ☐ Virtual sensors – calculation of measured values in real time

SOFTWARE PRODUCTS

- Database-application for filing and processing of measured values (SQL)
- Process visualisation in real time (master display)
- Advanced Managing Software (AMS)

ADVANCED MANAGING SOFTWARE (AMS)

- Creation of virtual sensors by input of mathematical functions
- Generation of logical and time-based linkages between sensors and actuators (PLC-functionality)
- Management of notification scenarios, e.g. as SMS, e-mail or fax



LINKING-UP SENSORS AND CONTROLS

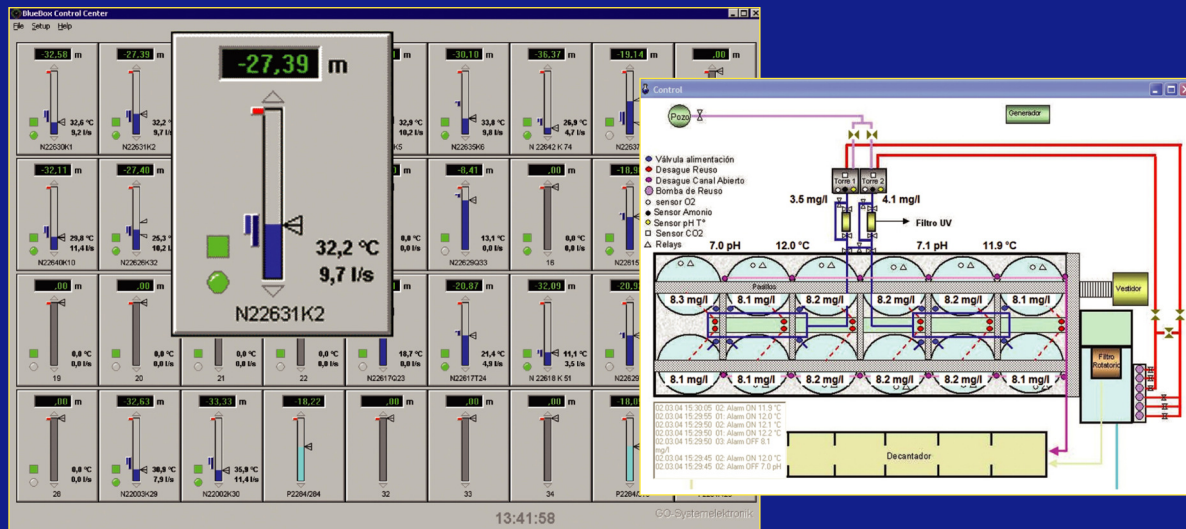
The CAN-Bus enables the connection of sensors, actuators and displays over long distances.

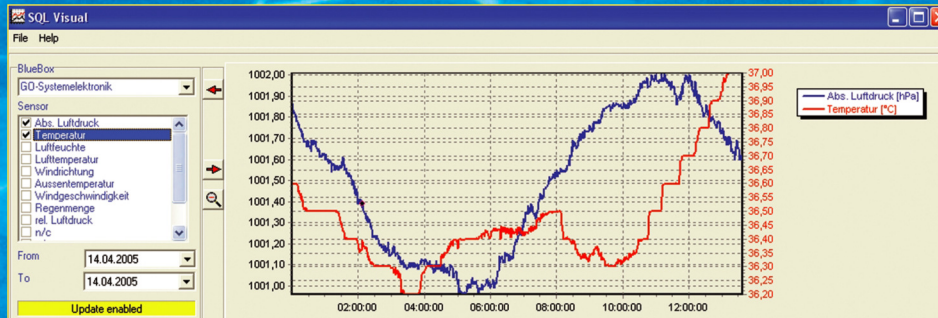
The sensors and actuators are connected over many kilometres in user-defined design by one cable for the data and the power supply.

DATA LOGGING AND VISUALISATION

The measured values can be shown “online” or “offline” on a PC by the BlueBox-visualisation software.

All current types of data transmission are supported and a large assortment of tools for the data processing and the control and communication system are available.





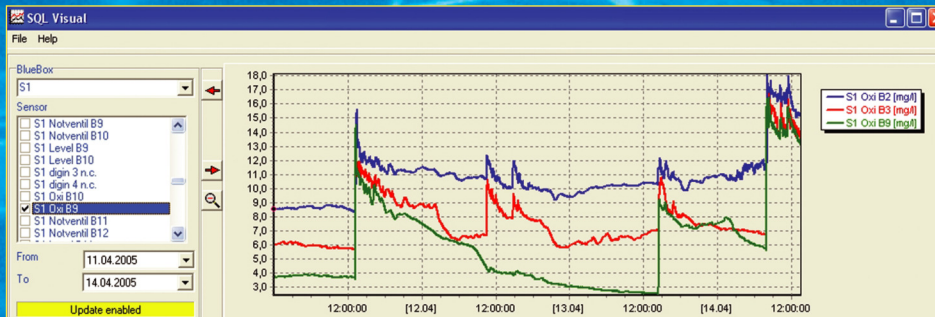
Surface water monitoring
Land reclamation
Landfill leachate monitoring

Process water control
Food industry
Aquaculture and fish-farming

Sewage and purification plants
Drinking water monitoring
Process water optimisation
Fountain monitoring
Ground water management

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Hydrologic and climatologic measurements on research vessels, buoys and gauging stations, etc.



MEASURING AND CONTROLLING

BlueBox – the intelligent connection between sensors and actuators

SENSORS

- ☐ Temperature
- ☐ Conductivity (salinity)
- ☐ Dissolved oxygen
- ☐ pH-data
- ☐ Turbidity
- ☐ Redox
- ☐ Pressure
- ☐ Discharge
- ☐ Nitrate
- ☐ Ammonium
- ☐ TOC/DOC
- ☐ COD/BOD
- ☐ virtual sensors
- other parameters on request

ACTUATORS

- ☐ 0 to 10 V
- ☐ 4 to 20 mA
- ☐ Relay-outputs
- ☐ Serial interface RS 232
- ☐ Serial interface RS 485
- other actuators on request

INPUT MODULES

- ☐ 4 to 20 mA
- ☐ 0 to 10 V
- ☐ Digital I/O-port
- ☐ TTL / 24 V
- ☐ Pulse
- ☐ Serial interface RS 232
- ☐ Serial interface RS 485
- other input modules on request

