

Electronic transmitter & controller for the measurement of the dissolved oxygen in high purity water .

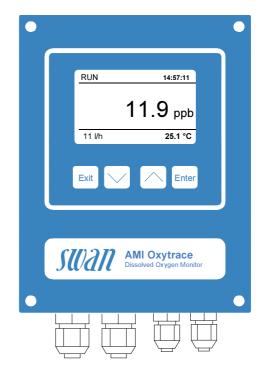
Transmitter AMI Oxytrace

- Measuring and control transmitter in a rugged aluminum enclosure (IP 66).
- Measurement ranges:

- Dissolved oxygen: 0.01ppb to 20 ppm

- Saturation: 0 to 200%

- Connections for a three-electrode oxygen sensor with integrated NT5k temperature probe, e.g. Swansensor Oxytrace G with cathode (gold), anode (silver) and guard (silver) and for a SWAN digital sample flow meter.
- Temperature and air pressure compensation.
- Big backlit LC display for the reading of measuring value, sample temperature, sample flow and operating status.
- Easy user menus in English, German, French and Spanish. Simple programming of all parameters by keypad.
- Electronic record of major process events and calibration data.
- Real-time clock for time stamp in data logs and for automated functions.
- Data logger for 1'500 data records stored at a selectable interval.
- Galvanically separated sensor connection.
- Overvoltage protection for in- and outputs.
- Two current signal outputs (0/4 20 mA) for measured signals.
- Potential-free alarm contact as summary alarm indication for programmable alarm values and for instrument faults.



- Two potential-free contacts programmable as limit switch or PID-control.
- Input for potential-free contact to freeze the measuring value or to interrupt control in automated installations (hold function or remote-off).

Order Nr.	Transmitter AMI Oxytrace AC	A-12.415.100
	Transmitter AMI Oxytrace DC	A-12.415.200
Option:	[] 3 rd current signal output (0/4 – 20mA)	A-81.420.050
	[] Profibus DP & Modbus RTU interface (RS-485)	A-81.420.020
	[] USB interface	A-81.420.042
	[] HART interface	A-81.420.060

Transmitter AMI Oxytrace

Data sheet No. DenA12415X00

Dissolved Oxygen Measurement

Dissolved oxygen sensor type

Three-electrode sensor with cathode, anode and guard.

 Measuring range
 Resolution

 0.01 to 9.99 ppb
 0.01 ppb

 10 to 199.9 ppb
 0.1 ppb

 200 to 1999 ppb
 1 ppb

 2 to 20 ppm
 0.01 ppm

 0 to 200% saturation
 0.1% saturation

 Automatic range switching.

Automatic temperature and air pressure compensation

Temperature measurement

with NT5k

Measuring range: -30 to +130 °C Resolution: 0.1 °C

Sample flow measurement

with digital SWAN sample flow sensor.

Transmitter Specifications and Functionality

Flectronics case: Cast aluminum IP 66 / NEMA 4X Protection degree: Display: backlit LCD, 75 x 45 mm screw clamps Electrical connectors: Dimensions: 180 x 140 x 70 mm Weight: 1.5 kg Ambient temperature: -10 to +50 °C 10 to 90 % rel., non cond. Humidity:

Power supply

Voltage:

AC version: 100 - 240 VAC (± 10 %),

50/60 Hz (± 5 %)

DC version: 10-36 VDC Power consumption: max. 35 VA

Operation

Easy operation based on separate menus for "Messages", "Diagnostics", "Maintenance", "Operation" and "Installation"

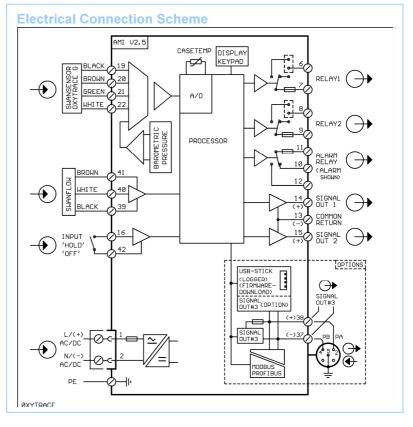
User menus in English, German, French and Spanish.

Separate menu specific password protection.

Display of process value, sample flow, alarm status and time during operation.

Storage of event log, alarm log and calibration history.

Storage of the last 1'500 data records in logger with selectable time interval.



Real-time clock with calendar

For action time stamp and preprogrammed actions.

Safety features

No data loss after power failure, all data is saved in non-volatile memory. Overvoltage protection of in- and outputs.

Galvanic separation of measuring inputs and signal outputs.

Transmitter temperature monitoring with programmable high/low alarm lim-

1 Alarm relay

One potential free contact for summary alarm indication for programmable alarm values and instrument errors.

Maximum load: 1A / 250 VAC

1 Input

One input for potential-free contact. Programmable hold or remote off function.

2 Relay outputs

Two potential-free contacts programmable as limit switches for measuring values, controllers or timer for system cleaning with automatic hold function.

Rated load: 1A / 250 VAC

2 Signal outputs (3rd as option)

Two programmable signal outputs for measured values (freely scaleable, linear or bilinear) or as continuous con-trol outputs (control parameters programmable) as current source. 3rd signal output selectable as current source or current sink.

Current loop: 0/4 - 20 mA Maximum burden: 510Ω

Control functions

Relays or current outputs programmable for 1 or 2 pulse dosing pumps, solenoid valves or for one motor valve. Programmable P, PI, PID or PD control parameters.

1 Communication interface (option)

- RS485 interface (galvanically separated) with Fieldbus protocol Modbus RTU or Profibus DP
- 3rd Signal output
- USB interface
- HART interface