
TriOS
Optical Sensors
Higher efficiency.
Greater clarity.
One solution.
SEPIA®
made
in
Germany

SEPIA®

The SEPIA series redefines water analytics: modular, precise, flexible, and digital. Whether in the lab, in the field, or on the go – all applications are combined in one modular system. Designed for water utilities, wastewater treatment plants, environmental laboratories, industry, and aquaculture.
Think one solution.

Your Benefits at a Glance

- **High accuracy and reliability**
- **Easy handling and intuitive operation**
- **Cost efficiency through modular design**
- **USB-C & Modbus for seamless integration**
- **Comparable results in lab and field**

Technology That Connects

SEPIA offers sensors for all key water quality parameters:
Dissolved oxygen, pH, conductivity, turbidity and fluorescence parameters such as oil in water, chlorophyll a, CDOM, tryptophan and phycocyanin.

Thanks to its modular design, sensors can be integrated into 5-slot or 8-slot multiparameter probes – for stationary online monitoring, mobile applications, or laboratory analysis.

One system

all applications, all industries.

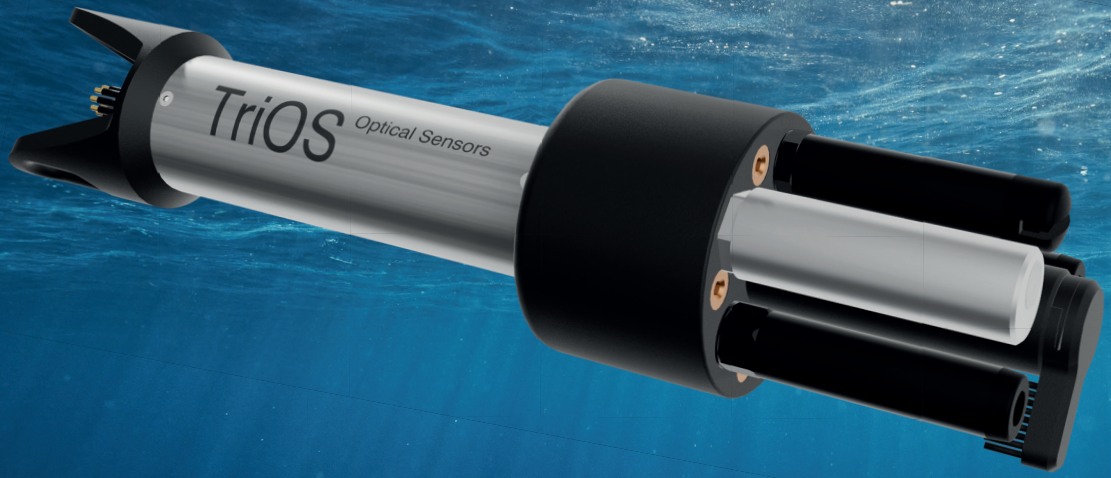
Applications

- **Wastewater treatment – reliable monitoring for process optimization**
- **Drinking water – ensure safe and clean water quality**
- **Environmental monitoring – track water bodies and detect pollutants**
- **Aquaculture – safeguard fish health and water conditions**

