New England - ETA Process Instrumentation
119 Foster Street, Bldg #6
Peabody, MA 01960
Tel: (978) 532-1330
www.etapii.com
sales@etapii.com

Upstate NY - Martech Controls
2000 Teall Avenue
Syracuse, NY13026
Tel: (315) 876-9120
www.martechcontrols.com
sales@martechcontrols.com

Dräger Polytron 7000
Fixed gas detector

The Dräger Polytron 7000 is a gas detector that can satisfy all toxic and oxygen gas measurement applications on a single platform. It is meeting the requirements of the compliance market as well as the high specification requirements of customized solutions.

ST-3751-2003

INTUITIVE OPERATION

The software menu of the Dräger Polytron 7000 was designed in partnership with our customers making it simple and easy to use. The large graphical display uses icons and plain text to show the status of the instrument, and guides the user through calibration and configuration.

INTELLIGENT SENSORS

Dräger Polytron 7000 is able to detect over 100 different gases. Specifically designed for the demanding requirements of a 24 hours a day, 365 days a year stationery gas detection system, the larger DrägerSensor are renown for their long life times and superior performance. The embedded sensor memory contains all relevant sensor data. All this enables the use of pre-calibrated sensors, which makes the Dräger Polytron 7000 ideal for a virtually maintenance free transmitter.

COMMUNICATION INTERFACES

With the Dräger Polytron 7000 the communication to the central control system can be selected between 4 to 20 mA or digital options as: HART®, FOUNDATION fieldbus™ H1, PROFIBUS® PA or LONWORKS*. With the digital options, the Dräger Polytron 7000 can be integrated into any LONWORK*, PROFIBUS® or FOUNDATION fieldbus™ system architecture. Offering the advantage of reduced wiring cost and enabling the remote diagnosis and predictive maintenance functionality for a reliable and flexible communication network.

SOFTWARE OPTIONS

A number of software dongles with different software functionality will customize the transmitter to specific application needs.

Sensor Test Dongle

With this dongle, the Dräger Polytron 7000 performs many patented sensor tests to ensure reliability and functionality of the sensor and the gas detection system.

ST-3812-2003

Dräger Polytron 7000
Intrinsically safe gas detector for toxic gases and oxygen in ambient air.

Large Display
34 x 62 mm, 64 x 128 pixel 1.3" x 2.4"

Quick Lock mechanism
One half turn – lockedt

Simple 3 button operation and navigation
Graphics, icons and real text descriptions

Polytron Docking station
Durable GRP housing

ST-3812-2003

Sensor Diagnostic Dongle

All sensors have a certain life time which can be affected by factors such as gas exposure, temperature exposure and the age of the sensor. Now, with the new sensor diagnostic function in the dongle (including Sensor Test), the stress and remaining life of the sensor is evaluated, and it is possible to predict and plan for a maintenance and replacement cycle.

Data Dongle

Datalogger and eventlogger options are implemented in this dongle, which stores gas values and events such as faults and alarms. Using an IR link with the PDA m515-Ex, the data can be downloaded and evaluated on a PC with the GasVision software. By pushing one button, a graphical 15 minute history of the gas concentration will be displayed on the transmitter screen, for quick evaluation of the current and past situation.

SIMPLE, QUICK INSTALLATION

The Dräger two component concept of a Docking Station and a Dräger Polytron 7000 electronics saves time and money. The Docking Station can be pre-installed – mounting and wiring it into place separately – while protected by a rain and dust cover until commissioning. At commissioning, the Dräger Polytron 7000 electronics is fixed by quicklock mechanism into the Docking Station, the sensor inserted and the system is ready for operation.

RUGGED HOUSING

The design of the compact durable GRP housing of the Dräger Polytron 7000 is dust and water proof with an IP66/67 and NEMA 4 rating. It is verified to SIL 2 specification with unsurpassed RFI resistance.

RELAY MODULE

The Dräger Polytron 7000 can be equipped with a relay module to make it a stand alone device with two gas alarms and one fault relay. The relay module forms a part of transmitter, so there is no additional installation cost or wiring to be done. For general purpose use only.*

PUMP MODULE

An internal pump for sampling the gas mixture to the sensor is also a module option. The pump fits inside the Dräger Polytron 7000 with no additional need for extra wiring and mounting space. For general purpose use only.*

ACCESSORIES / REMOTE SENSOR

The remote sensor is easy to install on the wall or, using the duct adapter, onto ducts and pipes.

