Roscid Technologies®

Moisture, Oxygen, Hydrogen Analyzers and System Solutions

Gas and Dew Point Measurements

Sample Systems and Generators

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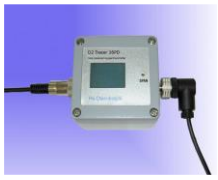
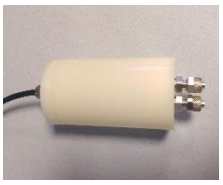
Summary:

Gas analyzer (O2, H2, CO, and moisture):

Side	Typ
3	O_2Tracer, O_2Tracer, Oxytrans LC, Oxytrans LC KF40
4	Oxytrans I, Oxytrans I KF40, Oxytrans II, Oxytrans II KF40
5	H2-Trans, H2-Trans ZO, Hydro-Trans, H2-WLD 1000
6	Oxymaster II 16 T, Oxymaster II 16 P, Oxymaster II 16 TD,DCM 28
7	OxyP %, OxyP T , OxyP %-H2 , OxyDew Case

Humidity analyzer, Sample system, RH Generator, Custom Specials:

Side	Typ
8	PLMa , DPXO70 , RO-120 , TMA-2100
9	HDR 200, HSTAT, DewP, RO-PDM
10	Dewtran LC, DewTran, DewTran-HB, DewTran-SL
11	RO120 W, RO120 D, PPMG101, SVS
12	**Custom specials: sample gas systems on panels and cabinets**

Typ	O_2Tracer-DIS-R	O_2Tracer LC	Oxytrans LC	Oxytrans LC KF40
oxygen				
Parameter1	Oxygen	Oxygen	Oxygen	Oxygen
Parameter2				
Method	Electro chemical	Electro chemical	Electro chemical	Electro chemical
Range	0 – 100 % 0 – 25 % 0 – 5 % Special Range	0 – 25 % Special Range	0 – 25 % 0 – 10.000 ppm 0 – 1.000 ppm Special Range switchable	0 – 25 % 0 – 10.000 ppm 0 – 1.000 ppm Special Range switchable
ATEX	No	No	No	No
Accuracy	+/- 5 % FSD	+/- 2 % FSD	+/- 2 % FSD	+/- 2 % FSD
Resolution	0.1 %	0.1 % 0.01 %	0.1 ppm	0.1 ppm
Flow rate	1 l/min	1 l/min	1 l/min	1 l/min
Pressure	0.1 – 1 bar	0.1 – 1 bar	0.1 – 1 bar	0.1 – 1 bar
Calibration	Air / Cal. Gas	Air / Cal. Gas	Air / Cal. Gas	Air / Cal. Gas
Response time T 90	10 s	0-10 % 20s	0-10 ppm 45s 0-100 ppm 20s	0-10 ppm 45s 0-100 ppm 20s
Gas temperature	0 – 50°C	0 – 50°C	0 – 50°C	0 – 50°C
Output	4 – 20 mA	4 – 20 mA 2-Wire	4 – 20 mA 2-Wire	4 – 20 mA 2-Wire
Supply Voltage	10 – 35V	10 – 35V	10 – 35V	10 – 35V
Display	LCD 6 Digits Bar Graph Display	No Display	No Display	No Display
Protection Class	IP 65	IP 65	IP 65	IP 65
Connection	M 16 x 1	6 mm	6 mm	6 mm
Dimension	80x75x55	60x90	60x90	60x90
Weight	0.3 Kg	1 Kg	1 Kg	1 Kg