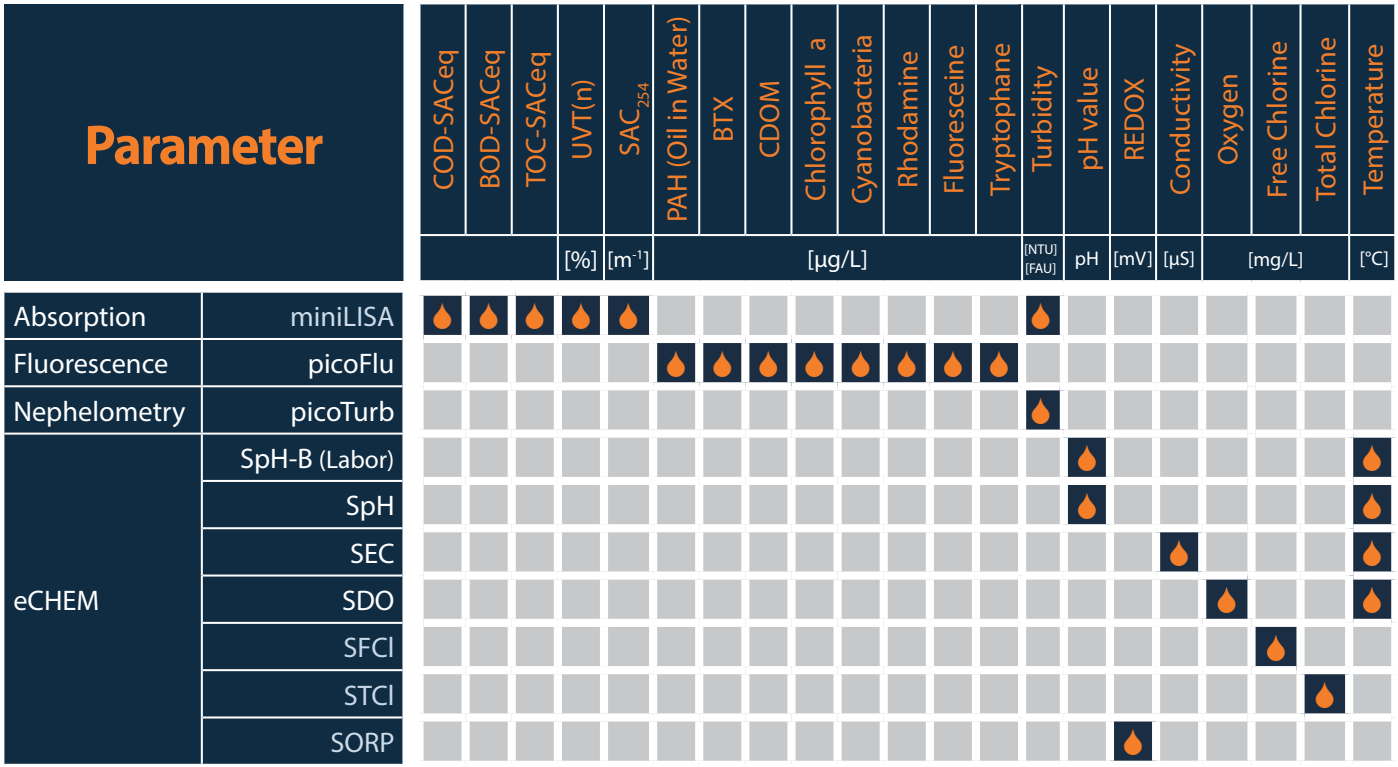
LoLA by TriOS

Bench device

FALCON by TriOS



Multiparameter probe


Parameter
COD-SACeq
BOD-SACeq
TOC-SACeq
UVT(n)
SAC254
PAH (Oil in Water)
BTX
CDOM
Chlorophyll a
Cyanobacteria
Rhodamine
Fluoresceine
Tryptophane
Turbidity
pH value
REDOX
Conductivity
Oxygen
Free Chlorine
Total Chlorine
Temperature
[%]
[m-1]
[µg/L]
[NTU] [FAU]
pH
[mV]
[µS]
[mg/L]
[°C]
Absorption
miniLISA
Fluorescence
picoFlu
Nephelometry
picoTurb
eCHEM
SpH-B (Labor)
SpH
SEC
SDO
SFCl
STCl
SORP

Why Choose SEPIA?

With over 30 years of water quality expertise, TriOS is proud to bring the SEPIA Series to the markets. Designed for real-world challenges, this concept will re-invent water monitoring.

- **Laboratory, online, and mobile measurements combined on one platform**
- **Digital, modern, and ergonomic design**
- **Calibrate in the lab – use in the field**
- **Durable and stable for demanding environments**
- **Ready-to-use sensors, pre-calibrated**

FALCON by TriOS

Introducing the next generation of modular water quality monitoring:

