

AQUALABO

Smart water solutions

NEW

ACTEON 6000

DIGITAL FIXED UNIT
UNIVERSAL MULTI-CHANNEL
DIGITAL FIELD TRANSMITTER



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.

ADVANTAGES



- Wide range of parameters: Oxygen, conductivity, pH, redox, turbidity, suspended solids (SS), SAC254, COD, BOD, TOC, NH₄, NO₃, 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

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 NO₃, NH₄, 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 analogue 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 functional galvanic isolation • Max load 400 Ohms
Relay outputs	6 A / 50 V
Operating conditions	Temperature : -15°C to + 50 °C • Temperature of storage/transport : -20 °C to +60 °C
USB port	Unloading of the recorded data
Power/ Electrical protections	10-28 VDC (absolute max. = 30 VDC) • Power limitation = 6A/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

DIGITAL SENSORS

Digital “smart” sensors

- All calibration data (factory coefficients, offset, slope) are stored in the probe,
- Digital technology for extreme reliability measurements without interference.

Robust probe in field and laboratory

- Probes from more than 50 years of experience PONSEL
- Applications waters, drinking water, wastewater, sewage...



	Principe	Gammes
OPTIC	Oxygen	Optical fluorescence 0,00-20,00 mg/L 0-200 %
	Turbidity	IR nephelometry (90° scattering) 0.0-50.0 NTU 0.0-200.0 NTU 0-1000 NTU 0-4000 NTU Automatic 0-4500 mg/L
	Turbidity – Drinking Water	IR Nephelometry 0–10 NTU; 0–100 NTU & Automatic Range
	TSS	IR absorptiometry (870 nm) Sludge Blanket: 0-100% TSS: 0-50 g/L Turbidity: 0-4000 FAU
	Sludge Blanket	IR absorptiometry (870 nm) 0-100%
	SAC254	UV absorption 254 nm 0-30 Abs/m 0-750 Abs/m
ELECTROCHEMISTRY	CODeq COTeq BODeq	UV absorption 254 nm CODeq: 0-50 mg/l; 0-1300 mg/l TOCeq: 0-20 mg/l; 0-500 mg/l BODeq: 0-15 mg/l; 0-350 mg/l
	pH/T°C	Combined electrode (pH/Reference) 0,00-14,00 pH 0,00 to +50,00 °C
	Redox	Combined electrode with platinum tip - 1000,0 to + 1000,0 mV
	Ring redox	Combined electrode with platinum ring - 1000,0 to + 1000,0 mV
	Conductivity	4-electrode amperometric 0-200,0 µS/cm 0-2000 µS/cm 0,00-20,00 mS/cm 0,0-200,0 mS/cm Automatic range
	Salinity	4-electrode amperometric 5,00-60,00 g/Kg
	Inductive Conductivity	Inductive method 0-100 mS/cm
	Inductive Salinity	Inductive method 5,00-60,00 g/Kg
	Free Chlorine	3-electrode amperometric 0,005-2,000 mg/L 0,05-20,00 mg/l

COMPATIBILITY WITH THIRD-PARTY SENSORS

With the ACTEON 6000, it is also possible to integrate and connect any type of Modbus-compatible, 0–10 V or 4–20 mA sensor to measure additional parameters such as level, chlorine, chlorophyll, hydrocarbons and many others.