MONITORING EXCELLENCE.

SIGRIST
PROCESS-PHOTOMETER

AquaMaster

Multi-Parameter Measuring System for Water Treatment Works

Applications

Combined measurement of:

- Turbidity
- pH
- Conductivity
- Redox / ORP
- Dissolved oxygen
- Temperature
- 2 additional, external parameters

Properties

- Compact, modular complete system
- Unrestricted combination of parameters
- Central, integrated control unit with colour touch screen
- Strong, reliable brands: SIGRIST & HAMILTON
- One partner for all measurements
- Integration of external sensors possible
- Simple calibration and maintenance without tools

Industries

- Treatment of drinking water
- Industrial water treatment

AquaMaster

Multi-Parameter Measuring System for Water Treatment Works

Innovations with real benefits

Compact complete system

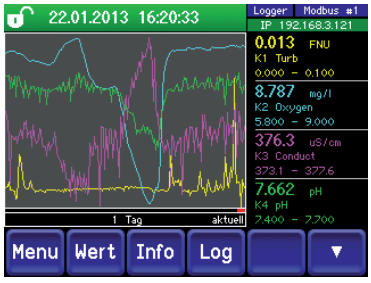
A compact measuring system for a multitude of parameters. Turbidity in all available AquaScat variations, pH, conductivity, redox/ORP, dissolved oxygen, temperature:

- Freely selected and combined parameters.
- Compact footprint.
- Simple installation; only a support has to be mounted.
- Only a water supply and discharge is needed.
- Connect – adjust water flow – measure!

Modular structure

Measuring cell with room for 4 sensors is provided as standard. 2 additional parameters can be integrated via an analogue input (4–20 mA):

- Initial installation with only one parameter possible.
- Additional sensors can be supplemented at any time.
- SIGRIST ColorPlus for the measurement of DOC (UV absorption) and colour (Hazen) can be combined.



Integrated control unit

A touch screen with colour display serves as user interface:

- Only one control unit is necessary; this is integrated in the system.
- The display shows either values, graphs, status or alarm messages.
- An internal data logger allows recalling and displaying measured data from the last 32 days.
- Extensive communication options including an integrated web server.

User-friendly maintenance

Simple maintenance without tools. Storage shelf for calibration liquids, mounting brackets for sensors and the electronic part of the AquaScat:

- Both hands are free to calibrate and to work at the AquaScat.
- Little risk of damage.
- Automatic detection of the sensors' calibration standards.
- Integrated display of the quality of the sensors.
- Simple replacement of the sensors according to the principle «Plug & Measure».

Technical data

AquaMaster System:

Dimensions:	approx. 55 × 115 × 40 cm (w × h × d)
Sample temperature:	0 .. +40 °C
Max. pressure:	0.6 MPa (6 bar)
Ambient temperature:	0 .. +50 °C
Ambient humidity:	0 .. 100 % rel. h.
Protection degree:	Min. IP54
Power supply:	100 .. 240 VAC, 47 .. 63 Hz or 18 .. 30 VDC
Power consumption:	10 W

Control Unit:

Display:	¼ VGA, 3.5"
Operation:	Touchscreen
Outputs:	4 × 0/4 .. 20 mA, galvanic separated 2 × Relays 250 VAC, 4A 5 × digital outputs, freely configurable
Inputs:	2 × 0/4 .. 20 mA 4 × digital inputs, freely configurable 1 × for optional flow meter
Digital interface:	Ethernet, Modbus TCP, microSD-card
Optional:	Profibus DP, Modbus RTU, HART, additional current output module, 4 × 0/4 .. 20 mA

Turbidimeter AquaScat:

Measuring principle:	90° scattered light acc. to standard ISO7027/EN27027
Measured units:	FNU, NTU
Measuring range:	0 .. 4'000 FNU (WTM, HT) 0 .. 100 FNU (P)
Further specifications:	See datasheet AquaScat

pH Sensor:

Measuring principle:	Potential measurement against a reference
Measured units:	pH, temperature
Measuring range:	pH 0 .. 14

Conductivity Sensor:

Measuring principle:	4-pole measurement
Measured units:	µS/cm, mS/cm, temperature
Measuring range:	1 .. 300'000 µS/cm

Dissolved oxygen Sensor:

Measuring principle:	Optical (luminescence)
Measured units:	µg/l, mg/l, ppb, ppm, %-sat., %-vol., temperature
Measuring range:	4 ppb .. 25 ppm

Redox / ORP Sensor:

Measuring principle:	Potential measurement against a reference
Measured units:	mV, temperature
Measuring range:	–1'500 .. 1'500 mV

DOC (UV absorption) / colour (Hazen) ColorPlus:

Measuring principle:	Absorption
Measured values:	E, E/m, Hazen, GOST
Measuring units	0 .. 3E 0 .. 60 E/m 0 .. 420 Hazen @ 390 nm
Further specifications:	See data sheet ColorPlus

photometer.com/c374

Your representative:

SIGRIST PROCESS-PHOTOMETER

SIGRIST-PHOTOMETER AG
Hofurlistrasse 1 · CH-6373 Ennetbürgen
Tel. +41 41 624 54 54 · Fax +41 41 624 54 55
www.photometer.com · info@photometer.com