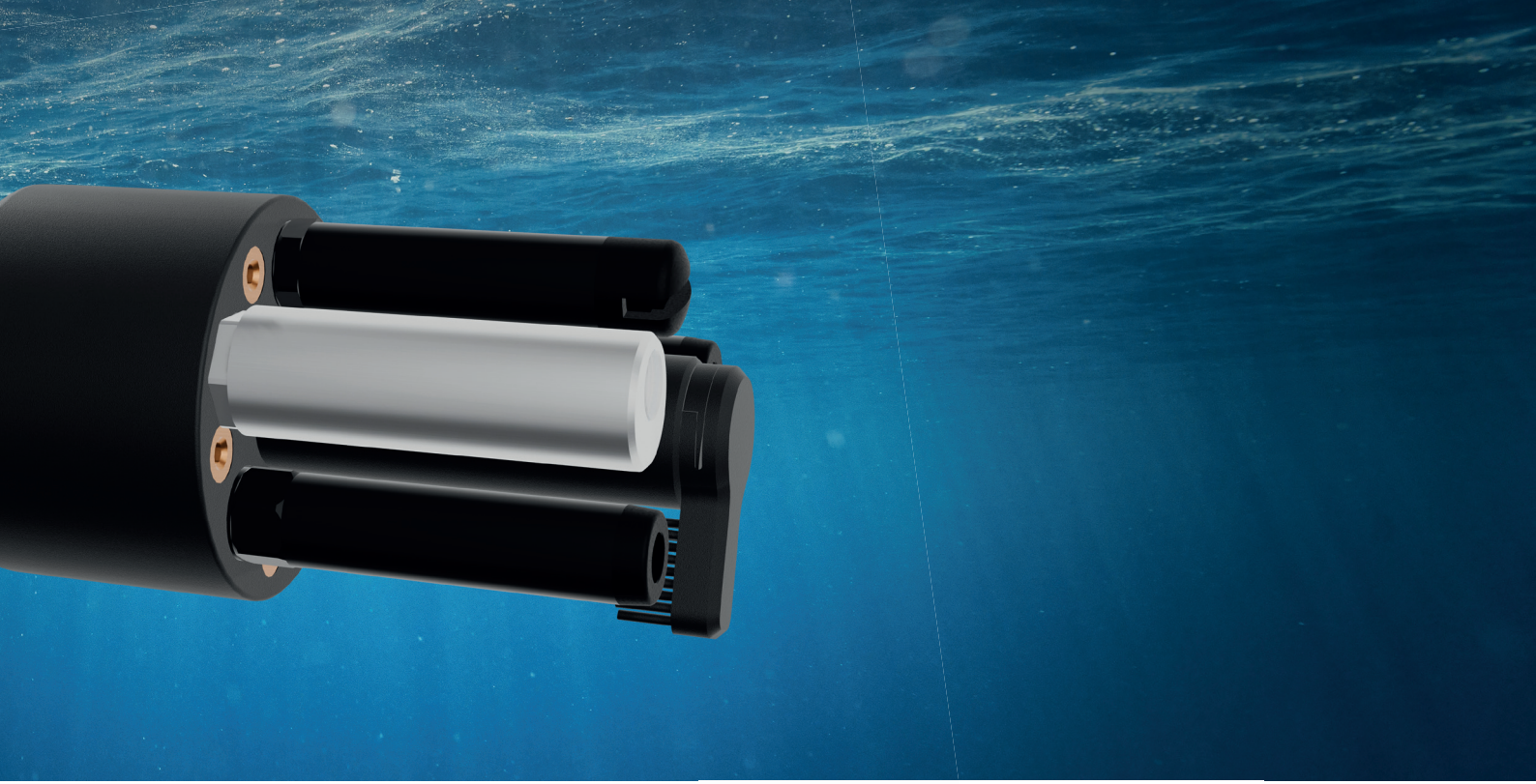
A robust, stainless steel or titanium housed multiparameter submersible probe engineered for precision, flexibility, and long term field performance. Available in 5 slot and 8 slot configurations, the system allows users to combine a wide range of digital sensors, creating customized measurement setups for any water monitoring challenge. Each port accepts any sensor from the product family, allowing users to tailor their configuration. FALCON features the SEPIA protocol as well as direct Modbus integration for seamless communication with Modbus RTU networks, data loggers, PLCs or customer specific systems.

Compatible with:

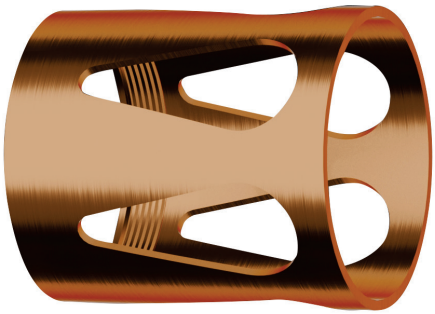
SEPIA sensors

Accessoiries

- **Brush or pressured air cleaning**
- **Protective cage & tangle protection**
- **Storage jar**



Tangle Protection



Protective cage

LoLA Lab Controller – Precision Bench Device

For high-accuracy water quality measurements, reliable calibration is essential. The Lab Controller LoLA is a compact, benchtop device engineered specifically for the calibration and verification of all digital sensors within the system portfolio. It provides a controlled laboratory environment where each sensor can be calibrated with maximum precision before deployment in the field. In addition, the device is fully suitable for independent use in the laboratory, enabling precise measurements and workflows.

