



## Kontrol **500-502** Single and twin-parameter control instruments

The Kontrol 500-series are advanced controllers designed for high-end applications. The units feature independent proportional PID-enabled control outputs, RS 485 serial port with MODBUS protocol, USB port on request, probe quality checking, a variety of outputs and full data logging capability. The user has full programming authority.

Kontrol 500-502

### Parameters

- pH / ORP
- Conductivity
- Dissolved Oxygen
- Chlorine
- Chlorine Dioxide
- Hydrogen Peroxide
- Ozone
- Peracetic Acid
- Turbidity
- Suspended solids

### Applications

- Waste Water
- Drinking Water
- Cooling Towers
- Boiler
- Legionella disinfection
- Reverse Osmosis
- Sludge
- Crate Wash
- Galvanic Process
- Dioxide Station
- CIP
- Irrigation
- Swimming Pool
- Fish Farming
- Sea water
- Dairy

### Features

#### Graphic display and Keypad

128 by 64 pixel resolution monochrome display with graphic icons to show digital output status, Data logging, washing cycle, alarms. Simultaneous flashing values for the measurement (numeric + bargraph) and temperature readings. Analogue scrolling output values. Five control keys for instrument calibration and configuration.

#### Enclosure Box and Power Supply

Wall mounting ABS plastic material IP65 (144x144)  
 Panel mounting IP54 (96x96)  
 Universal Power Supply  
 100÷240 Vac 50/60 Hz

#### Manual controls

The user-friendly programming step menu makes starting up and checking the control and dosing system easy.

### Data logging

Internal Flash Memory with records interval from 1 to 99 min. (near to 16000 records)

Visualization key for stored data in tabular and graphic form.

Type: Circular (F.I.F.O.) or Filling.

### RS485 Serial port

For set-up and real-time data acquisition from remote or for stored data download on PC or laptop (Communication **Software Master Controller NET** required).

MODBUS RTU communication protocol

### USB port

Download measuring data on removable memory Usb Pen Drive (upon request).

### Measure Input

High measuring resolution with probe quality control.

A modular measuring system

Chlorine measure in sea water application.

### Digital Input

Dedicated and level input to disable all controller output functions.

### Current outputs

#### 4÷20mA Galvanic isolation

Two independent programmable Output Measures with PID routine regulation.

### Relay Outputs

Four independent relays, two set points, one alarm remote output, on backwashing probe output.

On/OFF, Timed routine function setting.

## Measure range

Code	Description
pH	0 ÷ 14,00 pH
ORP	± 1500 mV
Conductivity	0 ÷ 20 /200 /2.000 /20.000 /200.000 µS
Inductive Conductivity	0 ÷ 10.000 /10.000 /100.000 /999.999 µS
Dissolved Oxygen	0 ÷ 20,0 ppm or mg/l - 0 ÷ 200% SAT
Chlorine and Chlo. Dioxide	0 ÷ 0,50/1,00 /2,00 /5,00 /10,0 /20,0 /200,0 ppm
Hydrogen Peroxide	0 ÷ 500 /1000 /2000 /10.000 /100.000 ppm
Ozone (O3)	0 ÷ 0,5 /2,00 /5,00 /10,00 ppm
Peracetic Acid	0 ÷ 500 /2000 /10.000 /20.000 ppm
Turbidity	0,00 ÷ 1,00 /10,0 /100 NTU/FTU
Suspended Solids Turbidity	0,0 ÷ 4,00 /40,0 /400 /4.000 NTU/FTU - 0 ÷ 30 gr/l
Temperature	with PT100/PT1000 0 ÷ 100°C (32 ÷ 212 °F)

## Product line Kontrol 500 Single parameter

Code	Model	Description
<b>K500PR</b>	Kontrol PR 500	for pH or ORP values
<b>K500CD</b>	Kontrol CD 500	for Conductivity values
<b>K500ID</b>	Kontrol ID 500	for Inductive Conductivity values
<b>K500OX</b>	Kontrol OX 500	for Dissolved Oxygen values
<b>K500CL</b>	Kontrol CL 500	for Chlorine values
<b>K500T1</b>	Kontrol TB 500	for Turbidity values
<b>K500T2</b>	Kontrol TS 500	for Suspended Solid Turbidity values

The unit's Software enables the following measures:  
H<sub>2</sub>O<sub>2</sub> - O<sub>3</sub> - ClO<sub>2</sub> - C<sub>2</sub>H<sub>4</sub>O<sub>3</sub>

## Product line Kontrol 502 Double parameters

<b>K502PR</b>	Kontrol PR-PR 502	for pH/ORP - pH/ORP values
<b>K502PD</b>	Kontrol PR-CD 502	for pH/ORP - Conductivity values
<b>K502PO</b>	Kontrol PR-OX 502	for pH/ORP - Dissolved Oxyge values
<b>K502PC</b>	Kontrol PR-CL 502	for pH/ORP - Chlorine values
<b>K502CC</b>	Kontrol CD-CL 502	for Conductivity - Chlorine values
<b>K502TO</b>	Kontrol TB-OX 502	for Turbidity - Dissolved Oxygen values
<b>K502TX</b>	Kontrol TS-OX 502	for Suspended Solids Turbidity - Dissolved Oxygen values
<b>K502PI</b>	Kontrol PR-ID 502	for pH/ORP - Inductive Conductivity values