



# TurBiScat

## In-line Process Turbidity Monitor



### Applications

- Filtration monitoring in beverages such as beer, fruit juices, spirits and process water
- Supervision of centrifuges, separators, whirlpools in the beverage industry
- Turbidity measurement in oils, sugar solutions, food
- Purity control in chemical and pharmaceutical processes

### Industries

- Beverage
- Food
- Chemical Industry
- Pharmaceutical Industry

### Advantages

- Maintenance-free design without seals
- Removable electronic section with quick lock
- Extended sensor check function with fouling control
- 2-Angle measurement with colour compensation
- Optional colour measurement
- Easy calibration with secondary standard
- Control unit with colour touch screen display
- Variable display of measuring data, graphs, process performance
- Smooth system integration using various communication interfaces

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## In-line Process Turbidity Monitor

### Innovations with tangible benefits



#### Sealless Design

The combination of Hastelloy and sapphire allows operating the unit in practically all process applications – from filtration control in breweries up to turbidity control in chemical processes. It eliminates the need for regular maintenance.



#### Easy Handling

The electronic section can be quickly removed from the sensor head with a simple grip using a quick lock, no tools are required. Therefore, the sensor head remains in the pipe line. Possible inspection or service actions can be carried out without interruption of the process.



#### Monitored Safety

An extended sensor check function permanently monitors all system parameters in the background. An optical anti-fouling control provides important information about a successful CIP procedure and informs about necessary cleaning and calibration check. Calibration is easily done using a secondary reference standard.



#### Intelligent Control System

The new control unit SICON uses state-of-the-art touch screen technology with colour display. It allows simple operation using logical menu guidance. Results displayed can be either plain values, graphs or historical data, including the indication of system and alarm status. The control unit SICON offers all possibilities of full system integration using various interface options. A SD card is standard and can be used for data logging with almost unlimited storage capacity for QS requirements.

#### Technical Data

##### Sensor:

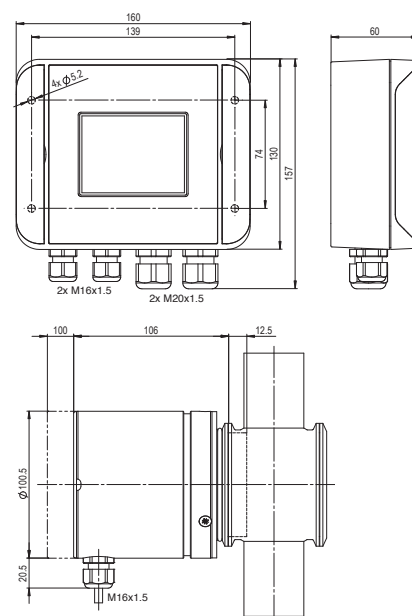
Measuring principle: 90°/25° Scattered light  
Wavelength turbidity: LED 650 nm  
Wavelength colour (optional): LED 430 nm  
Measuring range turbidity: 0 .. 1000 EBC  
0 .. 4000 NTU  
Measuring range colour: 0 .. 50 EBC  
Installation: In-line housing  
Varivent® or compatible  
Material sensor head: Hastelloy C-22  
Material housing: Stainless steel 1.4301  
Windows: Sapphire  
Sample temperature: -10 .. +100°C, 180°C with cooling option

##### Cleaning:

Pressure: 1 MPa (10 bar) / 100°C  
Ambient temperature: -10 .. +50°C  
Ambient humidity: 0 .. 100% RH  
Protection degree: IP 66

##### Control unit SICON:

Power supply: 9 .. 30 VDC  
Power consumption max.: 8 W  
Display: 1/4 VGA, 3.5"  
Operation: Touch screen  
Ambient temperature: -10 .. +50°C  
Ambient humidity: 0 .. 100% RH  
Protection degree: IP 66  
Outputs: 4x 0/4 .. 20 mA, galvanic separated, 7x digital outputs, 5x digital inputs, freely configurable  
Digital Interface: Ethernet, SD-card  
Optional: Profibus DP, Modbus, Profinet



Your representative:

**SIGRIST**  
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