Color Collection 2026:

magma red

satin black

midnight blue

Compatible with:

SEPIA sensors

Key Features:

Three USB-C Sensor Ports

The controller enabels direct connection of up to three sensors for sequential or parallel calibration steps.

Each port automatically recognizes the connected sensor and loads the appropriate calibration workflow.

USB Data Exchange & Seamless System Integration

Allows easy data transfer to PCs, laptops, or other management systems. Calibration data, sensor metadata, and diagnostic logs can be exported quickly for documentation, quality assurance, or integration into customer databases.

Compact Display for Real Time Feedback

A crisp, built in display provides instant visual feedback during calibration: Monitor measured values, stability indicators, calibration curves etc.

Intuitive, Guided Software

User friendly and intuitive software environment designed to streamline the entire calibration process

SEPIA USB

for SEPIA sensors

Color Coded Sensor Handles

Each handle plugs directly into one of the three USB C sensor ports of the lab controlller LoLA. The color coding helps users instantly identify which sensor is connected to which channel, reducing setup time and minimizing the risk of calibration mix ups.

Ergonomic Design for Frequent Use

The handles are shaped for comfortable grip and easy manipulation during calibration steps, supporting technicians who work with multiple sensors throughout the day.

Compatible with:

SEPIA sensors

Color Collection 2026:

magma red

satin black

midnight blue

papaya orange

Single sensors

SEPIA submersible sensors deliver precise, modular and digital water analysis in any situation– in the laboratory, in the field, on the move and directly in the process at waterworks or sewage treatment plants. They offer maximum flexibility, combining all measurement tasks in a single, modularly expandable system.

There are two versions available: L, the ‚long' sensors, which are for deployment in the field, and S, the ‚short' sensors, which are for use in the laboratory.

Interface: SEPIA protocol
Including full electronics

Length: L: 112.0 mm / S: 55 mm
Diameter: 24.0 mm / 17.8 mm

Applications:

- Water suppliers
- Drinking water monitoring
- Wastewater treatment plants
- Environmental laboratories
- Industrial applications
- Aquaculture

Benefits:

- Digital, modern and ergonomic design
- Calibrate in the laboratory – use in the field
- High accuracy and reliability
- Cost-effective thanks to modular design
- USB-C and Modbus for seamless integration
- Comparable results in the laboratory and in the field

picoTurb

Turbidity sensor

picoTurb is a digital sensor for optical turbidity measurement using the 90° IR scattered light method. Depending on the sensor version, it can be used in pure water as well as in raw water, waste water and process water.

Parameter:

Turbidity • TSS_{eq}

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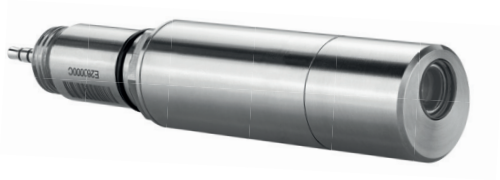
picoFlu

Submersible miniature fluorometer

picoFlu fluorometers are cost-effective, submersible miniature fluorometers for highly precise and selective measurements.



Parameter:

CDOM • chlorophyll a • phycocyanin

rhodamine • fluorescein

SEC

Digital sensor for conductivity

Conductivity sensor SEC-S / SEC-L measures the ability of a medium to conduct electrical current between two electrodes. The current flow takes place through the transport of ions - the higher the concentration of charged particles in the medium, the better it can conduct electricity.

Parameter:

Conductivity • Temperature

SDO

Sensor for Dissolved Oxygen

The SDO-S / SDO-L dissolved oxygen sensor from the SEPIA series uses luminescence-based optical measurement technology and delivers precise and reliable measurement results. Internal temperature compensation increases the accuracy of the measurements.

Parameter:

Dissolved Oxygen • Temperature

SpH-B

Digital pH sensor

The SpH-B sensor measures the alkalinity or acidity of samples in the laboratory. The glass body, the integrated temperature sensor and the plug & play compatibility to the lab controller LoLA makes it ideal for general laboratory applications. The sensor features a ceramic diaphragma and gel electrolyte in a standard 12 mm design.

Parameter:

pH • Temperature

SpH

Digital pH sensor

SpH-S / SpH-L is a robust , flat membrane digital pH sensor from the SEPIA series that is suitable for use in processes, laboratories, The sensor comes with a dirt repellent polymer junction with a polymer gel electrolyte and with the FALCON multiparameter probe. Digital communication ensures secure and interferencefree signal transmission from the sensor to the controller.