Type	Oxytrans I	Oxytrans I KF40	Oxytrans II	Oxytrans II KF40
Oxygen transmitters, slectable ranges, flow through and KF40 flange type				
Parameter1	Oxygen	Oxygen	Oxygen	Oxygen
Parameter2				
Method	Electro chemical	Electro chemical	Electro chemical	Electro chemical
Range	0 – 100 % 0 – 10.000 ppm 0 – 10 ppm Special Range	0 – 100 % 0 – 10.000 ppm 0 – 10 ppm Special Range	0 – 1/10/100 % switchable 0 – 10/100/1.000/ 10.000 ppm switchable	0 – 1/10/100 % switchable 0 – 10/100/1.000/ 10.000 ppm switchable
ATEX	ATEX / SIL	ATEX / SIL	ATEX / SIL	ATEX / SIL
Accuracy	+/- 2 % FSD	+/- 2 % FSD	+/- 2 % FSD	+/- 2 % FSD
Resolution	0,1 ppm 0,01 ppm	0,1 ppm	0,1 ppm 0,01 ppm	0,1 ppm
Flow rate	ca. 1 l/min	ca. 1 l/min	ca. 1 l/min	ca. 1 l/min
Pressure	Max 15 bar	Max 15 bar	Max 15 bar	Max 15 bar
Calibration	Air / Cal. Gas	Air / Cal. Gas	Air / Cal. Gas	Air / Cal. Gas
Response time T 90	0-10 ppm 45s 0-100 ppm 20s	0-10 ppm 45s 0-100 ppm 20s	0-10 ppm 45s 0-100 ppm 20s	0-10 ppm 45s 0-100 ppm 20s
Gas temperature	0 – 50°C	0 – 50°C	0 – 50°C	0 – 50°C
Output	4 – 20 mA 2-Wire	4 – 20 mA 2-Wire	4 – 20 mA 2-Wire	4 – 20 mA 2-Wire
Supply Voltage	10 – 35V	10 – 35V	10 – 35V	10 – 35V
Display	LCD 6 Digits Bar Graph Display	LCD 6 Digits Bar Graph Display	LCD 6 Digits Bar Graph Display	LCD 6 Digits Bar Graph Display
Protection Class	IP 65	IP 65	IP 65	IP 65
Connection	6 mm	KF 40 Flange	6 mm	KF 40 Flange
Dimension(mm)	120x160x65	120x160x65	120x160x65	120x160x65
Weight	2 Kg	2 Kg	2 Kg	2 Kg

Type	H2-Trans	H2-Trans ZO	Hydro-Trans	H2-WLD 1000
Hydrogen transmitters				
Parameter1	Hydrogen	Hydrogen	Hydrogen	Hydrogen
Parameter2				
Method	Electro chemical	Electro chemical	thermal-conductivity	thermal-conductivity
Range	0 – 10.000 ppm 0 – 100 ppm	0 – 10.000 ppm 0 – 100 ppm	0 – 10%	0 – 5%
ATEX	ATEX / SIL	No	No	No
Accuracy	+/- 2 % FSD	+/- 2 % FSD	+/- 3 % FSD	+/- 3 % FSD
Resolution	0.1 ppm	0.1 ppm	0.1 %	0.1 %
Flow rate	1 l/min	1 l/min	1 l/min	1 l/min
Pressure	0.1 – 1 bar	0,1 – 1 bar	0,1 – 20 bar	0,1 – 20 bar
Calibration	Cal. Gas	Cal. Gas	Cal.Gas	Cal.Gas
Response time T 90	0-1 % 45s	0-1 % 45s	2s	2s
Gas temperature	0 – 50°C	0 – 50°C	0 – 50°C	0 – 50°C
Output	4 – 20 mA Loop powered	4 – 20 mA Loop powered	4 – 20 mA Alarm RS232	4 – 20 mA Alarm RS232
Supply Voltage	10 – 35V	10 – 35V	10 – 35V	10 – 35V
Display	LCD 6 Digits Bar Graph Display	LCD 6 Digits Bar Graph Display	LCD 6 Digits Display	LCD 6 Digits Display
Protection Class	IP 65	IP 65	IP 65	IP 65
Connection	6 mm	6 mm	6 mm	6 mm
Dimension(mm)	120x160x65	120x160x65	145x80x85	145x80x85
Weight	2 Kg	2 Kg	2 Kg	2 Kg

