

Transmitter AMU-II Oxytrace

Data sheet no. DenA13650X00

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

Application examples

- For the measurement of trace concentrations of dissolved oxygen in power and industrial plant water cycles and ultrapure water for semiconductor fabrication.

Measuring range

- Dissolved oxygen: from 0.01 ppb to 20 ppm.
- Saturation: from 0 to 200 %.
- Automatic compensation of temperature and atmospheric pressure.

Sensors

- Connections for Oxytrace G oxygen sensor with integrated NT5k temperature probe and guard electrode.
- Integrated atmospheric pressure sensor.
- Optional: connecting a SWAN sample flow sensor.



Instrument features

- Transmitter for panel mounting with IP54 protection (front).
- Large, backlit LC display and simple, menu-driven operation.
- Various connection options: two analog signal outputs, two limit relays, one alarm relay and one relay input.
- Modbus, Profibus, HART, RS232 or USB as an option.

Order numbers:	AMU-II Oxytrace	A-12.445_00
Power supply	100 – 240 VAC, 50/60 Hz 10 – 36 VDC.....	1 2
Option	RS485 interface with Modbus RTU or Profibus protocol USB interface HART interface	A-81.460.010 A-81.460.020 A-81.460.030
Accessories	For all accessories and details, please visit our website at www.swan.ch . Swansensor Oxytrace G Flow cell QV-Flow PMMA OTG	A-87.213.0X0 A-83.423.10X



Dissolved Oxygen Measurement

Oxygen sensor

Oxytrace G sensor with integrated NT5k temperature probe and guard electrode.

Measuring range	Resolution
0.01 to 9.99 ppb	0.01 ppb
10 to 199 ppb	0.1 ppb
200 to 1999 ppb	1 ppb
2 to 20 ppm	0.01 ppm

0-200% saturation 0.1% saturation

Automatic range switching.

Automatic temperature and air pressure compensation.

Auxiliary sensors

- Temperature measurement with NT5k sensor.
Measuring range: -30 to +130 °C
Resolution: 0.1 °C
- Sample flow measurement with digital SWAN sample flow sensor. Included as standard when ordering a QV-Flow PMMA flow cell.

Transmitter Specifications and Functionality

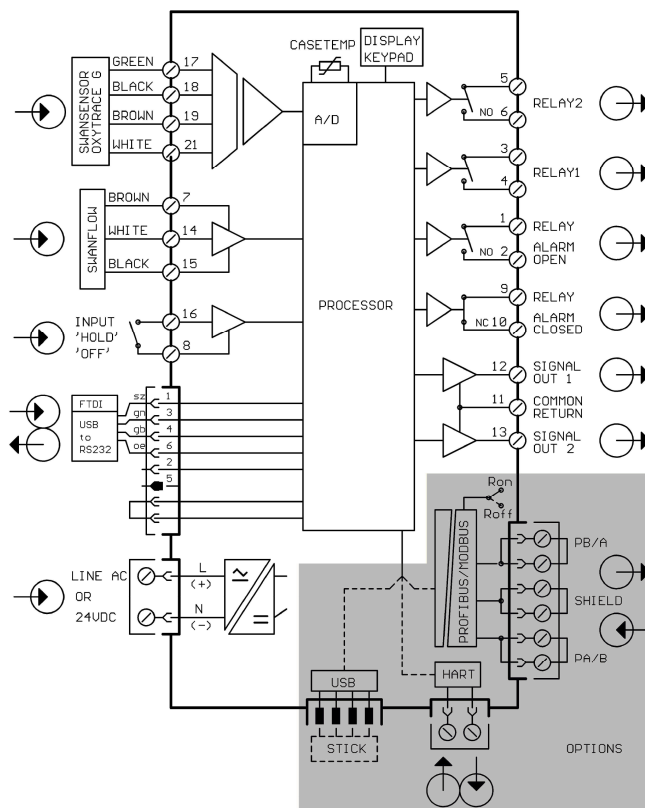
Electronics case: Noryl® resin
Protection degree: IP54 (front)
Display: backlit LCD, 64 x 32 mm
Electrical connectors: clamping yoke
Dimensions: 96 x 96 x 85 mm
Weight: 0.30 kg
Ambient temperature: -10 to +50 °C
Humidity: 10 - 90% rel., non-condensing

Power supply
AC version: 100 – 240 VAC (±10%),
50/60 Hz (±5%)
DC version: 10 – 36 VDC
Power consumption: max. 3 VA

Operation
User menus in English, German, French, Spanish and Chinese.
Separate, menu-specific password protection.

Safety features
No data loss after power failure, all data is saved in non-volatile memory.
Overvoltage protection of inputs and outputs.
Galvanic separation of measuring inputs from signal outputs.

Electrical Connection Scheme



Transmitter temperature monitoring
With programmable high/low alarm limits.

Real-time clock with calendar
For action time stamp and preprogrammed actions

Alarm relay
Two potential-free contacts for summary alarm indication for programmable alarm values and instrument faults (one normally open and one normally closed contact).
Maximum load: 100 mA / 50 V

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

Relay outputs
Two potential-free contacts programmable as limit switches for measured values, controllers or timer with automatic hold function.
Rated load: 100 mA / 50 V

Signal outputs
Two programmable signal outputs for measured values (freely scalable, linear or bilinear) or as controller outputs.
Current loop: 0/4 – 20 mA
Maximum burden: 510 Ω
Type: current source

RS232 interface
For data logger download to PC and for transmitter firmware updates. Requires the optional USB to RS232 interface converter.

Communication interface options

- RS485 interface with Modbus RTU or Profibus DP protocol, galvanically separated
- USB interface for logger download
- HART interface