Parameter:

pH • Temperature

SFCl

Free Chlorine sensor

Electrochemical sensor for measurement of chlorine concentrations from inorganic chlorine products in water.

The measuring cell captures free chlorine from inorganic chlorine products (hypochlorite, chlorine gas, etc.).

Parameter:
Free Chlorine

STCl

Total Chlorine sensor

The total chlorine sensor from the SEPIA sensors product range is an electronic sensor for measuring the chlorine concentration in water. The sensor measures the concentration in a sample created by adding inorganic chlorine products (e.g. chlorine gas, sodium hypochlorite solution, calium hypochlorite solution).

Parameter:
Total Chlorine

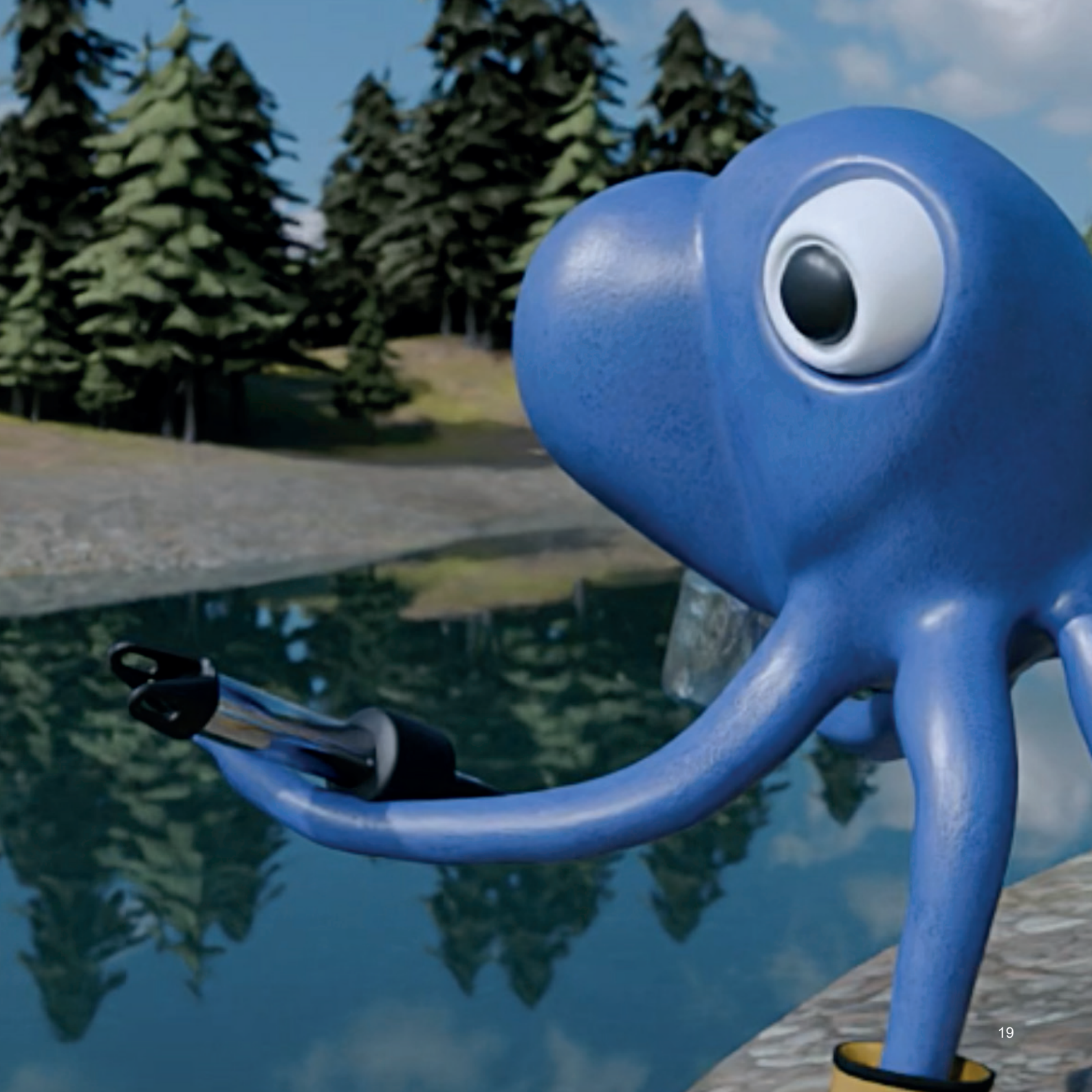
