AQUALABO

Smart water solutions

www.aqualabo.fr

NATURAL WATER / DRINKING WATER / WASTE WATER / INDUSTRIAL AND PROCESS WATER / FISHFARMING AND AQUACULTURE / WINEMAKING



- **2026** New multi-sensor digital transmitter ACTEON 6000
- **2025** NEON Open Range, new PHT sensor
- **2024** 2024 NEON Conductivity, Turbidity & Sludge blanket
- **2023** Launch of NEON Portable Instrument & LowTuS Low Range Turbidimeter for Drinking Water
- **2020** STACSENSE UV254 sensor launch
- **2019** AQUALABO generates 50% of its turnover from export business
- **2008** PONSEL launches its range of intelligent digital sensors DIGISENS Launch of the optical oxygen sensor
- **2003** ORCHIDIS launches its photometer ORCHI1
- **1995** SECOMAM launches the IXO510, first UV analyzer for COD, BOD, TOC, NO_3, TSS
- **1988** PONSELLE MESURE deploys a range of sensors for continuous and portable measurement
- **1979** Creation of AQUALYSE company Launch of the first venturi flume
- **1955** M. DEGREMONT (ORCHIDIS) produces the 1st field analysis kit (hardness, nitrate)
- **1948** Mr PONSELLE manufactures his 1st pH meter
- **1946** Mr CONSTANT (SECOMAM) produces his first spectrophotometer

ORCHIDIS BY AQUALABO · SECOMAM BY AQUALABO · AQUALYSE BY AQUALABO · PONSEL BY AQUALABO

DIGITAL SENSORS DIGISENS

Smart sensors for water control

ADVANTAGES

- Universal communication Modbus RS485 / SDI-12
- Compatible with all types of transmitters, recorders, remote control, controller equipped with a RS485 input or SDI-12 ...
- Integrated transmitter (recording of calibration data, history and measurement processing in the sensor)
- Ultra-low power technology

PHEHT & PHT : pH, ORP & temperature, digital technology for optimized measures

FOLLOWING NORM ISO 10523

- Combination sensor: pH, ORP & temperature or pH & Temperature
- Interchangeable Cartridge with "PLASTOGEL®"
- Digital communication RS-485 Modbus / SDI-12
- Measuring ranges : pH : 0,00 to 14,00 pH ; ORP : - 1000 to + 1000 mV ; T°C : 0,00 to + 50,00°C



PHEHT & PHT Monobloc: pH, ORP & Temperature, or pH & Temperature digital technology for optimized measures

FOLLOWING NORM ISO 10523

- Combination sensor: pH, ORP & temperature
- Digital communication RS-485 Modbus / SDI-12
- Measuring ranges : pH : 0,00 to 14,00 pH ; ORP : - 1000 to + 1000 mV ; T°C : 0,00 to + 50,00°C



NEW

C4E: Conductivity/salinity, digital technology for optimized measures

FOLLOWING NORM ISO 7888

- 4 electrodes (2 graphic, 2 platinum)
- Range 0 to 200 mS/cm on 4 ranges and 1 automatic range
- Digital communication RS-485 Modbus / SDI-12
- Robust and watertight



OPTOD: Optical dissolved oxygen, optical technology for optimized measurements

FOLLOWING NORM ISO 17289

- Optical Technology : no membrane or electrolyte
- No drift, Reduced maintenance
- Digital communication RS-485 Modbus / SDI-12
- Body in Stainless steel (316 L) or Titanium
- Plastic body with suitable protection and dedicated to fish farming
- Measuring ranges : 0,00-20,00 mg/L; 0,00-20,00 ppm; 0-200 % Sat



NEW

EHAN: Annular ORP sensor, ORP potential & temperature

- Combination sensor: ORP & Temperature
- Measuring ranges: ORP: - 1000 to + 1000 mV ; T ° C: 0.00 to + 50.00 ° C
- Interchangeable Cartridge with "PLASTOGEL®"
- Digital communication RS-485 Modbus / SDI-12



CTZN : Inductive conductivity, no sensitive to fouling

- Induction mounting regulated in temperature suitable for fouling environments
- Ranges 0 to 100 mS/cm
- Digital communication RS-485 Modbus / SDI-12
- Compact, robust and watertight
- Economic and successful technology that requiring not enough maintenance and not consumable



NTU: nephelometric turbidity, optical technology for optimized measures

FOLLOWING NORM ISO 7027

- IR optical sensor with optical fibre
- Range : from 5 to 4000 NTU on 4 ranges and 1 automatic range
- Rugged and waterproof (IP68)
- Ultra low-power consumption
- Digital communication RS-485 Modbus / SDI-12



