

ARGES Turbidity Sensor

Protecting Our Waterways: Precision Pollution Detection Made Easy

The **ARGES Turbidity Sensor** is an intelligent submersible sensor manufactured by Keynes Controls. It is a single-channel instrument capable of detecting and reporting turbidity levels in the range of 0.5–2000 NTU, enabling:

- The detection of Turbidity levels in rivers, drains, and estuaries
- Full compliance with Section 82 of the UK Environment Act 2021

Why Measure Turbidity: Turbidity is a key indicator of water clarity and quality, making it one of the most reliable early signs of pollution, sediment disturbance, and contamination in water systems. The ARGES Turbidity Sensor by Keynes Controls detects turbidity levels across rivers, drains, and effluent discharge points—working alongside Submersible pH Sensors, Submersible Fluorometers.

Pollution Detection: When particles enter a water source, they disrupt how light passes through it — and that change is something the ARGES Turbidity Sensor by Keynes Controls is built to detect. A sudden spike in turbidity can point to sediment, sewage, algal blooms, or industrial runoff making their way into the water supply. Left unchecked, these contaminants put human health at serious risk and can cause lasting damage to aquatic life and the ecosystems that depend on clean water.



OPC-UA Communications - (Open Platform Communications Unified Architecture) Contact Keynes Controls for further details.

The ARGES Turbidity Sensor - Simple, Accurate Turbidity Monitoring!



Constructed from high-grade stainless steel tubing, the **ARGES Turbidity Sensor** is designed for use as a stand-alone laboratory instrument or as part of a multi-parameter device within a SONDE, making it ideal for fixed installation monitoring applications.

The sensor is purely digital in operation and offers high performance measurements. The advanced power saving design ensures the sensor is ideal for remote operations. The sensor can be used as a standalone sensor or as part of a multiparameter system. **Easy to use, fairly priced, and built to deploy in minutes.**

All ARGES fluorometers have built-in temperature sensors that can be used to record the sample temperature.



Turbidity Technical Features

Type	Range
Solid state ISE sensor	
Concentration range:	0 to 2000 NTU - Other ranges on request.
Resolution:	0.01 NTU
Accuracy:	+/- 2 % of reading. +/- 0.5 NTU which ever is greater
Storage	Long term dry storage capable.
Calibration Period	Approximately 2 years, depending on usage.
pH range	0 - 14
Operation	Fluorescence
Digital Communications	SDI12 / RS485 / MODBUS Digital Communications
Depth	50 m Standard - other ranges on request.
Simple Calibration	Multi-point Calibration Point Optional
SI Units	NTU / Degree C - other turbidity units on request
Analogue Output Option	0-2 V DC - proportional to concentration and temperature.

Turbidity and Temperature effects on measurements

Turbidity and temperature effects increase errors in any of the fluorometer type sensor measurement, and so it is important to monitor the turbidity levels alongside the other chemical sensors. Changes in the turbidity of the sample can be recognised as causing measurement errors in the tryptophan and hydrocarbon sensor results.

Communications

All ARGES chemical sensors support SDI12, RS485 and MODBUS operations. The sensor acts as a slave unit when used compatible controllers and SCADA systems, the sensor supports 16- and 32-bit register addressing. A range optional USB converters are available to connect the sensor a Windows PC connection. The media converts can power the sensor directly from a PC USB port.

Product Size

Small enough to fit into outlet pipes. Dimensions Length x Diameter: 22 x 205 mm

Q-LOG Product Application Software

The ARGES Turbidity Sensor includes free Q-LOG software for Windows to configure sensors and view real-time Measurements.



Measurement Integrity

The ARGES Turbidity sensor can report the background light levels and this is used to ensure that the Turbidity measurements are accurate. Excess background light causes errors in results. There is no way to post process measurements to confirm the validity of any measurement without the background light being available for examination.

For more information, please visit the website: www.keynes-controls.co.uk