SEPIA Modbus

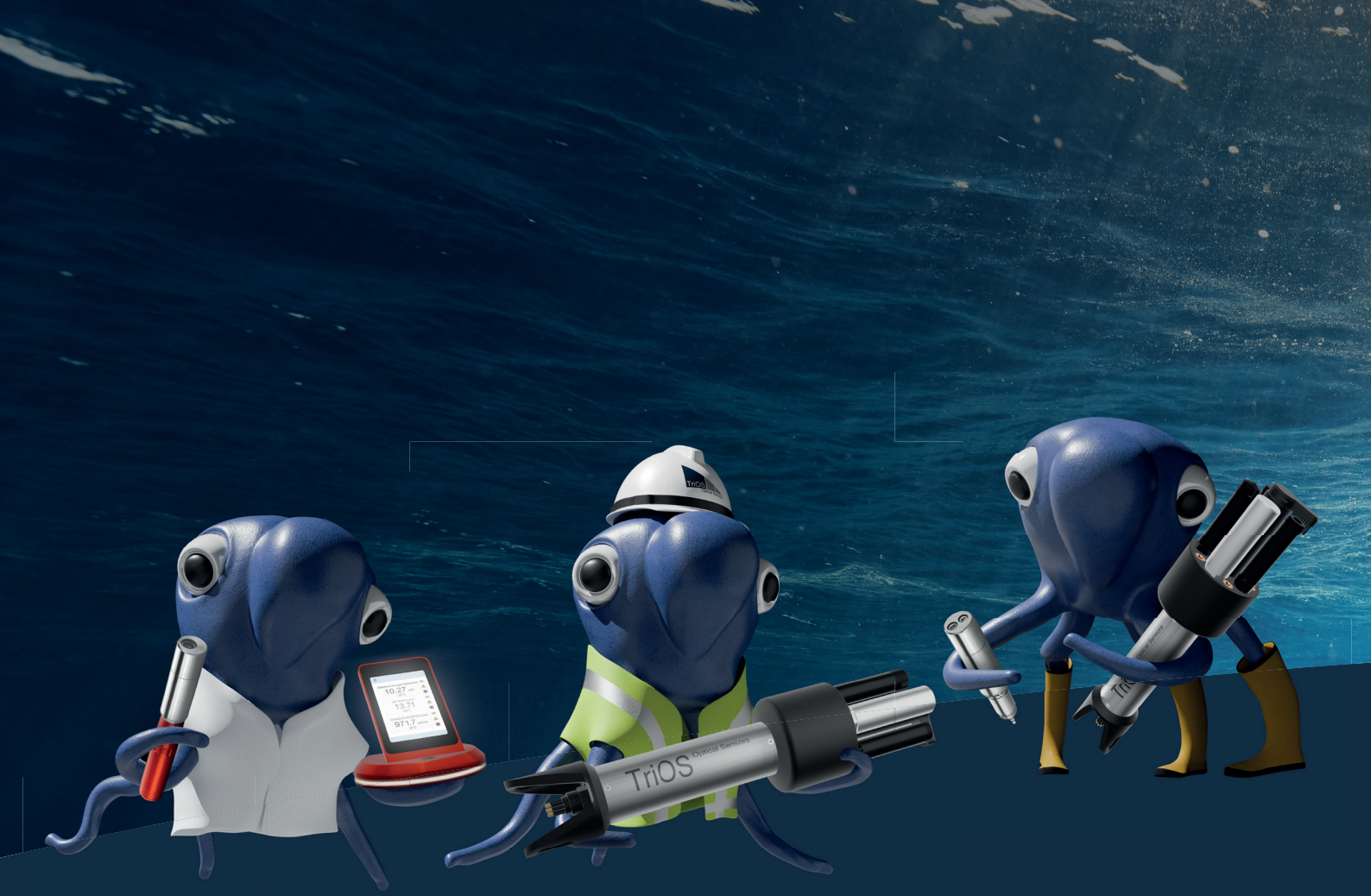
To complement the calibration handles used in the lab, the system portfolio also includes a dedicated Modbus Handle—a rugged, field ready accessory that brings single sensor measurements directly to any Modbus compatible device or controller. It extends the reach of the entire sensor family beyond multiparameter probes, enabling fast, mobile, and cost effective on site measurements.

- **Universal Sensor Compatibility**
- **Ideal for On Site Measurements /quick operational checks & diagnostics**
- **Rugged, Portable, and Easy to Use**
- **Direct Modbus Integration**

Compatible with:

All sensors





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