Type	Oxymaster II	Oxymaster II 16P	Moisture Master	DCM28
Dual sensor monitoring, data logging capabilities. Oxygen in % and trace levels, CO in the ppm range and dewpoint moniotring for medical air (DCM28)				
Parameter1	Oxygen	Oxygen	Moisture	Moisture/CO
Environment	Trace levels	% levels	Trace levels	Medical Air-audio/visual alarms
Method	Electro chemical	Electro chemical	nano- pore	Capacitive/electrical chemical
Range	0 – 10.000 ppm 0 – 10 ppm programmable	0 – 100 % 0 – 25 % 0 – 5 % programmable	10 – -100C programmable	-40 to 60C/0-50ppm
ATEX/NFPA99	No	No	No	NFPA99
Accuracy	+/- 2 % FSD	+/- 2 % FSD	+/- 2 % FSD	+/-1.0C/+/-2% FSD
Resolution	0.1 ppm 0.01 ppm	0.01 %	0.1 ppm 0.01 ppm	0.1
Flow rate	ca. 1 l/min	ca. 1 l/min	ca. 1 l/min	1 L/M
Pressure	Max 15 bar	Max 15 bar	Max 45 bar	Max 15 Bar/ 2 Bar
Calibration	Air / Cal. Gas	Air / Cal. Gas	Air / Cal. Gas	Cal Gas
Response time T 90	0-10 ppm 60s	0-10 % 30s	66%< 10 sec	66% < 10 sec
Gas temperature	0 – 50°C	0 – 50°C	0 – 50°C	0-50C
Output	4 – 20 mA/ RS232 Alarm Datalogger	4 – 20 mA/ RS232 Alarm Datalogger	4 – 20 mA/ RS232 Alarm Datalogger	1 form B alarm relays 3A 250V
Supply Voltage	85 – 230Vac	85 – 230Vac	85 – 230Vac	85-230Vac
Display	Graphic Display	Graphic display	Graphic Display	2 line LCD, backlit
Protection Class	IP 65	IP 65	IP 65	IP65
Connection	6 mm	6 mm	6 mm	¼“ tube
Dimension(mm)	220x190x190	220x190x190	220x190x190	305x203x178
Weight	3 Kg	3 Kg	3 Kg	4Kg

Typ	OxyP %	OxyP T	OxyP % - H2	OxyDew
Portable O2, moisture, and H2				
Parameter1	Oxygen	Oxygen	Oxygen	Oxygen
Parameter2			Hydrogen	Humidity
Method	Electro chemical	Electro chemical	Electro chemical	Electro Chemical/ Nano Pore
Range	0 – 100 % 0 – 25 % 0 – 5 % Special Range	0 – 10.000 ppm 0 – 1.000 ppm 0 – 100 ppm 0 – 10 ppm Switching	0 – 10 % H2 0 – 25 % O2 Special Range	0 – 10.000 ppm 0 – 10 ppm Programmable
ATEX	No	No	No	No
Accuracy	+/- 2 % FSD	+/- 2 % FSD	+/- 2 % FSD	+/- 2 % FSD
Resolution	0,01 %	0,1 ppm	0,01 %	0,1 ppm 0,1 °C
Flow rate	ca. 1 l/min	ca. 1 l/min	ca. 1 l/min	ca. 1 l/min
Pressure	0,1 – 1 bar	0,1 – 1 bar	0,1 – 1 bar	0,1 – 1 bar
Calibration	Air / Cal. Gas	Cal. Gas	Air/Cal. Gas	Cal. Gas
Response time T 90	0-10 % 30s	0-10 ppm 45s	0-10 % 30s	0-10 ppm 60s
Gas temperature	0 – 50°C	0 – 50°C	0 – 50°C	0 – 50°C
Output	4 – 20 mA Option: Datalogger	4 – 20 mA Option: Datalogger	4 – 20 mA Option: Datalogger	4 – 20 mA/ RS232 Alarm Datalogger
Supply Voltage	85 – 230V Akku	85 – 230V Akku	10 – 35V Akku	85 – 230V
Display	LCD 6 Digits Bar graph Display	LCD 6 Digits Bar graph Display	2 x LCD 6 Digits Bar graph Display	Graphic Display
Protection Class	IP 65	IP 65	IP 65	IP 65
Connection	6 mm	6 mm	6 mm	6 mm
Dimension	240x160x130	240x160x130	240x160x130	220x190x190
Weight	2 Kg	2 Kg	2 Kg	5 Kg