MES5 / VB5 : measurement of ss, turbidity and sludge blanket

- Optical sensor based on IR absorptiometry
- Measuring ranges: SS: 0-50 g / L, Sludge Blanket 0-100% Turbidity 0-4000 FAU
- CDigital communication RS-485 Modbus / SDI-12
- Robust sensor



TRIPOD

Numerical multiparameter probe for enhanced reliability measures

ADVANTAGES



- Measure until 8 parameters with the same probe
- Technology of oxygen measure by optical way
- Numerical communication Modbus RS-485 and SDI12
- Compact, strong and tight probe

Temperature I pH, ORP I Conductivity, salinity, TDS I Oxygen (% Sat, ppm, mg/L) I Turbidity (NTU, FNU), SS (mg/L)

Applications

• Urban wastewater treatment (inlet control) • Treatment of industrial effluents
• Surface water monitoring • Fish farming, aquaculture • Drinking water

Multiparameter probe

The new numerical TRIPOD of PONSEL MESURE allows to measure until 8 physico-chemical parameters in the same time dedicated to the quality of waters among the following ones: pH, ORP, Temperature, DO (by optical way), turbidity (NTU / FNU), Turbidity (mg / L), conductivity, salinity, TDS..
The probe is equipped with a snap ring and a carabiner to secure your installations.

New measuring cell, the essential accessory for your dynamic measurements

With the new measuring pot for TRIPOD, you can now carry out your water quality monitoring at great depths more easily. Simply bring your sample as close to the surface as possible, using a pump, feeding the measuring cell via inlet/outlet pipes.



Ready to be connected

Compact, robust and communicating in Modbus R485 or SDI12 the TRIPOD can be associated with every type of terminal with inlet RS485 Modbus (automaton of remote processing, transmitter, to logger) or SDI12 (acquisition device, logger with transmission GSM / GPRS, sampler ISCO, flowmeter).
Resisting the disturbances: a pre-amplification is integrated into the sensor and the digital processing of the signals allows an extreme fiabilisation of the measures.
The TRIPOD associated with the handheld multiparameters ODEON allows an optimization and a fiabilisation of your physico-chemical measures : important capacity of recording (until 100 000) and large autonomy

Sensors technical characteristics

3 sensors to choose from

	Parameter	Range	Accurancy	Sensor type
PH/REDOX/ T°C	**Temperature**	0,00 to + 50,00 °C	± 0,5°C	NTC Inox
	pH	0,00 to 14,00 pH	± 0,1	Plasticized PONSEL "PLASTOGEL"® : electrolyte Ag/AgCl reference
	ORP	- 1000,0 to + 1000,0 mV	± 2 mV	Platinum electrode Ag/AgCl reference
OPTOD	**Dissolved Oxygen /T°C**	0,00 to 20,00 mg/L I 0,0 to 200,0 % SAT	± 0,1 mg/L ± 1 %	PONSEL OPTOD optical luminescence technology ASTM D888 – Compliance
C4E	**Conductivity**	0,0 to 200,0 I 0 to 2 000 µS/cm I 0,00 to 20,00 I 0,0 to 200,0 mS/cm	± 1 % of the full range	C4E Technology 4 electrodes (2 platinum and 2 graphite)
	Salinity	5,00-60,00 g/Kgt	± 0,5 % of the full range	C4E Technology 4 electrodes (2 platinum and 2 graphite)
NTU	**Turbidity**	0,00 to 50,0 I 0,0 to 200,0 NTU I 0 to 1000 NTU I 0 to 4000 NTU I AUTOMATIC RANGE I Range 0-4500 mg/L	± 1 % of the full range	IR 90° technology ISO 7027 compliance

Probe	
Sensors	3 sensors
Interface signal	Modbus RS485 /SDI12
Measurement frequency	1 s max
Power supply	5-12 Volts
Dimensions	Diameter max. 75 mm, Lenght (without hook) 288 mm, Lenght with hook 394 mm
Weight	1300 g
Material	EPDM, PVC, Inox
Pressure	5 bars
Connection	9 armoured connectors, polyurethane jacket, bare-wires or waterproof Fisher connector
Protection	IP68



NEW

LOWTUS,

On-line Low Turbidity digital sensor for drinking water application applications

ADVANTAGES

- 90-degree light-scattering Nephelometric method – ISO 7027
- Ranges 0-10 NTU; 0-100 NTU
- Modbus RS-485 digital communication
- Self-cleaning of optical part
- Operation checking with Solid Tare

