

Water quality

Accurate results, every day

Advanced online, laboratory and field instruments
for water quality analysis and monitoring

Thermo Fisher Scientific offers a full range[#] of **water quality meters, consumables, probes, analysers and online monitoring instruments**, with solutions tailored for drinking water, wastewater/discharge, aquaculture, agriculture, and environmental monitoring.

Our product range addresses **all the key parameters for water quality** including pH, DO, conductivity, turbidity, chlorine, nutrients, algae, temperature, depth, flow and many more.

We're here to help you measure water quality at every critical control point; safeguarding supply, protecting the environment, improving efficiency, meeting regulatory compliance, and giving operators peace of mind.


Your personal safety is also our primary concern as you carry out this vital work. We know that lone worker situations and potential exposure to toxic or asphyxiating gases are potential hazards in this industry; we have solutions to keep you safe.

[#] The products showcased in this brochure are only a small sample of our full range. Please contact us for more information.



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Water quality



Portable and laboratory instruments

Whether in-field or in a laboratory, you need reliability, accuracy, and ease of use. Thermo Fisher provide a wide range of high quality instruments and consumables – because your results matter.

Thermo Scientific™ Orion Star™ A329 Portable Multiparameter Meter

Everything you need for benchtop accuracy in a rugged portable format.

- pH, ion concentration, conductivity, dissolved oxygen and temperature
- Protective rubber boot for drop resistance, IP67 waterproof
- 5000 point sample log with date/time, sample ID and user ID options so none of your data goes missing
- Calibration and high/low limit alarms to let you know when something is wrong
- Password-protected measurement methods so each operator can have the instrument configured to their preferences
- On-screen text prompts for step-by-step calibration and guided setup instructions making this meter very easy to use

The A329 is just one of a large family of portable meters ranging from simple single parameter meters to the premium A329, with a wide selection of electrodes to meet your needs.



Knick Portavo Portable Meters with Memosens® technology

Rugged portables with advanced features of Memosens connection technology for measuring pH, ORP, conductivity, and dissolved oxygen.

- Memosens digital data connection between meter, cable and sensor with no exposed electrical contacts; 100% waterproof. Auto-sensor recognition means plug and play simplicity with replacement of pre-calibrated sensors in seconds
- Models with ATEX approval for use in Hazardous Locations up to Ex Zone 0/1
- IP66 / IP67 protection
- Robust and chemical-resistant housing survives standardised drop test from 1 meter onto concrete
- Multi-functional hook ensures freedom of movement by allowing the meter to be hung up or positioned upright
- 3-year warranty



MEMO SENS

Lovibond® MD 610 Multi-Parameter Colorimeter with Bluetooth®

The MD 610 is a modern, mobile photometer/colorimeter for rapid, reliable water testing.

- Bluetooth® interface allows connection to iOS® and Android® smart phones and tablets, with a free app for data management and email delivery
- More than 120 pre-programmed methods for powder, tablet and liquid reagent chemistries covering all the tests you need to do daily, weekly, or monthly
- All the important water analysis parameters from A(luminium) to Z(inc) including nitrogen, chlorine, phosphate and COD
- Rugged, IP68 waterproof design
- Store up to 1,000 readings with location ID, time and date stamp so none of your measurements go missing

The MD 610 is just one of a family of colorimeter/photometers, complemented by an extensive range of reagents for almost any application.



Thermo Scientific™ Orion™ AQ4500 Turbidity Meter

An advanced Turbidity Meter, with dual light sources to meet ISO and U.S. EPA method requirements.

- White Light LED to comply with EPA 180.1 requirements
- Infrared (IR) LED to comply with ISO 7027 requirements
- Reads from 0 up to 4000 NTU in IR ratio mode. Various modes/units are available: NTU, FAU, FNU, ASBC and EBC
- IP67 waterproof
- 100 data point memory
- Average battery life of 2500 hours intermittent use so your meter is ready to go when you need it
- Includes SDVB primary standards (AC45ST), sample vials and sturdy field case for easy storage and transport

The AQ4500 is complemented by the IR only versions; the AQ3010, and the TN-100 pocket IR turbidimeter.



bbe AlgaeTorch*

A light, handheld measuring instrument for the simultaneous detection of the chlorophyll-a of blue-green algae (cyanobacteria) and the total chlorophyll-a content of all microalgae present in the water.

