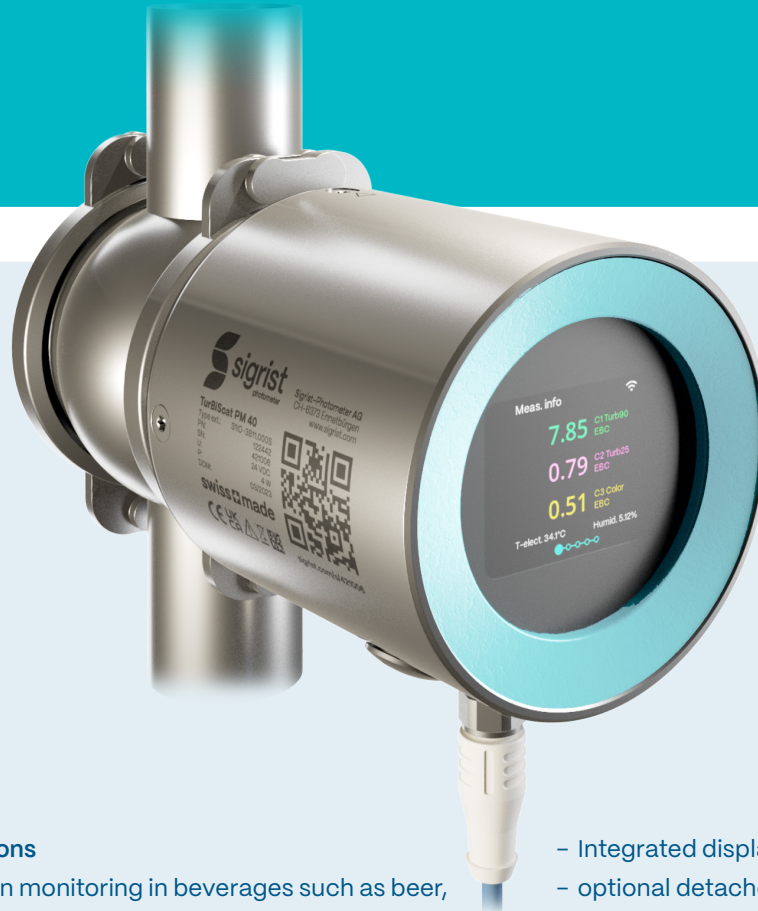


# TurBiScat PM 40

In-Line Turbidimeter



## Applications

- Filtration monitoring in beverages such as beer, fruit juices, spirits
- Supervision of centrifuges, separators, whirlpools in the beverage industry
- Turbidity measurement in oils, sugar solutions, food

## Advantages

- Sealless design, maintenance-free
- Extended sensor check function with fouling control
- Colour-compensated, 90° / 25° dual-angle measurement
- Optional colour measurement at 430 nm
- Measurement according to MEBAK / EBC / ASBC
- Quick adjustment with secondary standard
- Sensor monitoring regarding humidity and temperature

- Integrated display with colour touch screen display
- optional detached display unit
- Variable display of measuring data graphs, process performance direct on point of measurement
- Smooth system integration

## Industries

- Beverage
- Food

## Innovations with tangible benefits



### Highest Precision, Large Measuring Span

Highest quality components and precise workmanship result in a high measuring span. An optional integrated colour measurement is available:

- One sensor type for numerous applications
- Precise measurement of lowest up to very high turbidity values
- Colour measurement in the same sensor for an attractive price
- Proven measurement system
- MEBAK/EBC/ASBC-conform



### Convincing Design

Combination of stainless steel and sapphire in a compact, sealless design with LED technology:

- Simple installation in VARINLINE® housings
- Allows operation in practically all process applications
- No need for regular maintenance
- Operates without additional control unit
- Precise verification and recalibration without the use of Formazin
- Permanent humidity and temperature monitoring
- Low TCO



### Value display direct at the place of measurement

Das TurBiScat PM 40 can be easily detected in the plant.

Integrated display with state-of-the-art coloured display technology:

- Provides clear data display with easy touch screen navigation direct at the place of measurement
- Display of up to 4 measured data simultaneously or graphic representation of the measurement readings for up to 7 days (1 day, 1 hour)
- Clear status information with link to support in case of warnings or alarm
- state-of-the-art configuration and value display on the Smartphone



### System integration and integrated security

The TurBiScat provides several data interfaces from analogue outputs to process buses for continuous process monitoring

Permanent accessibility to data and status information

- Integrated threshold monitoring
- Enforced data security
- Secured WLAN-connection
- Secured access to smartphone over web browser

### Main technical details

Measuring principle:	90° / 25° Scattered light
Wavelength turbidity:	LED 650 nm
Wavelength colour (optional):	LED 430 nm
Measuring span turbidity:	0 ... 1'000 EBC 0 ... 4'000 NTU
Resolution:	0.001 EBC
Measuring span colour:	0 ... 50 EBC
Sample temperature:	-10 ... +100 °C
Protection degree:	IP66

Full details and technical data:



# TurBiScat PM 40

## Technical data

### Sensor

Measuring principle:	90° / 25° Scattered light
Wavelength turbidity:	LED 650 nm
Wavelength colour (optional):	LED 430 nm
Measuring span turbidity:	0 ... 1'000 EBC 0 ... 4'000 NTU
Measuring ranges:	8, freely programmable
Resolution:	0.001 EBC
Measuring span colour:	0 ... 50 EBC
Installation:	In-line housing Varivent® or compatible
Material sensor head:	Stainless steel (1.4404)
Material housing:	Stainless Steel 304 / 1.4301
Windows:	Sapphire
Sample temperature:	-10 ... +100 °C
Cleaning:	CIP / SIP compatible up to +120 °C / +248 °F @ 2 h
Pressure:	1 MPa (10 bar) / 145 psi in standard Varivent® housing Up to 4 MPa (40 bar) / 580 psi on request
Ambient temperature:	-10 ... +50 °C / +14 ... +122 °F
Ambient humidity:	0 ... 100 % RH
Protection degree:	IP66

### TurBiScat PM 40 – S1XX and SiDis AD 40

Supply voltage:	24 VDC ± 10 % (Interface PoE according to standard)
Power consumption:	Max. 4 W → depending on communication interface
Display:	Display: ¼ VGA with Touchscreen
Resolution:	320 x 240 pixel with 2.4" diagonal
WLAN-Modul:	WLAN according to IEEE 802.11 b/g/n
Standard Interface (EG_IO):	6 configurable inputs and outputs • Max. 2 digital inputs: 5 ... 28 VDC • Max. 4 digital outputs: High-Side Switch max. 20 mA • Max. 4 current outputs: 0/4 ... 20 mA, max. 700 Ω Modbus RTU

EG_PoE:	Ethernet LAN connection with Power over Ethernet • Ethernet according to 10/100BaseT POE according to 802.3af, class 0
EG_Profinet:	Profibus DP-V1 Slave In preparation

### SiDis AD 40

Protection degree:	IP 66
Weight:	Ca. 0.4 kg
Dimension:	Ø 105.5 x 71 mm
Material housing:	PC/ABS UL94 V0
Touchscreen:	Soda-Lime tempering glas