Applications

Raw water for drinking / water production / Drinking water process control / Final Water Monitoring / Filtered Water

Technical Characteristics	
Measurements	
Measurement principle	Diffusion IR at 90° - ISO 7027
Measuring Range	0-10; 0-100 NTU & Automatic Range
Resolution	0,0001 NTU for [0,0002 to 9,9999 NTU] • 0,001 NTU for [10,000 to 100,00 NTU]
Accuracy	Low range: +/-2% of reading or 0.03 NTU* • High range: +/-5% or 0.2 NTU* *Highest value
Temperature	NTC
Temperature Accuracy	+/- 0.5°C
Type of detector	Si photodiode
Light sources	LED IR 850 nm
Measurement frequency min	0.75s (measure only), 6s (measure + cleaning)
Ingress Protection rating	IP65
Maximum pressure	3.5 bar
Water Flow	100 ml/min to 1500 ml/min
Storage temperature	0-50°C
Weight	1800 – 2000g depending on the version
Equipment	Body: Polycarbonate, POM-C, PE, polyamide • Optical windows: Fused silica • Cable: Bare wire with polyurethane sheath • Seals: Nitrile • Wiper unit: Silicon, Stainless steel
Wetted materials	Measurement cell: POM-C, Fused silica, Nitrile Wiper unit: Silicon, Stainless steel
Cable	9 shielded conductors in 3, 7 and 15m. Other lengths on request
Signal interface	Modbus[1] RS-485 1. The sensor responds in Modbus including during Standby

	Measure only	Measure + Cleaning
Sensor Power Supply	6.5[1] - 26[2] VDC	6.5[1] - 26[2] VDC
	1. Minimum voltage subject to cable length-related losses 2. 28.0 V absolute maximum	
Typical consumption at 5V / 6V	Automatic standby: less than 3.7 mA* (18.5 mW / 22.2 mW) Maximum peak current: 400 mA (10 ms)	
Maximum current during measurement	180 mA (1170 mW)	300 mA (1950 mW)
Average current during measurement	95 mA (6175 mW)	190 mA (1235 mW)
Average current (1 measurement / 10s) *	12 mA (78 mW)	125 mA (812.5 mW)
Energy for 1 measurement	172 µWh	1715 µWh
Typical consumption at 12 V	Automatic standby: less than 4.0 mA* (48 mWh) • Maximum peak current: 250 mA (10 ms)	
Maximum current during measurement	150 mA (1800 mW)	150 mA (1800 mW)
Average current during measurement	60 mA (720 mW)	110 mA (1320 mW)
Average current (1 measurement / 10s) *	10 mA (120 mW)	65 mA (780 mW)
Energy for 1 measurement	200 µWh	1833 µWh
Typical consumption at 24 V	Automatic standby: less than 4 mA* (96 mW) • Maximum peak current: 150 mA (10 ms)	
Maximum current during measurement	80 mA (1920 mW)	100 mA (2400 mW)
Average current during measurement	50 mA (1200 mW)	80 mA (1920 mW)
Average current (1 measurement / 10s) *	10 mA (240 mW)	50 mA (1200 mW)
Energy for 1 measurement	333 µWh	2667 µWh
EMC compliance	NF EN 61326-1: 2021-06[1,2] • RS-485 Modbus RTU 1. The sensor is qualified for standard use with a dedicated cable including power supply and communication lines specific to the sensor network. 2 . When connected to a DC power supply network separated from the RS485 communication lines; additional shielding must be used on the system to protect the sensors from induced surges (above 30 meter cable length).	
Warranty	2years	

*When low power mode is activated in "User Configuration Modbus Registers" (subject to evolution with software updates)

NEW

STACSENSE

UV Optical Technology for optimal measurements

ADVANTAGES

- UV 254 spectral absorption without any reagents or consumables.
- Multi-parameter measurement: SAC254, CODeq, TOCeq & BODeq, Turbidity eq
- Modbus RS-485 digital communication.
- Automatic Turbidity compensation.

Applications

Urban wastewater treatment: detecting organic load variations during input - treatment process - output / Treatment of industrial effluents / Surface water monitoring / Fish farming, aquaculture (freshwater) / Drinking water: monitoring Organic matter in raw water, oxidation process, coagulation, activated carbon filtration.