- Switch-on, dip-in, read-off; results in less than 15 seconds with no sample-taking or preparation
- Measurement of algal concentrations via fluorescence
- Ideal for clean and dirty water thanks to the automatic turbidity compensation



Real Tech BOD/COD and TOC/DOC Field Meters

– No reagents, results in less than 30 seconds

Fast, simple and cost effective testing of water or wastewater, in the field or in the lab.

- No reagents required – test as often as needed, wherever is needed, without the costs of purchase and disposal of hazardous and toxic reagents
- Easy to use with fast 90 second warm up time
- Accurate and precise results within seconds
- No zeroing to DI water before each test
- Patented technology provides superior measurement performance across multiple wavelengths using UV and visible LED's
- Rugged for field testing with optional Battery Pack



Real Tech P-series UV254/UVT Field Meter

Fast measurement of organics in water, in the field or in the lab.

- Wastewater to high purity test ranges
- Practical, accurate and affordable
- Extremely easy to use with fast 90 second warm up time
- Measures in UVT or UVA with simple toggle feature
- Accurate and precise results within seconds
- No zeroing to DI water before each test
- Rugged for field testing with optional Battery Pack



bbe AlgaeLabAnalyser

Quick and simple chlorophyll measurement with algal class differentiation.

- Direct measurement without sample preparation by filtration or dissolution
- Quantification of algal classes: green, blue-green (cyanobacteria), brown (diatoms and dinoflagellates), cryptophytes
- Turbidity compensation up to 200 FTU
- Yellow substances (CDOM) measurement to correctly calculate the total chlorophyll content
- Optional hard case and external battery for mobile deployment



Thermo Scientific™ Orion Star™ A210 series benchtop meters

Our most popular selling benchtop meter, giving the perfect balance of features and ease of use with price.

- Available in versions for pH/ORP, ion concentration (eg. fluoride), conductivity, dissolved oxygen, and also a combination of pH/ORP with any other single parameter above
- 2000 point sample log with date/time, sample ID and user ID options
- On-screen text prompts for step-by-step calibration and guided setup instructions giving you an easy-to-use measurement solution
- Calibration and high/low limit alarms so you know when something is out of the ordinary



For even more capability consider the Orion™ Versa Star™ Pro series.

For more economical options consider our Eutech™ range of meters.

Thermo Scientific™ Orion™ AquaMate™ Visible and UV-Visible Spectrophotometers

The new AquaMate™ II is the most advanced and user friendly spectrophotometer designed to meet the needs of water and wastewater analysis laboratories.

- Large 7-inch colour, high definition (800 × 1280 pixels), glove-friendly touch screen so you don't need to keep taking gloves on and off during lab-work
- 260+ Pre-programmed methods spanning multiple reagent brands incl. Orion AQUAfast, Merck, and CHEMetrics so you don't need to switch from your favourite tests even if it is from another brand
- >1000 user defined methods
- Magnetically retained sample holders “snap-in snap-out” for easy cleaning and fast changeover saving you the cost of an instrument when the inevitable spill happens
- Multiple data connectivity options (WiFi, LAN, USB)
- Low cost of ownership with long-lasting user-replaceable lamps



Tecta™ B4/B16

TECTA™ is an automated microbiological platform that rapidly and reliably detects E. coli, Total Coliforms, Faecal Coliforms and Enterococci contamination.

- Available in models for testing 4 or 16 samples, simultaneously; the B4 being perfect for portable use
- Designed for operators with no microbiological training
- Simple, sensitive and flexible, allowing for testing of samples at any time of the day
- Automatically transmits data allowing for notification on electronic devices, such as mobile phones or laptops, as soon as a contamination event is detected
- See a confirmed positive result in as little as 4 hours



Lovibond® EComparator EC 2000 Pt-Co

Take the uncertainty out of colour measurement. Replace subjective visual results with reliable electronic measurement, eliminating human error.

- Easy Transition from Visual to Electronic Measurements
- Dual view of colour difference with on-screen colour and on-screen numerical display
- On-Screen "Traffic Light" Warning System; Green|Amber|Red| for In|At|Out of tolerance
- Programmable – create multiple projects with individual tolerance settings
- Touch Screen Technology for easy programming and instinctive on-screen menus
- Easy storage and sharing of results; large data storage (> 20,000 readings) and USB connectivity
- Single Scale Measurement - Platinum Cobalt/Hazen/Apha Colour (ASTM D 1209).




New Lovibond® TB350 Portable Turbidimeter

Lovibond®'s newest turbidimeter is Portable with the capabilities of a laboratory instrument. The TB350 uses Lovibond's innovative Multipath 90° BLAC® (Backscattered Light Absorbing Cavity) technology to achieve the highest standards of stray light elimination, delivering unsurpassed accuracy over the complete measuring range up to 4,000 NTU. Turbidity measurement has never been easier!

