

# Analog Monitors

pH/ORP, Conductivity, D.O. or Chlorine  
in numerous applications



The analog monitor series 298 for pH, conductivity, oxygen as well as for the chlorine measurement offers an enormously high operational reliability based on their galvanically isolated outputs. The clear menu structure along with the easy to read LCD display ensures a maximum operating and user friendliness.

The specially coated drinking water panels are pre-assembled and ready-to-operate. The sensors for free or total chlorine and the sensor combinations in case of a multi-parameter panel are freely selectable. Additional options such as analog/digital Outputs or flow monitoring are dependent on the selected panel.

## Fields of application:

- Drinking Water Monitoring
- Swimming pools & Thermal Baths
- Textile manufacturing & dyeing processes
- Pure & ultrapure water
- Electroplating
- Landfills & Leachates
- Paper & Pulp Industry
- Fishfarming/Aquaculture
- Wastewater Treatment Facilities

# Series 298 Single-parameter Field Monitor

Analog transmitter to directly connect analog pH/ORP electrodes, chlorine electrodes, conductivity cells and oxygen sensors with an outstanding price/performance ratio for a versatile application.



pH 298



- User-friendly and effective thanks to easy operation
- Safe operation due to the galvanically isolated outputs



## pH 298

for low-impedance pH measurement, automatic temperature compensation with NTC, Pt100 or Pt1000

*analog pH electrodes see from page 15*

## LF 298

suitable for numerous conductivity measuring cells due to different measuring ranges and cell constants

*analog conductivity measuring cells see from page 18*

## Oxi 298

with compressed air compensation and complete sensor monitoring

*analog D.O. sensors see from page 11*

## Cl 298

to measure free or total chlorine

*analog chlorine electrodes see from page 41*

## Ordering Information

Model	Description	Order No.
<b>pH 298 NTC</b>	Analog controller to measure pH/ORP, 230V and NTC	191230
<b>pH 298 Pt100</b>	Analog controller to measure pH/ORP, 230V and Pt100	191232
<b>pH 298 Pt1000</b>	Analog controller to measure pH/ORP, 230V and Pt1000	191234
<b>Oxi 298 NTC</b>	Analog controller to measure oxygen, 230V and NTC	291230
<b>Oxi 298 Pt1000</b>	Analog controller to measure oxygen, 230V and Pt1000	291234
<b>LF 298 NTC</b>	Analog controller to measure conductivity, 230V and NTC	391230
<b>LF 298 Pt1000</b>	Analog controller to measure conductivity, 230V and Pt1000	391234
<b>Cl 298 Pt1000</b>	Analog controller to measure chlorine, 230V and Pt1000	801254

*24V versions available upon request*



For technical data please see datasheet D3.01

Alternatives and accessories see brochure "Product Details" and website

Analog sensor technology see parameter chapters starting from page 11



EX monitors see from page 61

# Panels with Analog Monitors

## Single-parameter System CI 298/P

Pre-mounted on specially coated panel to measure free or total chlorine

### Monitors

CI 298 with integrated data memory, 2 current outputs, 2 relays and Modbus in robust aluminium housing



- Sanitary and well-structured
- Environmentally friendly - no use of chemicals
- Integrated PID control

### Electrode with flow cell

Order FCML 412 N or TCML N electrode (see page 41) separately; electrodes and flow cell match perfectly



### Flow control monitoring (optional)

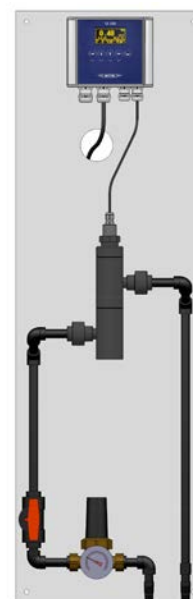
To continuously monitor the upstream flow of the electrode; the flow rate is visualized on the display as a signal and can be transmitted via Modbus