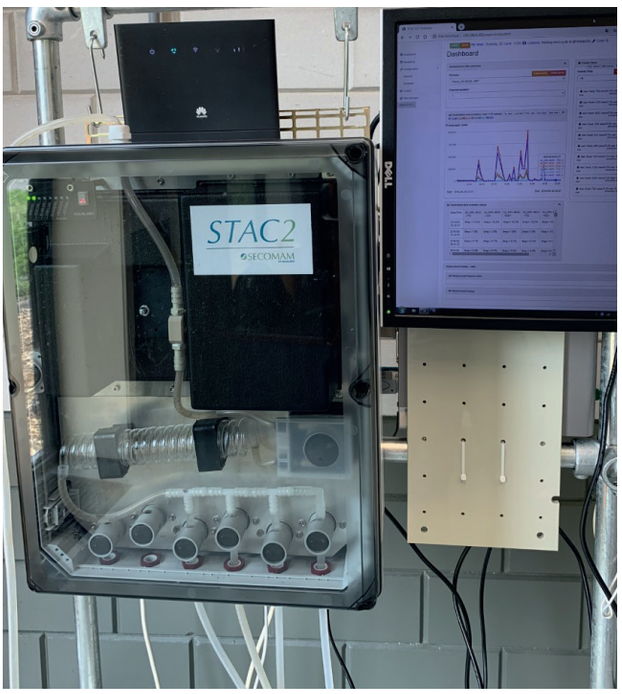
OPTION AIR CLEANING AVAILABLE

The Spectral Absorption Coefficient (SAC) at 254 nm helps determine the Organic Content of a water sample but also the COD, TOC and BOD parameters by applying the appropriate correlation coefficients.

Technical Characteristics	
Measurements	
Measurement principle	UV 254 nm absorption
Compensation	Turbidity at 530 nm
Wave lengths	Internal temperature
Type of detector	254 nm (turbidity correction at 530 nm)
Light sources	Silicon Photodiode
Optical paths	LED UV 254 +/- 5nm and 530 +/- 5 nm
Measurement frequency	2 and 50 mm
Ingress Protection rating	IP68
Max. immersion depth	50 meters
Maximum pressure	5 bars
Operating temperature	0-40°C
Storage temperature	-10°C to +50°C
PH range	pH2 to.pH12
Dimensions (D x L) (mm)	48x371 or 48x419 (see overall dimensions diagram)
Weight	1600 - 1800g depending on the optical path (cable not included)
Equipment	Body: Stainless steel 316 (1.4401) • Optical windows: Quartz (Corning 7980) • Cable: Bare wire with polyurethane sheath • Seals: Fluoroelastomer (FPM/FKM)

STAC2

On-line UV-Vis Alert Analyser for water chemical quality monitoring of BOD / COD / TOC / TSS and Nitrates



ADVANTAGES

- Fingerprint capability: scanning from 190 up to 800nm with unique 1 nm bandwidth
- Versatile sampling: up to 4 channels and 10 parameters available per channel
- Data connectivity: both local and cloud based data collection by means of a WiFi connection
- Real-time visualization of the water's fingerprint: BOD / COD / TOC / Nitrates
- Secomam UV-Vis technology since 1966!
- Robust and rugged design with high-tech data handling
- Automatic cleaning system

Applications

Wastewater treatment plant (follow-up purification performance, input, discharge, etc.) / Drinking water plant (pumping station, tank management, etc.) / Natural water / Process water / River monitoring / Aquaculture

NEW

NEON MONO SENSOR & NEON OPEN

New portable field meter for Dissolved Oxygen, pH, Conductivity, Salinity, Sludge blanket detection, Turbidity, Suspended Solid and Temperature

ADVANTAGES

- Intuitive, simple and quick to use: immediate handling
- Robust, waterproof IP67 and lightweight.
- Digital sensor: measurement reliability
- Data recording and transfer via Wifi



Applications

Fish farming: RAS, pond, offshore cage / Aquaculture industry / Aquarium / Surface water, groundwater monitoring / Treatment of urban wastewater (inlet, aeration basin, outlet) / Industrial wastewater treatment / Non Collective Sanitation (septic tank)

NEON Mono sensor digital portable device

Always ready for use, NEON combined with DIGISENS range sensor allows reading of dissolved oxygen (% and mg/L) and temperature or pH, ORP, Conductivity, Salinity, Sludge Blanket detection and Turbidity. NEON also offers a recording function (30 000 measuring points) in a punctual and automatic mode.
Data transfer to the computer is easy thanks to the WiFi Transfer function (without additional cable).
Resistant to disturbances: pre-amplification integrated in the sensor and digital signal processing.