- Outstanding convenience
- ISO and US EPA compliant (available with infrared or white light LED)
- Delivers superior accuracy at low & high turbidities; 90° nephelometric detection over the complete measuring range from 0.01 up to 4,000 NTU
- Easy, full colour touchscreen user interface that provides animated & guided procedures and straightforward data management
- Visual alert if the reading is out of tolerance
- 3 different modes: Single, Signal Averaging, Fast-Settling
- Data transfer made easy - share your measurement results via USB flash drive
- Supplied ready-to-use with sample cells, silicone oil and T-CAL® calibration standards





Water quality



Online and real-time continuous monitoring

Real-time monitoring is the only way to capture and react to changes as they happen. Whether it's a normal variation or an unexpected event, real-time monitoring allows optimal management of plant efficiency and costs, as well as allowing early detection and reaction to events.

Chemitec 4001_6 multiparameter chlorine analyser

The 4001_6 is a multiparameter online analyser for chlorine (free, total and combined), Redox (ORP), pH and temperature. It uses the colorimetric (DPD) method for chlorine, which is generally regarded as the most selective and reliable method for chlorine measurement.

- Large 240x128 backlit graphic LCD display with intuitive interface displaying current results and status, and graphic display of stored results
- RS485 serial output for set-up and remote real-time status monitoring, or to download stored data on a PC or laptop (using dedicated software), via MODBUS RTU communication protocol
- 4 x 0/4-20mA outputs, 5 x Relays (240VAC)
- 1 x 0/4-20mA input for auxiliary measurement (e.g. conductivity, flow)
- Simple and easy to maintain, low operating costs
- System calibration and self-cleaning performed automatically at each measuring cycle

The 4001 series includes models configured for 2-5 parameters (including temperature), as well as models for measurement of other oxidative species: Peracetic Acid, Ozone, Chlorine Dioxide.



Dosatronic® DOSAControl DCW 230 advanced package

One of a wide range of customisable packages from Dosatronic, the DCW 230 advanced package provides a very cost-effective measurement of free chlorine, temperature and pH.

- Advanced programmable 2-channel controller
- pH, free chlorine and temperature probes
- No reagents are required as the free chlorine is measured by the amperometric method

The Dosatronic product range is highly versatile to suit your needs; from single to 4 channel controllers, and a range of sensors for many other parameters.



Real Tech Analysers

Affordable and reliable single parameter monitoring with Controller and ByPass sensor combined into a single Unit; for wastewater to high purity water applications.

- Optical measurement requiring no reagents
- UVT/UV254, Colour, TSS, Nitrite
- Automatic chemical cleaning for long term accuracy and low maintenance
- Long-life LED light sources



Real Tech Multi-Wave Probe Sensors

Submersible probes are a simple and ideal solution for monitoring organics and other compounds from wastewater to high purity water applications.

- Robust submersible probe with titanium body options
- Ideal for open channel applications, high suspended solids sample matrix or non-pressurised applications
- Accurate and reliable real-time monitoring of single or multiple parameters including BOD/COD, TOC/DOC, UV254/UVT, TSS, Colour, Nitrate, Nitrite, Ozone, Benzene...
- Automatic compressed air cleaning for long term accuracy and low maintenance
- Long-life LED light sources
- Connects to Real Controller (shown) or Real Controller Pro



Real Tech Multi-Wave ByPass Sensors

ByPass sensors are a flexible reagent-free solution for monitoring organics and other compounds from wastewater to high purity water applications.

- Sample is supplied to the sensor from a pressurised source or from an open-channel using an accessory pumping/cleaning system
- Sample dilution option to increase range
- Accurate and reliable real-time monitoring of single or multiple parameters including BOD/COD, TOC/DOC, UV254/UVT, TSS, Colour, Nitrate, Nitrite, Ozone, Benzene, Hydrocarbons, Permanganate...
- Automatic chemical cleaning for long term accuracy and low maintenance
- Long-life LED light sources
- Connects to Real Controller or Real Controller Pro (shown)



Thermo Scientific™ Orion™ 8010cX Process Ammonia Analyser

The 8010cX is an easy to use, accurate, reliable and low maintenance solution for online ammonia monitoring. The analysis is based on the standard salicylic acid method.