Typ	PLMa	DPXO70	RO120	TMA-2100
Moisture				
Parameter1	Moisture	Moisture	Moisture	Moisture
Parameter2			Temperature	
Method	Nano Pore Ceramic	Capacitive	Capacitive	Nano Pore Ceramic
Range	-110°C - +20°C Dew Point, PPM option	-70 + 20°C	+30°C - -60°C Tp 5% - 95% rH	0 – 1000ppm C/F option
ATEX	No	No	No	No
Accuracy	+/- 2 °C TP	+/- 2°C	+/- 1 % FSD	+/- 2 % FSD
Resolution	Range	Range	Range	0.1 ppmv
Flow rate	1LPM	2 – 5 l/min	2 – 5 l/min	1LPM
Pressure	345 bar	200 bar	40 bar	300 mbar
Calibration	Chilled Mirror	Chilled Mirror	Chilled Mirror	Chilled Mirror
Response time T 90	+20°C- -40°C 60s	-20°C -60 90s	0-1 % 45s	95% step change in 45 sec
Gas temperature	-40 – +70°C	-10°C – 50°C	-20°C – +120°C	-20 to 60c (sensor)
Output	4 – 20 mA Loop powered	4 – 20 mA 3-Wire, RS485	4 – 20 mA/ 0-10V / RS232 Alarm	4 – 20 mA
Supply Voltage	5 – 28 V	10 – 28 V	18 – 30V	90-265Vac
Display	No	No	Option	LED Status
Protection Class	IP 65	IP 65	IP 65	IP 65
Connection	¾“UNF,½“ NPT	G1/2,	¾“	¼“ Tube
Dimension	9 cm	14 cm	17 cm	75 x 140 mm
Weight	0.3 Kg	0.3 Kg	1 Kg	0.3 Kg (sensor)

Type	HDR 200	HSTAT	DewP	RO-PDM
Portable and In-line configurations using different technology, Capacitive,Nano Pore Ceramic (DewP), Resistive (H-STAT)				
Parameter1	Moisture	Moisture	Moisture	Moisture
Comments	In-line	Wall mount	Portable	Portable
Method	Capacitive	Resistive	Capacitive	Capacitive
Range	-60°C - +40°C TP 0 – 100 % RH	10-95%RH	-100°C - +20°C	-60 to 20C dew point/ 0-100%RH
ATEX	No	No	No	No
Accuracy	+/- 1 % FSD	+/- 2 % FSD	+/- 2°C	+/- 1% FSD
Resolution	Range	0.1	Range	0.1
Flow rate	2 – 9 LPM	Diffusion	2 – 5 LPM	2-9LPM
Pressure	10 bar	None	0.1 – 1.0 bar	15 bar
Calibration	Dew Point Mirror	Dew Point Mirror	DewPoint Mirror	Dew Point Mirror
Response time T 90	+20 - -60°C 45s	Dependent on ambient air movement	+20 - -60°C 60s	+20 - -60°C 45s
Gas temperature	200°C	50°C	0 – 50°C	Max 120C
Output	4 – 20 mA 2-Wire	Alarm 1A@125Vac	4 – 20 mA Option: Data logger	3 4-20mA, 2 alarms
Supply Voltage	12 – 28 V	12 – 28 V	85 – 230V	85-230Vac
Display	2 line-LCD	None	LCD 6 Digits Bar Graph Display	2 line LCD display-back lit
Protection Class	IP 65	None	IP 65	IP64
Connection	½“	None	6 mm	¼“ tube
Dimension(mm)	100	102x93x25	240x160x130	127x90x54
Weight	0.3 Kg	0.3 Kg	2 Kg	3Kg

