

ONLINE MONITOR OF TOTAL AND SPECIFIC BACTERIA ACTIVITY (E.COLI AND COLIFORM) IN WATER.

Instrument Specifications:

Based on fluorescent measurement of specific enzymatic activity:

- β -Glucuronidase \rightarrow indicates E.coli activity
- β -Galactosidase \rightarrow indicates Coliform activity
- Alkaline Phosphatase \rightarrow Total Activity

Communication Specifications:

- Integrated PC with Windows
- Graphical user interface with touchscreen
- Full network capability via direct LAN
- 2 x USB 2.0 type A
- 2 x LAN 10/100/1000MB/s; RJ-45
- 2x digital input
- 2x relays output
- Protocols: Modbus TCP and Modbus serial, others on request
- 1 x 4 - 20mA outputs
- English operating system: German, French and Spanish, and others on request

Specifications Options:

- Modem slot for UMTS, ISDN or analog (modem optional)
- Second sample inlet / extra rinsing
- Air-conditioning unit (if higher than 30°C / 86F)

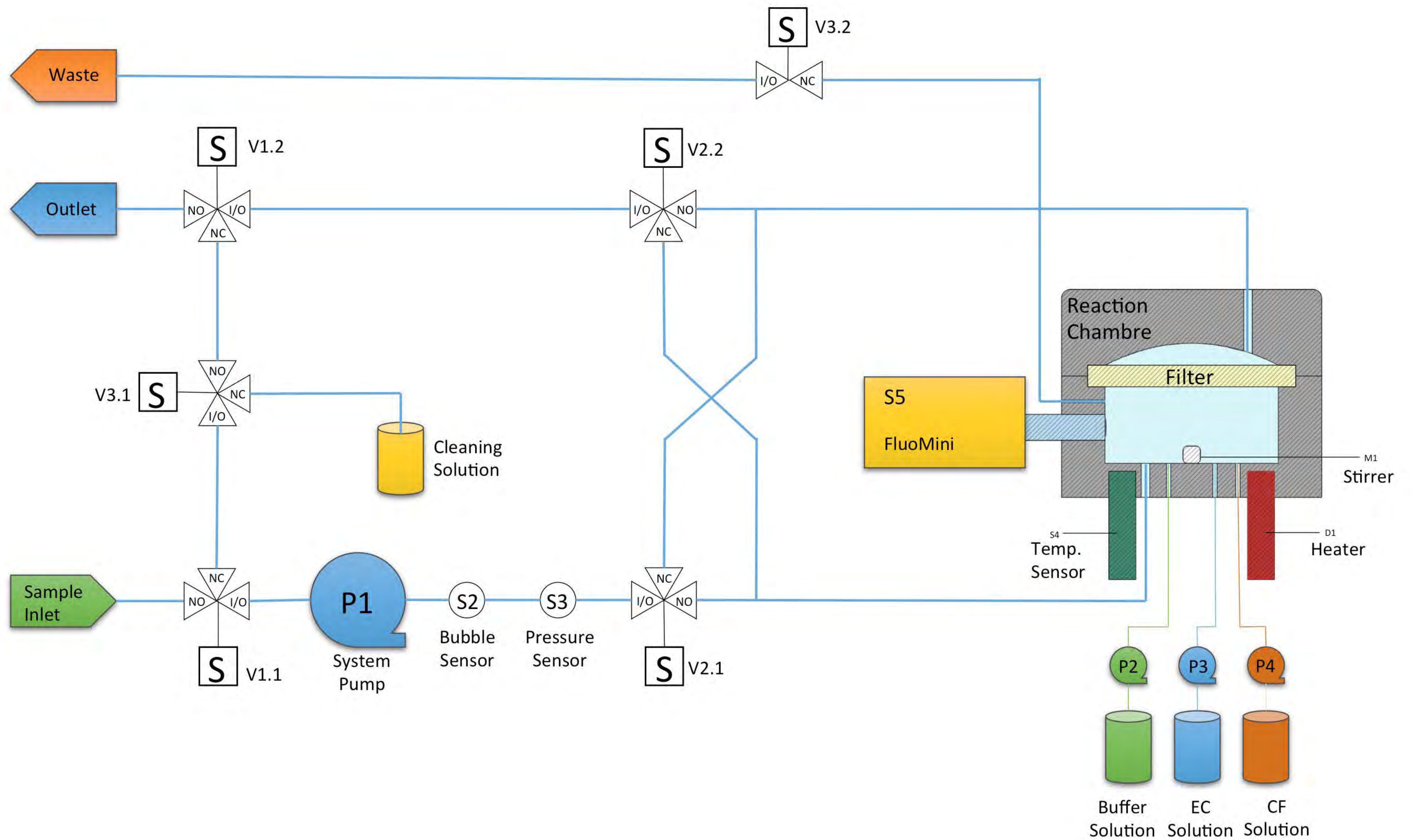
Automatic cleaning:

- User selectable cleaning cycles
- Cleaning solution (sodium hypochlorite solution < 0,05% active) prevents fouling and enables unattended deployment for several weeks.

Technical Details:

- Protection classification: IP 54
- Weight: 25 KG (excluding airco)
- Dimensions (h x b x d): 460 x 450 x 321 mm
- Cabinet material: St. Steel
- Sample pressure: max 0.05 bar
- Sample connection: 4 mm ID
- Sample temp.: 10 - 35°C / 50F 95F
- Sample flow rate: 3 l/h
- Ambient temperature: 15 - 30°C / 59F 86F, > optional air-co necessary
- Power consumption (average): <100W
- Power: 220V - 50 Hz or 110V - 60Hz
- 1 programmable pump (sample).





The BACTcontrol is an “early warning system”, complementing the officially accepted methods for the detection of microbiological activity. The measurements are realized in a short period of time, 1-2 hours, depending on the sampling volume and cleaning procedures. This is in contrast to classical microbiological methods, which are labor-intensive and in which cultivation of the organisms is required, taking several days before obtaining reliable results (24-48 hours).

The BACTcontrol is an online automated instrument for the detection of microbiological activity in water. It measures the specific enzymatic activities of β -galactosidase (coliforms), β -glucuronidase (E.coli) and alkaline phosphatase (total activity, biomass), as an indicator of the presence of bacterial contamination. The enzyme activity is detected by adding reagents (consumables) which contain a fluorescent indicator. The reagents are substrate-specific for the enzyme to be detected, meaning that there is an increase in fluorescence when the enzyme is present in the sample.

The BACTcontrol is based on the patent EU 08756847.3 (2 165 193) and US 8,518,246 B2 and already in use with renown water utilities and research institutes. Please contact us at sales@microlan.nl for references and applications.