- Designed to meet wastewater discharge regulatory requirements and process control needs
- Auto-ranging 0.02-2, 0.1-15, 0.5-30, 2-100, 30-500mg/L
- Feature-rich software and intuitive graphical user interface
- Minimised interference from colour and turbidity
- Compact size, small installation footprint
- Choose between continuous monitoring or interval monitoring modes that meet your needs
- Reagents last 60 days with 2 hour measurement interval with minimum waste (4L)
- IP65 protection



Thermo Scientific™ Orion™ 2109XP Fluoride Analyser

Thermo Scientific™ Orion™ 2109XP Fluoride Analyser offers accuracy, reliability and ease of use to best meet the demands of your fluoride analysis.

- Uses a recognized EPA method for fluoride analysis using an ion selective electrode (ISE)
- Configurable to your facility's desired level of performance
- Password protected
- Easy to install, allowing your plant to be up and running in minutes
- Eliminates problems with turbidity and suspended solids in samples
- Provides true accuracy in measuring total fluoride, with a detection limit of 10ppb
- Offers continuous fluoride monitoring in a wide variety of samples
- Limits unnecessary calibration cycles due to drift with superior Orion fluoride electrode technology
- Minimizes operator time and maintenance without the use of complicated moving parts or pumps that often require frequent attention and expensive spare part expenditures



Lovibond® PTV Process Turbidimeter

Designed by a team of globally recognized turbidity experts, the PTV addresses all of the issues customers struggle with while using their current turbidity systems.

These advancements, along with the addition of state-of-the-art communications and user interface make the PTV 1000 and PTV 2000 series the next generation of process turbidimeters.

- Mobile device app replicates the full control panel enabling easy operation independent of the location of the instrument
- Consistent flow rate of 4.8 L/hr reduces bubble creation
- Unique bubble trap that eliminates bubble interference with turbidity reading
- Advanced optics and flow cell design brings unsurpassed accuracy at low turbidity levels
- T-CALplus® calibration system and standards eliminates many errors with other turbidity systems and ensures zero contact between operator and chemicals



bbe AlgaeOnlineAnalyser*

The best solution for continuous online monitoring of algae in rivers, lakes and reservoirs.

- Detection of different algal classes by excitation with coloured LEDs
- Yellow substances (non-algal fluorescence) measurement and compensation
- Turbidity compensation up to 200 FTU
- Integrated cleaning unit protects against growth problems during long term measurement



Applications include: Intake monitoring | dam monitoring | waterway analysis and assessment | environmental assessment | desalination plants.

Thermo Scientific™ AquaPro™ Multi-Input Intelligent Process Analyzer

Accurate, user-friendly in-line monitoring of process applications in water and wastewater. The AquaPro Multi-Input Intelligent Process Analyzer is far more than a 4-wire multi-input meter. It is a sophisticated and highly flexible analysis platform.

- Large colour display for easy data viewing
- Up to four sensor inputs, with up to eight current outputs
- Up to six alarm/control relays that can be used to alarm operators
- Multiple digital communication protocols, such as MODBUS and relay pulse signal
- USB port for easy data access



Thermo Scientific™ Orion™ pH/Process ROSS™ Electrode

Save time and money while achieving fast, accurate pH measurements in a variety of samples.

- The ROSS™ reference sensor provides a drift-free measurement system with accurate results
- Minimal maintenance and a longer lifetime
- Replaceable salt bridge that extends sensor life
- High performance, reliability and longevity
- Used extensively in all online water applications, from wastewater to drinking water
- Use with the AquaPro™ Multi-Input Intelligent Process Analyzer



Thermo Scientific™ AquaSensors™ DataStick™ Wide-Range Turbidity Measurement System

Monitor wastewater and surface water turbidity 0 - 4000 NTU.

- Modbus RTU over RS485 communications adaptor
- Polycarbonate sensor body with 316 stainless steel to be used in any harsh environment
- Factory calibrated infrared sensor with 180-degree transmission compensation
- Optional head wash provides self-cleaning mechanism on the sensor to reduce manual maintenance
- Replaceable, pre-calibrated (for turbidity and temperature) sensor head that reduce the ongoing consumable cost compare to others in the market
- Plug-and-play capability via the Thermo Scientific™ DataStick™

Communications Adapter, available in multiple protocols, for interactive measurement, calibration, configuration and diagnostics with the Thermo Scientific™ AquaPro™ Multi-Input Intelligent Process Analyzer or AquaSensors™ AV38 local display and connects directly to a PLC and SCADA systems.