NEON & NEON OPEN Sensor technology

- **OPTOD sensor:** The OPTOD dissolved oxygen sensor uses the ASTM International Method D888-05 approved optical luminescence measurement technology and ISO 17289. This innovative method ensures reliable, accurate measurements and reduced maintenance. Without consumables or maintenance, the OPTOD sensor allows immediate return on investment. Only the DOdisk is to be changed every two years. The OPTOD sensor uses no oxygen and is suitable for all environments, including those with very low water circulation.
- **C4E Sensor:** The electrode works with a technology in 4 electrodes: an alternating current of constant voltage is established between a primary's pair of electrodes in graphite. The secondary's electrodes in platinum allow of regulate the voltage imposed to primary's electrodes to reflect of the fouling. The voltage measured between the primary's electrodes is in function of the resistance of place and so, of the conductivity.
- **PHEHT Sensor:** The PONSEL sensor incorporates a reference electrode, used for pH and redox measurements, type Ag/ AgCl with plasticized electrolyte saturated in KCl «PLASTOGEL»®. The «PLASTOGEL»® electrolyte communicates directly with the external medium without capillary or porous interposition. There is therefore no risk of plugging or defusing the reference.
- **VB5 Sensor:** The measurement principle is based on the attenuation of the IR signal at 870 nm through a 5mm optical slot. The sensor delivers Mud Veil measurements in % IR transmission. For better accuracy, the sensor optics are temperature regulated.
- **Turbidity Sensor:** The measure principle is based on IR nephelometry / 850 nm. The sensor can be calibrated with a Formazine standard solution. The NTU sensor integrates a low-cost optical technology, with very few maintenances and no consumables
- **MES5 Sensor:** The measurement principle is based on the attenuation of the IR signal at 870 nm through a 5 mm optical slit. The sensor provides measurements of MES (g/l), turbidity (FAU) and sludge veil as a percentage of IR transmission. For greater accuracy, the sensor optics are temperature-controlled

Specificacions	OPTOD	C4E	PHEHT	VB5	NTU	MES5
Measuring Range	Oxygen: 0,00-20,00 mg/L ; 0,00-20,00 ppm ǀ Oxygen: 0-150 % ǀ Temperature: 0,00-50,00 °C	Conductivity: 0-200,0 µS/cm ; 0 –2000 µS/cm ; 0,00 –20,00 mS/cm ; 0,0 –200,0 mS/cm (compensated at 25°C) ǀ Salinity: -5-60 g/Kg ǀ Temperature: 0.00 – 50.00°C	pH: 0.00 to 14.00 (temperature compensated) ǀ Redox: -1000.0 to +1000.0 mV ǀ Temperature: 0.00 – 50.00°C	Sludge Blanket : 0-100 % ǀ Temperature : 0,00 – 50,00 °C	Turbidity 5 to 4000 NTU in 5 ranges: 5 - 50 NTU ǀ 5 – 200 NTU ǀ 5 – 1000 NTU ǀ 5 – 4000 NTU AUTOMATIC TSS in mg/l Temperature: 0,00 – 50,00 °C	Suspended Solid: 0-50 g/L Turbidity 0-4000 FAU Sludge Blanket: 0-100 % Temperature: 0.00-50.00 °C
Resolution	Oxygen:0,01 ǀ Temperature: 0.01	Conductivity: 0,01 to 1 according to the range ǀ Salinity: 0.01 ǀ Temperature: 0.01°C	pH: 0.01 ǀ Redox: 0.1 mV ǀ Temperature: 0.01°C	Sludge Blanket: 0.01 to 0.1 % ǀ Temperature : 0.01 °C	0,01 to 1 NTU - mg/L Temperature: 0.01 °C	Suspended Solid: 0.01 g/L Turbidity: 0.01 à 1 FAU Sludge blanket: 0.01 à 0.1 % Temperature: 0.01 °C
Accuracy	Oxygen: +/- 0,1mg/L ; +/- 0,1ppm ; +/- 1 % Temperature: +/- 0.5 °C	Conductivity: +/- 1 % of the full range Beyond 100 mS/cm use appropriate buffer solution Temperature: +/- 0.5°C	pH: +/- 0.1 pH Redox: +/- 0.2 mV Temperature: +/- 0.5°C	Sludge Blanket : +/- 2% Temperature : +/- 0.5 °C	<5% of the reading Temperature: +/- 0.5 °C	Suspended Solid < 10 % Turbidity: +/- 5% (range 200-4000 FAU) Sludge Blanket: +/- 2% Temperature: +/- 0.5 °C
Calibration	On 1 or 2 points	On 4 ranges, 2 points per range	pH On 3 points	1 point ; 100 %	Turdidity NTU : 2 point/range Turbidity mg/L : 2 point (real sample)	Suspended Solid: 2 points (real sample) Turbidity FAU: 2 points Sludge Blanket: 1 point 100 %
Compensations	Barometric: Automatic ǀ Salinity: Manual ǀ Temperature via CTN: automatic	Temperature via NTC: automatic @ 25°C	Temperature via NTC	Regulation of optics via NTC	Regulation of optics via NTC	Regulation of optics via NTC
Recording	30 000 points ǀ Wifi transfert					
Functions	Auto Off: 2, 5, 15, 30, 120 min ǀ Light intensity: 5 min max ǀ Contrast management ǀ Main measurement zoom function ǀ Recording: On-site, interval recording (time interval) ǀ Indication of measurement stability ǀ Measurement function that freezes with measurement stability condition					
Power supply	3 battery 1,5V AA ǀ 648 h (without recording) ǀ 230 h (1 recording/minute)					