### Dosing valve

for optimum flow adjustments

### Pressure reducer

0 ... 16 bar with integrated temperature sensor



CI 298/P

## Ordering Information

Model	Description	Order No.
CI 298/P - 230 VAC	Ready to operate measuring panel to measure free or total chlorine, analog monitor 2 current outputs and MODBUS interface, with automatic temperature compensation (Pt1000), 230 VAC	801260
CI 298/P Flow - 230 VAC	Like above, but with FlowControl to monitor the flow volume	801261



For technical data please see datasheets D3.01, D7.01, D7.03

Configuration of alternatives and accessories brochure "Product Details"

Analog sensor technology see parameter chapters starting from page 11



EX monitors see from page 61

# MULTILINE 1000 Multi-parameter System

With up to 16 individually configurable measuring channels, the terminal MULTILINE 1000 is a very flexible measuring system for drinking water analysis. The system is pre-configured on a wall mounting panel and ready to use. Simply connect and start measuring: Drinking water measuring panel comes with a flow system, pressure reducer, dosing ball valve, completely pre-assembled cable and with a water-repellent panel. Connections with DN10 and optionally:

## pH measurement

(SenTix® ML 70 *see page 14*)



## ORP measurement

(SenTix® ML ORP *see page 14*)

## Chlorine measurements

amperometric;  
free chlorine - low pH dependancy (pH 4-9) (FCML 412 N *see page- page 41*) or total chlorine (TCML N *see page 41*)

- Multi-parameter system for measurement of pH/ORP, D.O. conductivity, turbidity, free or total chlorine
- Intuitive menu navigation
- Excellent price-performance ratio
- No chemical consumables needed - environmentally friendly



## Turbidity measurement

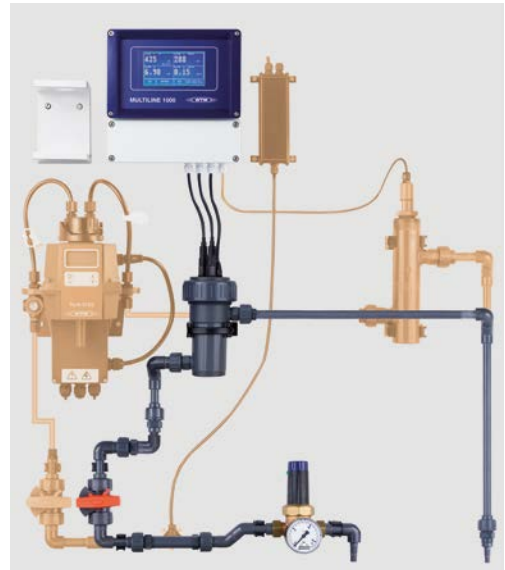
with white light, without ultrasonic cleaning (Turb 2000),  
with white light and ultrasonic cleaning (Turb 2020);  
with IR light, without ultrasonic cleaning (Turb 2100),  
with IR light and ultrasonic cleaning (Turb 2120) *see page 25*

## Conductivity measurement

(LR ML *see page 19*)

## Flow Measurement

(with pre-mounted impeller)



Drinking water panel with basic equipment and all options (orange)

## Ordering Information

Model	Description	Order No.
<b>MULTILINE 1000 230VAC</b>	Multi-parameter monitor to connect up to any 16 sensors, power supply 230 VAC	480200
<b>MULTILINE 1000 115VAC</b>	Like above, but with 115 VAC	480201
<b>Drinking water panel</b>	ready-to-use panel to measure pH, ORP, Cond, Chlorine and Turbidity (Turb 2000); X: with or without flow; yyyy: coding dependent on parameter selection; details see price list or drinking water flyer	8X-yyyy



For technical data please see datasheets D7.01 to D7.04

Configuration of alternatives and accessories brochure "Product Details"

Analog sensor technology see parameter chapters starting from page 11

Analyzer see from page 54