Thermo Scientific™ AquaSensors™ RDO™ Pro-X Optical Dissolved Oxygen Sensor

Continuously monitor dissolved oxygen (DO) in municipal and industrial applications.

- 0 to 20ppm measurement range that covers most water and wastewater applications
- No membranes; only annual field replaceable caps with unique count-down system when the fresh membrane is changed
- Resists photo-bleaching and abrasive process media
- No “poisoning” by sulfides
- No cross sensitivity to carbon dioxide, ammonia, pH, sulfide, sulfate, chloride or hydrogen sulfide
- Plug-and-play design with digital network interface
- For local display, connect to AquaPro™ Multi-Input Intelligent Process
- Analyser or AquaSensors™ AV38 local display



Knick Process Analytics Solutions

Versatile solutions for measuring pH, ORP, conductivity and dissolved oxygen online environments, tailored for your application.

- Wide range of transmitters (controllers) for data communication and control
- Extensive range of fittings to integrate sensors into your measuring point
- Automatic in-place sensor cleaning and calibration solutions
- Long lasting analogue and Memosens digital sensors



Transmitters (Controllers)

- Choices from a DIN rail transmitter to a fully modular system
- 2- or 4-wire configuration
- Ex approved options
- Bus communication: HART, FOUNDATION Fieldbus, Profibus DP and PA
- Robust industrial housing with high IP protection
- Suitable for outdoor applications
- For analog and digital sensors
- Easy and intuitive operation

Fittings

- Static and Retractable (automatic and manual)
- Immersion, flow through and inline
- Ex approved options
- Process wetted materials include Stainless Steel, Polymer, Hastelloy, titanium, PFA
- Pipes, Vessels, open channel applications
- High pressure and high temperature options

MemoSuite Sensor Management Software

- Allows quick and easy pre-calibration of Memosens sensors in the laboratory
- Eliminates need for calibrations to be carried out on-site, just a quick and uncomplicated swap of the used sensors with pre-calibrated sensors

Sensors

- Analog and digital (Memosens) sensors
- Intelligent preventive diagnostics with Memosens
- Multiple designs, sensor lengths and a wide range of connection possibilities
- Suitable for a large selection of Knick fittings, such as SensoGate and Ceramat as well as inline, flow-through and immersion fittings
- Conductivity sensors include 2-electrode, 4-electrode, inductive. For all measuring ranges from ultrapure water to concentrated acid and alkaline solutions
- Dissolved Oxygen sensors include amperometric and optical. Measuring ranges from trace to saturated

Automatic Cleaning and Calibration Systems

- Fully automatic in combination with the Protos process analysis system and a SensoGate or Ceramat retractable fitting
- Ensure highly accurate measurements even with difficult process conditions such as high pressure, high temperatures and high levels of impurities
- Maximum availability of the point of measurement; calibration without disrupting the process, even when measuring directly in a pressure vessel

MACE FloPro XGi

Monitor wastewater, stormwater and trade waste flows in full pipes and partially full pipes (open channel).

- Applications include: Wastewater | Stormwater | Industrial and Environmental flows
- Unique ceramic pressure sensor that survives in high solid water applications
- Small footprint area velocity sensor eliminates turbulence in the flow

Whether you need to measure flow as well as conductivity, pH and rainfall, or utilise a downward looking ultrasonic depth sensor to measure pond levels, the FloPro is fully expandable to your needs and is easily interfaced to telemetry/SCADA systems.



Mace HVFlo Portable Waterproof Logging Flow Meter

The HVFlo portable logging flow meter features MACE field proven Doppler velocity and level measurement sensors.

Advanced spectrum signal processing allows HVFlo to produce superior results under a very wide range of hydraulic operating conditions.

Even under full pipe, surcharge, or reverse flow conditions, HVFlo will produce accurate, repeatable results every time. HVFlo offers optional telemetry interface for long-term monitoring applications.

- The HVFlo operates under a very wide range of hydraulic conditions, and will produce accurate, repeatable results even under full pipe, surcharge or reverse flow conditions
- Lightweight for easy handling
- Rechargeable battery offers long-life without costly new batteries
- Excellent data storage, typically 240 days (@ 15 minute logging)
- Typically 150 days battery discharge cycle (@ 15 minute logging)
- IP68 to 3 metres




MACE velocity and area/velocity sensors

Utilising continuous wave Doppler ultrasound, the MACE velocity sensors measure the speed of dirt, bubbles and other particles in the stream flow.