ODEON,
The polyvalent handheld device

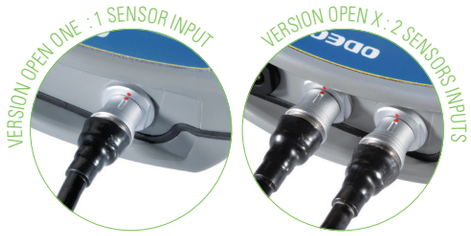
ODEON IS THE RANGE OF HANDHELD NUMERICAL DEVICES DEDICATED TO WATER QUALITY CONTROL ON THE FIELD OR IN THE LABORATORY

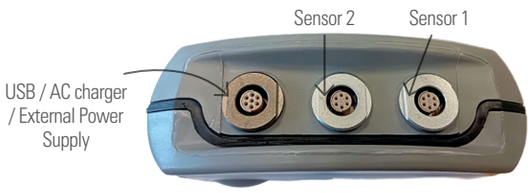


Getting immediate, intuitive use

- Large graphical display 4 'backlit
- Exceptional Memory Capacity: 8 MB, up to 100,000 measurement records
- Ergonomic device, shock resistant and waterproof: IP67
- Automatic recognition and self-diagnostic probes «Plug and Play»
- Optical Sensors (Oxygen, Turbidity) and electrochemical (pH, ORP, temperature, conductivity)

Technical specifications	
Memory	8 MB (up to more than 100,000 records)
Power supply	4 x 1.5V AA • Options: • Rechargeable Battery • Power. External 12 V
Battery life	145-190 hours depending on the configuration
Communication	USB
Housing	PC / ABS
Weight	400 g
Dimensions	196.5 x 121 x 46 mm
Protection	IP 67
Operating temperature, humidity	- 25 to + 50 ° C, 0-70%
Storage temperature, humidity	- 25 to + 65 ° C, 0-80%
Display	LCD 4 «240 x 320 pixel display with adjustable backlighting
Connectors	• 1 connector: ODEON OPEN ONE • 2 connectors: ODEON OPEN X





Universal waterproof connectors Clic-Loc™ Plug



Accessories and options

- Transfer and data analysis software
- Rechargeable Version with charger 220 V
- External Power Cable 12V
- Y cable for 2 digital sensors on one input
- Sensor coupling Accessories
- Reels up to 20m and 100 m
- Enhanced suitcase equipped with a 12V battery
- Cable length 3 m / 7 m / 15 m (other lengths available on request)
- 125 mL Standardized calibration solutions

ACTEON 5000,
Digital transmitter multiparameters instrument

INTELLIGENT TRANSMITTER FOR INTELLIGENT SENSORS: DISSOLVED OXYGEN / TURBIDITY / PH / T°C / ORP / CONDUCTIVITY / SALINITY / COD, TOC, BOD, SAC254 / TSS / SLUDGE BLANKET

ADVANTAGES

- Touch-sensitive screen
- Technology of digital communication
- 1 to 2 digital sensor connexion
- Wide graphic screen: display until 4 measures
- Analogic output Out 4-20 mA, programmable Relays (visible state main screen)
- Simple and fast intuitive Programming
- Wide range of digital sensors
- Modbus RS485 output
- Ethernet output



The measured values are displayed and transmitted by analog or digital way. The functions of preconfigured regulations also optimize process control.
ACTEON 5000 is associated with a wide range of digital sensors resistant to disturbances: preamplifying is integrated to the sensor and digital signal processing. All data regarding calibration, history, users and measures are handled directly in the sensor to enable traceability and extreme reliability of the measurements

Application areas

Waste water treatment plant (aeration tank for control/regulation of Nitrification / Denitrification process, Drinking water (control raw water), Industrial waste water treatment (reject control, regulation), Survey of surface water, Fish farming…

