

## Model MoniSpec-C-A (MSC-A)



- Principle of measurement: Absorption
- Low maintenance / long service life
- Optimized flow cell for simplified maintenance & cleaning
- Calibration- / maintenance interval 24 months (depending by application)
- Measuring lamp, gas filled ( $\lambda$  380 - 1100nm), life time approx. 2 years
- Protection class: All parts are at least IP65 / Nema 4x rated
- Flow cell material: stainless steel 1.4404 (optional titanium, PTFE, ...)
- Sight glass material: Sapphire (optional Borosilicate, Plexiglas, ...)
- Gasket material: FKM (optional FFKM, EPDM, silicone, ...)
- Process connections: DIN flanges, ANSI flanges, NPT, ....
- Span of measuring ranges: 0-100mg/l to 0-60000mg/l (DE)
- For use in hazardous area Ex- Zone I & Ex- Zone II (ATEX- Ex d IIC / T6)
- Optional air purge
- Cleaning: Cleaning in place / optional cleaning jets

### Description:

The sensor model MoniSpec-C-A uses the principle of light absorption to detect dissolved or suspended particles / colour in liquids. The transmitter model Messenger is required to use this sensor. The system has been designed for continuous operation with long life time. The sensors can be installed into almost any type of pipe. Process connection, pressure, temperature, gasket material, etc will be application specific. Optional cleaning jets will allow a cleaning of the sapphire windows in determined intervals. Calibration can be done in multiple ranges and measurement units like EBC, ppm, %, g/l, etc.. Due to the availability of multiple optical path lengths (2mm up to 120mm) the sensors can cover measurement ranges from 0-100ppm up to 0-60000ppm. The sensor will detect IR-absorption for turbidity measurement. Therefore the measurement results are not affected by product colour. In case the customer wants to detect the product colour, the absorption will be measured at an application specific wavelength.

### Applications:

- Product concentration
- Suspension
- Cell concentration
- Oil in water / Water in oil

### Operational areas:

- Chemical industry
- Petrochemical industry
- Dairies
- Brew & Beverage

### Technical Data:

Line size:	DN 25 – DN 125 / ½" - 5"	Measurement range:	typical 0–100ppm, 0–6%TS
Process pressure:	PN16 / ANSI class 150	Reproducibility:	± 1 %
Process temperature:	maximum 140°C	Detector:	Silica diode
Sensor material:	1.4404 / 316L	Measurement wavelength:	390 – 900nm
Sight glass material:	Sapphire	Cleaning:	optional cleaning jet probe
Gasket material:	application specific	Sterilization:	CIP (cleaning in place)
Protection class:	IP65 / NEMA 4X	optional hazardous area:	ATEX Zone I or Zone II