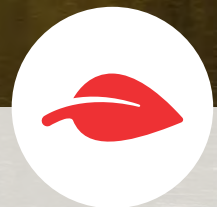
In full or partially full pipes, the velocity of the stream flow varies markedly across the cross-section of the pipe. MACE Doppler ultrasonic sensors receive reflected frequencies from particles moving at these different velocities. The average velocity of the stream is therefore calculated by averaging those frequency reflections received across the whole stream profile.

Suitable for partially filled/filled pipes or open channels to 3m, Customized installation options available





Water quality



Portable and unattended field deployment

Our range of rugged field-deployable sondes can be used for manual on-the-spot measurements, or left unattended to continuously measure and log water quality parameters for lengthy periods.

In-Situ Aqua TROLL 400

Water Quality sonde with fixed sensors and a field replaceable pH/ORP sensor that measures.

- Actual and specific conductivity, salinity, total dissolved solids, resistivity and density
- Optical Dissolved Oxygen (optical RDO)
- pH/ORP
- Temperature
- Water level and water pressure (absolute)

Rugged and compact, the Aqua TROLL 400 can be deployed for months of unattended operation in harsh field conditions.



In-Situ Aqua TROLL 500 and 600

Fully customisable multiparameter sonde with interchangeable sensors and a smartphone interface.

- Customised for fixed and portable applications
- Aqua TROLL 500 requires external power, Aqua TROLL 600 has the additional benefit of internal logging and internal battery
- Sensors are interchangeable between the Aqua TROLL 500 and 600
- Options include temperature, pressure, conductivity, pH/ORP, Rugged Dissolved Oxygen (RDO®), turbidity, chlorophyll A, Phycocyanin (BGA-PC), Phycoerythrin (BGA-PE), Rhodamine WT, ammonium (ISE), chloride (ISE) and nitrate (ISE)

The In-Situ range of water quality instrumentation consists of a shared Eco-System of cabling and communication. They are compatible with iOS® and Android® mobile devices.



In-Situ VuLink

VuLink revolutionises remote monitoring with a cellular NB-IoT telemetry device that will change the way you think about remote monitoring.

- Our turnkey solution is easy to set up, works from anywhere and delivers long-lasting power. So, you never have to worry about your equipment or your data
- VuLink has an in-built barometric sensor to automatically compensate atmospheric pressure, and a hydrophobic filter for maintenance free vented systems in a sub-2 inch design
- VuLink is part of the most complete monitoring solution available. Instrumentation, telemetry and software work together within In-Situ's shared ecosystem to make it easier than ever to collect, access and manage your data



bbe Fluoroprobe*

Field deployable instrument for analysis of chlorophyll with algae class determination.

- Deployable to a depth of 100m (optionally 1000m)
- Highly sensitive
- Fast - up to 4 measurements per second
- Determination of green algae, blue-green algae (cyanobacteria), diatoms and cryptophytes, with individual profiles for the different algal classes
- Yellow substances (non-algal fluorescence) measurement and compensation
- Automatic turbidity correction
- Internal rechargeable batteries and datalogger
- PC software for data analysis
- Optional Hydro-Wiper unit to prevent biofouling when operated for extended periods from moored platforms, submersed from buoys or fixed measuring stations



bbe PhycoProbe*

All the capabilities of the Fluoroprobe plus measurement of unbound phycocyanin (free PC)

- Deployable to a depth of 100m
- Measurement of free phycocyanin reflects the release of blue-green algae contents like cyanotoxins as well as flavours and odorous substances





Water quality



Biogas monitoring

Biogas monitoring at wastewater treatment plants is becoming ever more important as plants capture methane from anaerobic digestion, to generate heat and electricity on site.

Portable BIOGAS 5000 Monitor

QED Environmental Portable BIOGAS 5000 Monitor is a field instrument to measure anaerobic digester gases with repeatable accuracy on Wastewater treatment facilities.

- Measures CH₄, CO₂ and O₂ as a standard
- IECEx certified for hazardous environments
- Optional CO, NH₃, H₂S and H₂ sensors
- 3 Year Warranty



Fixed BIOGAS 3000 Online Analyser

The QED Environmental IECEx BIOGAS 3000 Online Gas Analyser maximizes gas production yield and protects expensive capital equipment from the damaging contaminant gases contained within the production process.

- Measure from up to 4 sample points
- Measures CH₄, CO₂ and O₂ as a standard
- IECEx certified for hazardous environments - zone 2
- Optional CO, H₂S and H₂ sensors
- Optional heater, automated moisture removal drain, and profibus or profinet communication



Fugitive Emissions of Methane

The Huberg Laser One by QED Environmental is a professional instrument for the detection and localisation of methane gas leaks. It is selective and it requires no gas cylinder. Applications include the detection of leaks in underground and above ground pipelines.