NEW : Available with Stacsense and LowTuS

Software and features	
2 digital output	Choice of 2 programmable parameters according to connected sensor
2 relay	NO / NC customizable Instruction point : configuration of the working range (Hysteresis / direction) and time of activation Command of external cleaning system Alarm output, probe default
Atmospheric pressure sensor	For pressure Oxygen compensation

Technical specifications	
Display	Back-light graphic lcd touch-sensitive - Size: 95 x 54 mm
Analogic output	0/4.00 – 20.00 mA with galvanic insulation • Charge max 250 Ω
Relay output	6 A /250 V
Conditions of functioning	Temperature of functioning: - 15 °C à + 50 °C • Storage Temperature / transport: - 15 °C to + 50 °C
Power supply Electric protections	100-240 V AC / DC 50-60 Hz • Option 9-28 V DC / DC • Electric protection : compliance with EN61010-1 :2010
Digital outputs	Modbus RTU • Ethernet TCP IP
Dimensions (L x H x P)	213 x 185 x 84 mm
Protection	IP65

NEW

ACTEON 6000,

Digital fixed unit universal multi-channel digital field transmitter Up to 12 parameters

ADVANTAGES

- Wide range of parameters: Oxygen, conductivity, pH, redox, turbidity, suspended solids (SS), SAC254, COD, BOD, TOC, NH_4, NO_4, chlorine, etc.
- Digital communication technology
- 2 Modbus RTU networks: Bus-A: 4 DIGISENS digital sensor inputs / Bus-B: 1 configurable input
- 2 analogue inputs, 2 digital inputs
- Large graphic touchscreen: display of up to 12 parameters
- 4 x 4-20 mA outputs, 4 x programmable relays (status visible on main screen)
- Modbus RTU outputs, Ethernet TCP/IP
- Quick and easy intuitive programming

Applications

- Wastewater treatment (aeration tanks for control/regulation of nitrification/ denitrification processes)
- Drinking water (raw water control)
- Industrial effluent treatment (discharge control, regulation, etc.)
- Surface water monitoring
- Fish farming, etc.

The new ACTEON 6000 digital transmitter allows you to directly connect up to 4 digital sensors from the PONSEL range to monitor pH, redox, temperature, dissolved oxygen (optical), SAC254, TOC, COD, BOD, conductivity, salinity, turbidity (NTU, mg/L), MES (g/L), and sludge veil (%).

The measured values are displayed and transmitted via analogue or digital channels. Preconfigured control functions also enable optimised process control.
A truly versatile platform, the ACTEON 6000 also allows for the integration of a wide range of sensors to meet all your measurement needs, including NO_3, NH_4, chlorine and hydrocarbons.



Transmitter ACTEON 6000

SOFTWARE AND FEATURES	
2 Modbus networks inputs	Modbus RTU (A = DIGISENS sensors ; B = configurable)
Digital sensor inputs	4 (Modbus RTU A network) + 1 Modbus RTU B network configurable
2 analog inputs	Configurable in 0/10 V – 0/4 -20 mA. 12 VDC sensor power supply
2 digital inputs	External cleaning information taken into account: switches to maintenance mode
4 analog outputs	0/4-20 mA • Choice of programmable source parameters depending on connected sensors
4 relay outputs	NO/NC configurable via software Setpoint: configuration of the working range (hysteresis/direction) and activation time Timed control for external cleaning system Hardware sensor fault alarm output
3 digital outputs	NO/NC configurable via software Configurable supply voltage 5 or 12VDC
Modbus outputs	Modbus RTU • Ethernet TCP/IP
Data logging	Data logging and export in CSV format (via USB key)
Atmospheric pressure sensor	To compensate oxygen pression
CHARACTERISTICS	
Display	Backlit graphic LCD touchscreen – Size: 7 inches, 1024x600
Analog outputs	0/4.00 – 25.00 mA with galvanic isolation • Max load 400 W
Relay outputs	6 A /250 V
Operating conditions	Temperature : -15°C to + 50 °C • Temperature of storage/transport : -30°C to +70°C
USB port	Unloading of the recorded data
Power/ Electrical protections	10-28 VDC (absolute max. = 30 VDC) • Power limitation = 100 W • Electrical protection: compliant with IEC 61010-1
HOUSING	
Dimensions (WxHxD)	257x247x134 mm
Material	Enclosure: Polycarbonate Seal: Polyurethane Cable glands: Polyamide
Protection rating	IP 65

AQUAMOD,

Autonomous wireless real-time communication LoRa® solution for Digisens Ponsel digital sensors



THE MONITORING OF YOUR REAL TIME DATA WAS NEVER SO SIMPLE!

