



BactoSense™ Multi

Automated flow cytometer for easy monitoring of bacteria in multiple water samples



- Autonomous** Processes up to 30 samples automatically, while thermally stabilized
- Safe** Minimized handling of chemicals, all reagents are sealed in a recyclable cartridge
- Accurate** Flow cytometry technology allows precise detection of more than 99.9% of microbial cells
- Fast** Results available within 25 minutes, analyses up to 36 samples in 24h
- Reliable** Self-check routines, factory calibration and low maintenance

- Easy to use** Fully automated sample preparation, batch measurements and cleaning – can be used by anyone
- Cost saving** Reduces the required number of plating tests (HPC) for a minimal total cost of ownership
- Universal** For process monitoring, lab analysis, manual or batch processing – provides TCC, ICC, HNAC/P, and LNAC
- Compact** Built for process and industrial operations
- Integrated** Choice of multiple data interfaces: USB, Ethernet, FTP

Main applications

Microbiological assessment of your production and processes.

- Allows a complete mapping of your system
- Enables monitoring of multiple sampling points
- Simultaneous disinfection control
- Filtration efficiency
- Synchronized validation of the distribution network

Industries

- Water treatment & distribution
- Food & beverage
- Laboratories & universities

Parameters provided

- TCC Total Cell Count
- ICC Intact Cell Count
- HNAC High Nucleic Acid Count
- LNAC Low Nucleic Acid Count
- HNAP High Nucleic Acid Percentage

Specifications

| Measuring principle | Flow cytometry |
|----------------------------|---|
| Light source | Laser diode 488 nm |
| Optical detection | Fluorescence: 535/43 (FL1), 715 LP (FL2), Side scatter 488/10 (SSC) |
| Lower size detection limit | 0.1 µm |
| Measuring range | 1'000 - 2 Million cells/ml |
| Detection limit | 100 - 5 Million cells/ml |
| Accuracy | < 5 % relative |
| Measuring interval | 40 minutes |
| Microbial parameters | TCC/ml, ICC/ml, LNA/ml, HNA/ml, HNAP(%) |

| Sampling | Autoloading station |
|------------------------|-------------------------------------|
| Sample volume | 1162 µl sampled, 90 µl for analysis |
| quantity | 1 - 30 samples |
| cooling | min. 4°C, max. room temp. minus 3°C |
| Requirements | |
| chlorine concentration | max. 3 mg/l |
| turbidity | max. 10 FTU |
| pH range | 5 - 12 |
| temperature range | 5..40°C |
| conductivity | max. 100'000 µs/cm at 20°C |

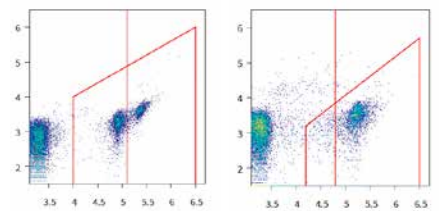
| Instrument | Factory calibrated |
|---------------------|--|
| Display | Touchscreen |
| Data storage | 32 GB |
| Dimensions (WxDxH) | 700 × 757 × 373 mm |
| Weight | 35.5 kg |
| Power supply | 100 - 240 VAC, 50/60 Hz, 1.4 A, 2 sockets |
| Power consumption | 20 + 160 W |
| Ambient temperature | 5..30°C |
| Relative humidity | 10 - 90% RH |
| Cartridge | Hermetically sealed enclosure for reagents, cleaning liquids and waste |
| Cartridge capacity | Max. 500 measurements, 9 months validity |

| Interfaces | Digital and analogue |
|--------------------|---|
| Inputs | 4 × digital, freely configurable |
| Outputs analogue | 2 × 0/4 .. 20 mA, galvanically isolated |
| Outputs digital | 4 × digital, freely configurable |
| Digital interfaces | Sealed USB, Ethernet connection, FTP |

| Accessories | |
|-----------------|--|
| TCC Refill | Filling and servicing of cartridge - to measure Total Cell Count of up to 500 samples |
| ICC Refill | Filling and servicing of cartridge - to measure Intact Cell Count of up to 500 samples |
| Cleaning kit | Deep cleaning of all internal micro-fluidic components |
| Validation kit | Easy way to check your instrument after transport or long period out of use |
| Screw cap vials | 10 ml, box of 100 vials with septum |
| Barcode Reader | Eliminates input errors, reads 1D-, 2D- and QR codes |



BactoSense Multi with cooling capabilities



Dotplots showing TCC and ICC



ICC or TCC cartridge



Sample tray containing up to 30 vials



Validation & Cleaning kits



bNovate Technologies SA

Ch. Dent d'Oche 1A · CH-1024 Ecublens
Tel. +41 (0)21 552 14 21
info@bnovate.com · www.bnovate.com

© 2022 bNovate Technologies SA, Switzerland, all rights reserved



30201-01-EN