Type	DewTran- LC	DewTran	DewTran HB	DewTran-SL
Chilled Mirror Hygrometers				
Parameter1	Moisture	Moisture	Moisture	Moisture
Parameter2	Temperature	Temperature		Air temperature option
Method	Dew Point Chilled Mirror 1-stage	Dew Point Chilled Mirror 2-stage	Dew Point Chilled Mirror 2-stage	Dew point Chilled Mirror 1-stage
Range	-20°C - +40°C TP 0 - 95 % rH	-40°C - +60°C TP 0 - 95 % rH	-40C to 95°C	-10 to 85°C
ATEX	No	No	No	NO
Accuracy	+/- 0.2 °C	+/- 0.2 °C	+/- 0.2 °C	+/- 0.3 °C
Resolution	0.05 °C	0.05 °C	0.05 °C	No
Flow rate	1 – 5 l/min	1 – 5 l/min	1 – 5 l/min	1 – 5 l/min
Pressure	10 bar	10 bar	10 bar	1 bar
Calibration	Dew Point Mirror Ref Std	Dew Point Mirror Ref Std	Dew Point Mirror Ref Std	Dew Point Mirror Ref Std
Response time T 90	1°C / sec	1°C / sec	1°C / sec	1°C / sec
Gas temperature	60°C	100°C	100°C	90°C
Output	2x 4 – 20 mA RS232 Alarm	2x 4 – 20mA RS232 Alarm	2x 4 – 20mA RS232 Alarm	2x 4 – 20mA RS232 Alarm
Supply Voltage	24V	24V	85-220Vac	24V
Display	No Display	LCD 2-line	LCD 2-line	None
Protection Class	IP 55	IP 65	IP 65	IP55
Connection	G1 ¼“	G1 ¼“	6mm	
Dimension(mm)	60x150	60x150	250X200X250	229x29
Weight	1.4 Kg	1.4 Kg	5Kg	2Kg

Type	RO120 W	RO120 D	PPMG101	SVS
Humidity, Temperature and dew point -optional: barometric pressure, RH Generator, sampling system				
Parameter1	Moisture/Temp/ Relative Humidity	Moisture/Temp/ Relative Humidity	Moisture Generator	Sampling Vacuum System
Parameter2	Barometric pressure option	Barometric pressure option		Accessory for Atmospheric or vacuum applications
Method	Capacitive	Capacitive	Divided flow	Vacuum pump
Range	-60 to 40°C 0 - 95 % rH	-40°C - +60°C TP 0 - 95 % rH	23C to -80C dew points	none
ATEX	No	No	No	NO
Accuracy	+/- 1%RH	+/- 1%	+/- 2C	+/- 0.3 °C
Resolution	0.1	0.1	None	No
Flow rate	1 – 5 l/min	1 – 5 l/min	10 l/min	4 l/min (pull)
Pressure	None	1-2 bar	Max 150 psi	8 bar
Calibration	Dew Point Mirror Ref Std	Dew Point Mirror Ref Std	Dew Point Mirror Ref Std	None
Response time T 90	1°C / sec	1°C / sec	1°C / sec	none
Gas temperature	60°C	60°C	90°C	90°C
Output	3x 4 – 20 mA RS232 Alarm	3x 4 – 20mA RS232 Alarm	Dewpoint-flow	
Supply Voltage	24V	24V	No power	85 to 240Vac
Display	2 line LCD, back lit	LCD 2-line	Visual to flowmeters	None
Protection Class	IP 64	IP 65	none	IP64
Connection	None	Duct seal	¼“ Tube	¼“ tube
Dimension(mm)	190x100x60	203x20 (probe)	229x330x229	210x127x83
Weight	1.4 Kg	1.4 Kg	25 Kg	2 Kg

Example: Sampling Gas Panels and Cabinets

Oxygen % +ppm with Hydogen	Oxygen % + ppm	Oxygen + Hydrogen	Oxygen + Moisture in Hydrogen	Inert Oxygen System
				
O2 im ppm + %	O2 in ppm + %	O2 in %	O2 in ppm	O2 in %
ppm Cell switched on	ppm Cell and % switching	H2 UEG	Moisture in H2	Inert Gas application
N2 Flash ppm Cell	N2 flash ppm Cell	Aerosol filter with Condensate	Ex	Filter
H2 Transmitter 3%	Sample probe switching	EX		Ex

O2 / H2 / H2O	Oxygen and Moisture P2O5	O2 with Sample switching	CH4 Control
			
H2, O2 and H2O with Pressure reducer	O2 + H2O in Helium	O2 System	CH4 Redundant
Aerosol lab sampling panel	Pure gas	Sample switching	Ambient air control
Ex		Oven-control	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