

BlueSense Transducer

The **BlueSense** transducer facilitates the processing and calculation of measurement values of physical and chemical sensors. In addition, the transducer features a full controller function that can cover all process-oriented tasks.

The BlueSense transducer is compatible with analogue and digital sensors and actuators of all manufacturers.



Application Areas



Drinking Water

- Quality control
- Alarm systems



Wastewater

- Effluent monitoring
- Trend analysis
- Early detection of discharge (fingerprint)



Process Measurement & Control Technology

- Process monitoring in industrial facilities
- Control of process water treatment
- Process optimization



Environmental Monitoring

- River water
- Surface water

Parameters / Sensors

- Blue-green algae
- Chlorine
- Chlorine dioxide
- Chlorophyll a
- Conductivity
- Dissolved organic substances
- Dissolved oxygen
- ISE
- Level
- Oil in water
- Ozone
- pH
- Redox (ORP)
- Salinity
- Temperature
- Turbidity
- Water pressure

Main Functions & Features



Monitoring Function



PID-Controller Function



SD Card Data Logger



2 Sensor Inputs



Intelligent Event Handling



Cloud Data Service



Modular & Expandable



CAN bus, Modbus & Profibus

Technical data

| | |
|-----------------------------|--|
| Power supply | 12 V DC (9 - 18 V) 24 V DC (18 - 36 V) 230 V AC (90 - 260 V) |
| Power consumption (typical) | 8 W |
| Dimensions (wxhxd) | 23.5 x 18.5 x 11.9 cm |
| IP protection class | IP 65 |
| Graphic touch display | 240 x 128 pixel |
| Ambient temperature | -10 to +45 °C |

Optional interfaces

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|--|
| 1x RS-232, RS-485, var. protocols e.g. Modbus |
| 1x CAN bus for connection to ISA, BlueBox, BlueMon & MPS |
| 1x Ethernet [TCP/IP], Modbus [TCP/IP] |
| Profibus |
| GPRS / UMTS / LTE modem |

Inputs

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|--|
| 2x Sensor input for selectable parameters |
| 2x Digital-In (static) potential-free contacts |
| 2x Pulse-In (PNP/NPN selectable) |

Outputs

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|--|
| 2x Current output 4-20 mA |
| 2x Relay with a switching capacity of 230 V AC/DC; 2 A |
| 2x Relay with a switching capacity of 24 V AC /DC; 0,5 A |

Features & functions

| |
|-------------------------|
| PID controller |
| Signal compensation |
| Data storage on SD card |
| Multipoint calibration |

Product configuration

The BlueSense transducer can optimally be adapted to the customer specific application through the modular configuration of the sensor inputs.



BlueSense

Art. no. 485 0001

BlueTrace - Turbidity Sensor

The **BlueTrace - Turbidity Sensor** is a compact probe for the measurement of **Turbidity**, **Total Suspended Solids (TSS)** and **Temperature** in water. The sensor works according to the scattered light measuring principle and features an integrated temperature compensation.



Application Areas



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- Quality control
- Alarm systems



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Environmental Monitoring

- River water
- Surface water

Parameters

- Turbidity (FNU)
- Total Suspended Solids (TSS)
- Temperature

Functions & Features



Adaptable Measuring Range



90° Scattered Light



Easy Calibration



Immersion & In-line Integration



Integrated TSS Estimation



Temperature Compensation



Robust & Non-corrosive



Modbus Interface

Technical data

| | |
|-----------------------------|--|
| Power supply | 10 - 32 V DC |
| Power consumption (typical) | 0.5 W |
| Light source | 860 nm |
| Material | Stainless steel 1.4404 / Titanium [optional] |
| Operation temperature range | -5 °C to +55 °C |
| Weight | 0.6 kg |
| Dimensions | Length 146.1 mm; Ø 36 mm |
| Maximum pressure | 6 bar |
| Interface | Modbus [RTU] |
| Art. no. | 461 6780 |

Parameter details

| | |
|-------------------------------|---|
| Measuring principle | 90° scattered light according to DIN EN 27027 / ISO 7027 |
| Measuring range (Turbidity) | 0 - 50 / 100 / 1000 / 4000 FNU |
| Measuring range (TSS)* | 0 - 5 g/l |
| Measuring range (Temperature) | 0 - 60 °C |
| Measuring accuracy (typical)* | 3 % FS |
| Detection limit (typical)* | 0.1 FNU |
| Measuring interval | ≥ 1 s |

*TSS requires calibration to on-site specific composition. Accuracy and calibration depend on the composition of the substance

Accessories



Immersion sensor holder with
compressed air cleaning
Art. no. 462 1110



Automatic brush cleaning system
Art. no. 462 W00



Retractable armature
Art. no. 462 6700



BlueConnect Module
Art. no. 486 C000



Modbus USB Converter
Art. no. 486 S810



Modbus Tool
www.go-sys.de/en/downloads