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AMI INSPECTOR Oxygen

Data sheet No. DenA75200000

Portable inspection equipment for quality assurance of trace oxygen monitors.

AMI INSPECTOR Oxygen

Complete portable system mounted on small, aluminum panel:

- **Transmitter AMI INSPECTOR Oxygen** in a rugged aluminum enclosure (IP 66).
- **Swansensor Oxytrace G** with three electrode setup (cathode, anode and guard) and integrated NT5k temperature sensor.
- **Flow cell QV-Flow PMMA OTG** made of acrylic glass with needle valve and digital sample flow meter.
- Rechargeable battery for stand-alone operation.
- Carrying case
- USB interface for logger download to PC.
- Factory tested, ready for installation and operation.

Specifications:

- Measuring range:
  0.01 ppb to 20ppm O_2 (at 25°C) or
  0 – 200% saturation
- Big LC display for the reading of measuring value, sample temperature, sample flow, operating status and battery charge condition.
- 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.
- Data logger for 1’500 data records stored at a selectable interval.
- Two current outputs (0/4 - 20 mA) for measured signals.

Optional:

- Instrument certificate

Order Nr.	AMI INSPECTOR Oxygen	A–75.200.000
Option:	[ ] Instrument certificate	A-97.017.200

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Dissolved Oxygen measurement

Swansensor Oxytrace G with three electrode setup (cathode [gold], anode and guard [silver]) with integrated NT5k temperature sensor.

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 – 200% saturation	0.1% saturation

Automatic range switching.

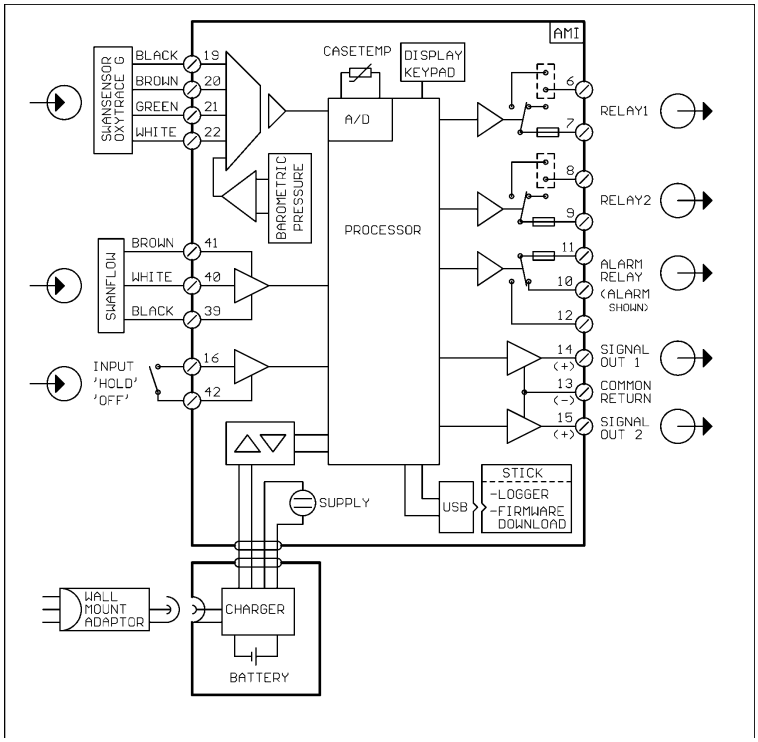
Accuracy / Repeatability:
Accuracy ± 1.5 % of reading or ± 0.2 ppb
Repeatability:± 1 % of read. or ± 0.15 ppb

Response time
t_{90} < 30 sec. (rising concentration)

Temperature measurement NT5k
Measuring range: -30 to +130 °C
Resolution: 0.1 °C

Sample flow measurement
with digital SWAN sample flow sensor.

Electrical Connection Scheme



Transmitter Specifications and Functionality

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

Power supply - Battery
Use original, supplied wall mount power adapter only.

Voltage:	90 - 264 VAC, 50/60 Hz
Power consumption:	max. 20 VA
Charging time:	~ 6h
Battery type:	Li-Ion

During charging protect from heat impact and keep splash-proof (not IP66).

Operating time

Stand-alone (Battery):	> 24h
Connected adapter:	continuous

Controlled shut-down when battery is empty, remaining time is displayed.

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, time and battery charge condition.
Storage of event log, alarm log and calibration history.
Storage of the last 1’500 data records in logger with selectable time interval.

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 limits.

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
Two programmable signal outputs for measured values (freely scaleable, linear or bilinear) or as continuous control outputs (control parameters programmable).

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

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

1 Communication interface
USB interface for logger download to PC.

Monitor Data

Sample conditions

Flow rate:	8 to 25 l/h
Temperature:	up to 45 °C
Inlet pressure (25 °C):	0.2 to 1 bar
Outlet pressure:	pressure free
pH:	not lower than pH 4
Suspended solids:	less than 10 ppm

Flow cell and connections
Flow cell made of acrylic glass with built-in flow adjustment valve and digital sample flow meter.

Inlet:	¼” Swagelok tube adapter
Outlet:	flexible tube 8 x 6 mm

Panel

Dimensions:	275 x 320 x 240 mm
Material:	anodized aluminum
Total weight:	4.5 kg