

AquaGuard PR 30

Multi-parameter measurement with zero water loss

The AquaGuard S allows to measure up to five quality parameters directly in water – without using expensive pumps and without water loss. The portable measurement station consists of an AquaScat S and up to three Hamilton probes. This allows for a flexible adaption to the own requirements. The system is operated with a SICON control unit.

Applications

Combined measurement of

- Turbidity
- pH
- Conductivity
- ORP
- Dissolved oxygen
- Temperature

Advantages

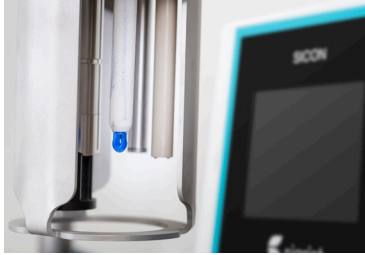
- Direct measurement in water
- No water loss
- Customised, flexible solutions

Industries

- Drinking water treatment
- Industrial water treatment

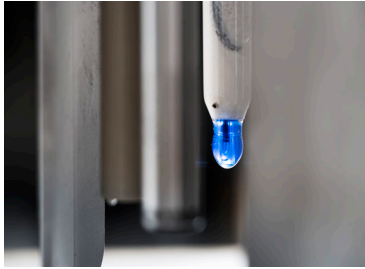


Innovations with tangible benefits



Multiparametermessung ohne Wasserverbrauch

- No installation of expensive pumps or pipes necessary
- Submersion measurement without water loss (min. 0.1 m)
- Reliable measurement at low water level
- Standard equipment with 10 m or 20 m cable, other lengths upon request



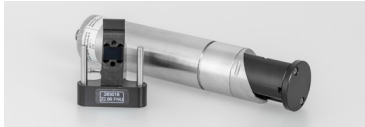
Modularity

- Measurement of turbidity according to ISO7027 and temperature in combination with up to three Hamilton probes (pH, ORP, electrical conductivity, dissolved oxygen)
- Simple adaption to specific customer needs
- System can be upgraded at any time



Maintenance –friendly design

- Reliable instrument design for fast and tool-free maintenance
- Re-calibration in the field with solid state reference (AquaScat S) and calibration standards (Hamilton probes)



Control

- Simple control, visualization, and parametrization with SICON M control unit
- Data logging capabilities for up to 32 days
- Simple extension to other state of the art communication platforms like Profibus DP, Profinet IO, etc.

Main technical details

Measuring range:

pH, temperature:

ORP, temperature:

Conductivity, temperature:

Dissolved oxygen, temperature:

Sample conditions:

Turbidity according to ISO 7027/EN 27027

0 ... 4000 FNU

0 ... 14, 0 ... 130°C

-1500 mV ... 1500 mV, 0 ... 130°C

1 ... 300'000 µS/cm, 0 ... 130°C

0.004 ... 25 ppm, 0 ... 130°C


see AquaScat S data sheet

Details and
technical data:



AquaGuard PR 30

Technical data

| | |
|---------------------------------------|---|
| Measuring principle | 90°C scattering light according to ISO 7027 with LED |
| Nominal range turbidity | 0 ... 4000 FNU |
| Resolution turbidity | 0.001 FNU |
| pH Sensor | Potentiostatic measurement against reference |
| Measuring quantities pH | pH, Temperature [°C, K, °F] |
| Nominal range pH | 0 ... 14 |
| EC Sensor | 4-Pole measurement |
| Measuring quantities el. Conductivity | El. Conductivity uS/cm, mS/cm], Temperature [°C, K, °F] |
| Nominal range el. Conductivity | 1 ... 300'000 uS/cm |
| Oxygen sensor | optical measurement (luminescence) |
| Measuring quantities diss. Oxygen | dO2 [µg/L, mg/L, ppm, ppb, %sat, %Vol], Temperature [°C, K, °F] |
| Nominal range diss. Oxygen | 0.004 ... 25 ppm |
| ORP Sensor | Potentiostatic measurement against reference |
| Measuring quantities ORP | ORP [mV], Temperature [°C, K, °F] |
| Nominal range ORP | -1500 ... 1500 mV |
| Sample temperature | 0 ... 50°C |
| Sample Pressure | max. 0.5 MPa (5 bar) |
| Ambient temperature | 0 ... 50°C |
| Supply voltage | 24 VDC +/- 10% |
| Power input | max. 8 W (incl. SICOM M) |
| Outputs | see SICOM M |
| Inputs | see SICOM M |
| Interfaces | see SICOM M |
| Options | see SICOM M |
| Protection class | IP68 |
| Conformities |  |