ORDER INFORMATION

Dräger Polytron 7000 with 4 to 20 mA output and Sensor Diagnostic Dongle	83 17 980

Dräger Polytron 7000 variations

4 to 20m A	HART®	Relay	Pump		
■					83 17 610
■		■			83 17 636*
■			■		83 17 637*
■		■	■		83 17 638*
■	■				83 17 710
■	■	■			83 17 776*
■	■		■		83 17 777*
■	■	■	■		83 17 778*

Dräger Polytron 7000
With internal pump.*

PROFIBUS® PA	FOUNDATION fieldbus™ H1	LON	Relay	Pump	
		■			83 17 810*
		■	■		83 17 816*
		■		■	83 17 817*
		■	■	■	83 17 818*
■					83 19 430
■			■		83 19 427*
■				■	83 19 436*
■			■	■	83 19 438*
	■				83 19 440
	■		■		83 19 428*
	■			■	83 19 437*
	■		■	■	83 19 439*

Dräger Polytron 7000
With integrated relays.*

Dräger Polytron Docking Station – one required per transmitter	83 17 990
Modules	
Pump Module	83 17 350
Relay Module	83 17 360
Relay Connector	18 90 086
Software Dongles	
Data Dongle	83 17 618
Sensor Test Dongle	83 17 619
Sensor Diagnostic Dongle	83 17 860
Accessories	
Remote Sensor Adapter	83 17 275
Remote Cable and plug 5 m / 16 ft.	83 17 270
Remote Cable and plug 15 m / 49 ft.	83 17 998
Remote Cable and plug 30 m / 100 ft.	83 17 999
Remote duct adapter	83 17 617
Duct Mounting Kit	83 17 150
Cable Entry Set M20, with cable gland and connector for multi-drop	83 17 282
Calibration Adapter, electrochemical sensors	68 06 978
Pump Adapter for DrägerSensor AC L	83 17 976
Calibration Adapter, DrägerSensor AC L	68 09 380
Dräger GasVision, data display software	83 14 034
Dräger CC-Vision GDS, calibration and configuration software	68 11 989
IR data cable, USB DIRA	83 17 409
PDA m515-Ex	83 17 995

Dräger Polytron 7000
With remote sensor and remote cable up to 30 m / 100 ft.

TECHNICAL DATA

Typ	Intrinsically safe transmitter for electrochemical sensors	
Gases and Ranges	Toxic gases and oxygen, ranges user adjustable, see sensor data sheet	
Display	Large graphic display, 34 x 62 mm, 64 x 128 pixel 1.3" x 2.4"	
	Menu structure and messages in real text, 3 button navigation	
Output	Analog	4 to 20 mA
	Digital	HART®, LONWORKS®, PROFIBUS PA, FOUNDATION fieldbus™
	Warning signal, configurable	default: warning signal every 10s for 1s
	Maintenance signal, configurable	3.4 mA constant or 4 mA ± 1 mA, 1 Hz modulation
	Fault signal	< 3.2 mA
Power Supply	16,5 to 30VDC 2-Wire, 3-Wire for Pump module* and relay module*	
Pump Module*	Tubing up to 30m / 100ft. @ 0.5 l/min with 4mm / 3/16" inner diameter	
Relay Module*	Two alarm relays, one fault relay, SPDT, user programmable	
	Rating 5A 240VAC, 5A 24VDC	
Ambient Conditions	Transmitter only, for sensors see separate sensor data sheet	
	Temperature	– 40 to +65 ℃ / – 40 to +150 °F
	Pressure	700 to 1300 hPa / 23.6 to 32.5 inch Hg
	Humidity	0 to 100 %RH, non condensing
Enclosure	GRP, IP 66/67, NEMA 4, M20 cable gland	
Size (h x w x d)	166 x 135 x 129 mm, 6.54 "x 5.32" x 5.08" ft.	
Weight	Approx. 900 g / 2 lbs.	
SIL Level	SIL 2 verified	
Approvals	ATEX	II 1G EEx ia IIC T6/T4, – 40 to + 40 / + 65 ℃ / II 3G EEx nL IIC T6, – 25 to + 40 ℃ / II 3D IP6x T65℃
	EN50104:2002+A1:2004 O_2 measuring function for explosion protection (inertization)	
	IEC	Ex ia IIC T6/T4, – 40 to + 40 / + 65 ℃
	UL	Class I, Div 1, Group A, B, C, D, Class II, Div 1, Group E, F, G
	CSA	Class I, Div 1, Group A, B, C, D / Ex ia IIC T6/T4, – 40 to + 40 / + 65 ℃
	CE-mark	electromagnetic compatibility (directive 89/336/EEC)
		low voltage directive (72/23/EEC, 93/68/EEC)

ETA Process Instrumentation
119 Foster Street, Bldg #6
Peabody, MA 01960
Tel: (978) 532-1330
Fax: (978) 532-7325
www.etapii.com
sales@etapii.com

HART® is a registered trademark of the HART Communication Foundation
LONWORKS® is a registered trademark of the Echelon Corporation
FOUNDATION fieldbus™ is a registered trademark of the Fieldbus Foundation™

*General purpose use only. The transmitter does not have any approval, but the CE-mark
when used with LON. a pump or relay module.