Aquamod' solution

Our solution AquaMod' allows to follow in real time, the measures made by the digital sensors Digisens of the brand Ponsel on the parameters Temperature, Oxygen, pH, conductivity, Salinity, Redox, Turbidity, SS, Sludge Blanket, SAC254, CODeq, BODeq, COTeq.

Every sensor is connected on a wireless autonomous module « AquaMod ' « which records the data stemming from the digital sensor. The measures are transmitted in a Gateway, via an independent local area network LoRaWAN.

Accessible local Web application via WIFI since any browser (Chrome, Firefox, etc..) for the calibration of the sensors, for the configuration of the frequency of the acquisition.

ADVANTAGES +

- Local and independent radio LoRa® communication network
- Transfer of the secure data
- No IT management, only Internet browser for operation
- Real time visualization
- 2 years autonomy minimum
- Real time surveillance and data transmission of your digital sensors
- Private Communication network LoRaWAN and frees operators

LoRa® Technology

Our module AquaMod «communicates via a local area network and private LoRa®. This network wireless allows a communication with low consumptions, a long range, optimized for equipment working on batteries (many years' autonomy). This network is perfectly adapted to the applications of energy control.

With a private network, you are an owner of your gateway and your network LoRa®.
Thanks to this solution, you manage directly the collection of data coming from your digital sensors, to manage them towards your platform. You do not pay costs of communication by maintaining your LoRa® network.

Module AquaMod'

AquaMod ' is a tight, autonomous wireless module allowing to collect the data measured by the digital sensors physico-chemical DIGISENS of the brand Ponsel. Simple to install and preconfigured in factory, the AquaMod' module is immediately operational.

Configuration and diagnostic in local via WiFi and Web application.



CHEMICAL REAGENTS AND ANALYSIS KITS



Colorimetry kit



Analytical reagents & chemical solutions

- Buffer solutions, standard solutions...



Custom analysis kits and cases or standard by activity

- More than 60 parameters



Test tubes

Tube analysis methods are also available and compatible with PHOTOPOD and with all the spectrophotometers UVILINE: Total Nitrogen, Ammonia, Nitrites, Nitrates, DCO and Phosphates

Consult us for the parameters' list and their ranges.

PRIM Spectrophotometers

PRIM LIGHT and PRIM ADVANCED visible spectrophotometers combine excellent photometric quality with simple and intuitive handling.
Compact and lightweight, these spectrophotometers are ideal for standard applications in education or in laboratory.

- **PRIM Light:** simple internal software which includes basic measurements in spectrophotometry, absorbance, transmittance and single standard concentration.
- **PRIM Advanced:** Advanced applications in absorbance, transmittance, multi-standard concentrations, kinetics, multi-wavelengths and spectrum scanning.





Uviline 9300 and 9600 spectrophotometers

Our UVILINE 9300 and 9600 combine the best innovations available in analytical instrumentation.

- Optimum accuracy thanks to the reference beam
- High optical resolution
- User-friendly Spectralab software
- Remote control possible
- Ergonomic with their large color screen

	9300	9600
Wavelenghs range	VIS : 320-1100 nm	UV-VIS : 190-1100 nm
Light Source	Halogen	Xenon
Spectral bandwidth	4 nm	
Wavelenght accuracy	+/-1 nm	
Repeatability	+/-0,5 nm	
Photometric accuracy	+/-3,500 Abs	
Scanning speed	600nm/min	800nm/min

AQUALABO

LOCATION

QUICK AND SIMPLE SOLUTIONS

FOR WATER QUALITY MONITORING

For punctual or long-term measurement campaigns, or test equipment,
trust in Aqualabo for your rental projects.

PHYSICAL CHEMISTRY

Local or Communicating version



Portable device ODEON & NEON



Wireless real Time Communication Solution



COD, BOD, COT, NO_3 Analyzer (without reagents)



Digital sensors



UV Online Analyzer for COD BOD TOC TSS NO_3



Spectrophotometers



Refrigerated and isotherm portable samplers



Bubble and Transit time flowmeters

QUICK DELIVERY

QUALITY

We ensure a continuous and rigorous control under ISO 9001 certification. After each use, the material is cleaned, disinfected and checked on test benches before restocking.
Certificates of control and conformity issued upon request.

TECHNICAL SUPPORT

Our team of experts is at your disposal to advise you and answer all your questions : problem on a current rental, a doubt about the operation of a product or software ...
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A STANDARD EXCHANGE UNDER 24H OR 48H IN CASE OF FAILURE

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