

# Controller DULCOMETER diaLog X

From small to large - extremely flexible for all water treatment systems



The DULCOMETER diaLog X multi-parameter controller ensures that complex water treatment systems are operated as efficiently as possible. The controller is highly flexible and suitable for many sensor parameters.

## Technical Details

Comprehensive inputs and outputs

- Up to 24 flexible sensor inputs and mA outputs (8 per device), e.g. CTFS sensor, linear polarisation resistor (LPR) corrosion sensor
- Up to 30 output relays and pulse outputs (10 per device) to control pumps and other actuators
- Up to 24 digital inputs (8 per device) to control level switches, water meters and remote switches
- Up to 12 pulse frequency outputs
- Up to 18 relays

Communication options

- In-built Modbus RTU and via gateways (BACnet, Modbus TCP, PROFINET)
- Web interface via Wi-Fi and Ethernet, FTP server, rest API, MQTT client interface. The client interface is an intuitive remote control via a Wi-Fi or network connection to your PC or smartphone, e.g. for configuration settings or setpoint settings.
- Configurable and managed via DULCONNEX.

# Controller DULCOMETER diaLog X

From small to large - extremely flexible for all water treatment systems

## Technical Data

Measured variables and measuring ranges	<p><b>Conductivity:</b> with the digital sensor CTFS: 0.1 - 10 mS/cm Via conductivity module L3 depending on sensor used (LMP, LFT): 50 µS/cm - 20 mS/cm Via mA module AA with the inductive conductivity sensor ICT: 8 to 2 mS/cm, 20 mS/cm, 200 mS/cm</p> <p><b>Type of connection mV:</b> pH: 0.00 ... 14.00 ORP potential: -1500 ... +1500 mV</p> <p><b>Type of connection mA (amperometric measured variables, measuring ranges corresponding to sensors, 2 ppm, 10 ppm):</b> Chlorine Chlorine dioxide Chlorite Bromine Ozone Hydrogen peroxide Peracetic acid</p> <p><b>Temperature:</b> via Pt 100/Pt 1000, measuring range 0 ... 150 °C</p>
Inputs and outputs	<p><b>Inputs</b> 4 plug-in module slots per unit for 2-channel serial sensor input module 2-channel conductivity input module 2-channel mV input module 2-channel mV/mA input module 2-channel mA input module</p> <p><b>Outputs</b> 2-channel mA output module 6 output relays as changeover contacts, of which 3 are potential-free and 3 are AC/DC 4 pulse frequency outputs for controlling metering pumps 8 digital control inputs for contact water meter, flow switch and pause for locking</p>
Resolution	<p>pH: 0.01 pH ORP: 1 mV Amperometric analysis (chlorine etc.): 0.001/0.01 ppm, 0.01 vol. %</p>
Accuracy	0.3% based on the full-scale reading
Temperature compensation	Pt 100/Pt 1000 for pH
Control characteristic	P/PI/PID control
Electrical Connection	100 – 230 V, 50/60 Hz
Ambient temperature	-5 ... 50 °C at max. 95% relative air humidity (non-condensing)
Tests and approvals	CE, MET, UK CA
Housing material	PC with flameproofing equipment
Dimensions	276 x 424 x 137 mm (H x W x D)
Enclosure rating	Wall-mounted: IP 67
Field bus connection	Modbus RTU, additional field buses via gateway