The instrument can be used for better quantification of CH₄ emissions from infrastructure and has great results even with biogas leaks in biogas plants, thanks to the high precision of tunable diode laser technology. Equipped with GPS antenna and Bluetooth for data transfer from the instrument to a PC or PDA.

- Rapid start-up and detection
- In-built GPS tracking
- ATEX certified
- No cross-gas or false readings
- No additional devices for operation
- No flame or external hydrogen required
- Accurate reporting which meets and maintains compliance requirements





Water quality



Gas detection

An extensive range of portable gas detection equipment designed to monitor a wide variety of toxic and combustible gases, such as methane, hydrogen sulphide, carbon monoxide, carbon dioxide and oxygen deficiency.

Portable gas detection**

Honeywell BW™ Icon/Icon+ Four Gas Detector

- Fixed life (Icon) and Serviceable (Icon+) next-generation datalogging, single-button, four gas detector
- Simple icons for gas levels and device status. That means no live gas readings for workers to interpret and no time-consuming training
- Ideal for confined space monitoring
- 2 months battery runtime
- Bluetooth for access from smartphone



Honeywell BW™ Solo Single Gas Detector

- Next-generation datalogging, single-button, single gas detector
- Wide range of gas models from Cl₂ to H₂S to NH₃
- Easy sensor replacement, in the field, with no tools
- Bluetooth option for access from smartphone



Honeywell BW™ Ultra Five Gas Detector

- Serviceable next-generation datalogging, single-button, five gas detector
- Measures the standard confined space gases, plus one toxic gas
- Integral sample pump
- Ideal for confined space monitoring
- Bluetooth for access from smartphone



MSA Altair® 4XR Four Gas Detector

- Rugged gas detector, IP68 and drop-tested
- Long-life, fast XCell Technology with end-of-life indicator
- Bluetooth connectivity
- 4 or 5-year warranty



MSA Altair® 5X Six Gas Detector

- Rugged gas detector, IP65 and drop-tested
- Ideal for wastewater sites, with PID and NH₃ Sensor options
- Long-life, fast XCell Technology with end-of-life indicator
- Integral pump
- Bluetooth connectivity



Gas detection / Lone worker safety

Blackline Safety G7 product line incorporates an SOS trigger, fall-detection, no-motion detection, missed check-in detection and advanced location technology, along with cellular and satellite communications to ensure seamless monitoring. From lone worker monitoring to gas detection and 24/7 response management, G7 has your team covered

Blackline G7c gas detector and lone worker monitor

- Always-connected cellular real-time lone worker monitor with fall-detection, no-motion detection, missed check-in detection, SOS emergency trigger and gas alert
- Communication via text, voice or push-to-talk
- Combine with up to 5-gas sensors to provide full connected worker safety



Don't need lone worker alerts?

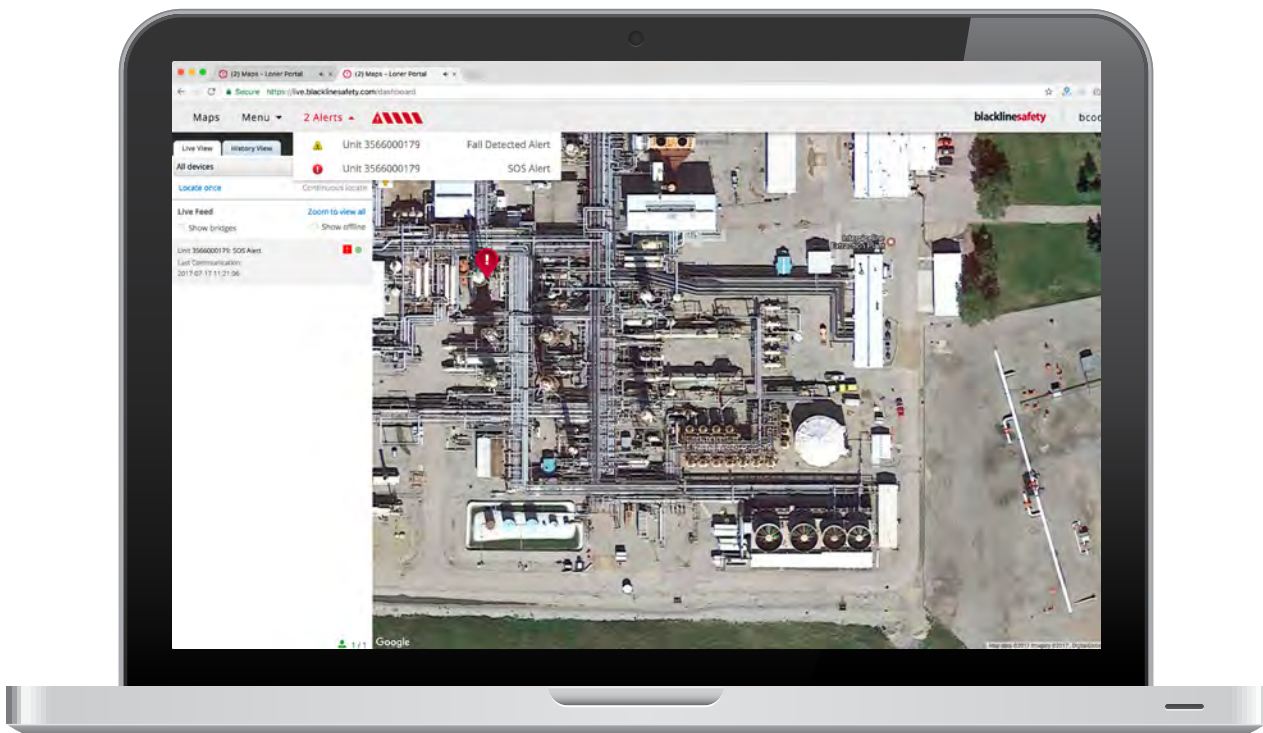
- G7c provides cloud-connected gas detection, complete with an SOS emergency trigger
- At the end of each day, compliance data and measurements are uploaded to the cloud, for review, without the need for cables or infra-red dongles

Blackline G7x

- No cellular network reception?
- G7x provides a satellite connection for both real-time lone worker monitoring and gas detection

Blackline Live Web Portal

- Whether in real-time or as historical data, Blackline Live shows:
 - where your team are located
 - any alerts that may be present
 - trends of alerts for team members and plant



Asset protection

OdaLog G20 – the first gas logger with smart digital sensors

- Gas logger designed for harsh wastewater environments, at manholes, rising mains, fence-lines
- Predictive maintenance, with fault indication to help identify sensor issues and corrective actions
- Extended field life, to reduce on-going service costs
- Bluetooth, 4G, Cloud and Modbus integration
- IECEx certified for hazardous environments



Fixed gas detection**

A comprehensive range of technologies designed to monitor a wide variety of toxic and combustible gases found throughout Water and Wastewater Sites

Honeywell SPM Flex Gas Detector

- Low level (ppb) detector for H₂S
- Ideal for odour scrubbers
- Proven intelligent Chemcassette® technology
- Fixed and portable options



Honeywell Series 3000 Gas Detector

- Single gas detector ideal for H₂S and Cl₂
- Two-wire loop powered device
- Hazardous zone options





Technical service

Thermo Fisher Scientific, your true industry service partner

Thermo Fisher Scientific is your industrial partner, focused on helping you to improve process efficiency and minimise unplanned downtime.

We offer technologically advanced monitoring and measurement instrumentation to enable plants in power, mining, municipal, food and beverage, and more, to improve production efficiency, improve the lifecycle of their existing assets, and ensure environmental compliance. This is backed by our NATA calibration and service support capabilities.

We have service centres in Melbourne, Sydney, Brisbane, Perth and Auckland and offer on-site calibration services that guarantee a convenient servicing location as well as minimising equipment downtime and a cost-effective solution for all your calibration requirements.

Our factory trained technical service team is equipped with the global knowledge and tools to support your organisation when instruments require repair, service and calibration. They're factory trained to ensure we can offer a guarantee on our workmanship with anything we do as well as only using genuine parts to maximise your instrument uptime. Why risk using anyone else when Thermo Fisher stand behind everything we do.

In many cases, we can offer a maintenance agreement to minimise the financial impact on your business by giving you greater working capital increasing your cashflow; talk to us today to find out how we can tailor a service solution to meet your business needs.



In Australia:

For customer service, call 1300-735-292

To fax an order, use 1800-067-639

To email an order, ordersau@thermofisher.com

In New Zealand:

For customer service, call 0800-933-966

To fax an order, use 0800-329-246

To email an order, ordersnz@thermofisher.com

 Learn more at thermofisher.com/wateranalysis