ATi
ANALYTICAL TECHNOLOGY, INC.

PortaSens III
GAS LEAK DETECTOR

PortaSens III
MODEL D16 GAS DETECTOR

Locating the source of gas leaks can be a challenge, especially in plant areas with multiple potential leak sources. Ammonia refrigeration piping, ozone generator skids, and hazardous gas piping systems are just a few of the applications where identifying exact leak sites is difficult

ATI's new PortaSens III portable leak detector (Model D16) is ideal for locating leak sources or simply for measuring gas concentrations in the workplace. With a built-in sampling pump and inlet wand, sample is drawn from precise locations where leaks may occur. Areas around valve packing, flanges, compression fittings and other system components are easily checked to find the higher gas levels that exist near the leak site.

The PortaSens III is physically similar to its predecessor, the PortaSens II which has been in service for the past 15 years. The internals of the instrument have been completely redesigned with a modern USB computer interface, a color touch-screen display, and improved pump control. As with the original, the D16 detector has the ability to measure a wide variety of gases by simply inserting the appropriate sensor for that gas. The D16 can use any of over 60 different sensor modules, providing nearly unmatched flexibility. Sensors can be changed quickly and easily without the need for calibration.

Sensors used in the PortaSens III are ATI's H-Series smart sensor modules. Each sensor module is actually a sensor, amplifier, and memory module in one compact package. Because of this design, sensor modules can be calibrated independently and simply plugged into any detector for immediate use.

When installed in a detector, calibration data is loaded into the microprocessor so that no adjustments are needed. The result is that a detector can, for example, go from phosgene measurement to ammonia measurement in less than one minute.

FEATURES

- Interchangeable "Smart Sensors" for gas flexibility
- NEW IR sensors for methane & carbon dioxide
- Internal sample pump and external sampling wand
- One-hand pistol grip design
- NiMH "D" cell rechargeable battery or alkaline cell
- Easy to read back-lit color graphics LCD
- Instantaneous and timed-sampling modes of operation
- Visual and Audible alarms
- Internal 4 Gb data-logger with USB output

SMART SENSORS

The basic PortaSens II detector does not include sensor modules. Because the D16 is designed to accept any ATI smart sensor module, you must select one or more sensors from the list below. Each sensor module is factory calibrated at the time of shipment and is ready to use by plugging it into the receptacle in the D16 manifold. Each module can be used for logging data over minimum and maximum ranges indicated.

AVAILABLE SENSORS

- 00-1000 Br_2, 0-1/5 ppm
- 00-1001 Br_2, 0-5/200 ppm
- 00-1002 Cl_2, 0-1/5 ppm
- 00-1003 Cl_2, 0-5/200 ppm
- 00-1004 ClO_2, 0-1/5 ppm
- 00-1005 ClO_2, 0-5/200 ppm
- 00-1359 ClO_2, 200/1000 ppm
- 00-1425 ClO_2, 0-1/5 ppm (low Cl_2)
- 00-1006 F_2, 0-1/5 ppm
- 00-1007 F_2, 0-5/200
- 00-1008 O_3, 0-1/5 ppm
- 00-1009 O_3, 0-5/200 ppm
- 00-1358 O_3, 200/1000 ppm
- 00-1163 O_3, 500/2000 ppb
- 00-1010 NH_3, 0-50/500 ppm
- 00-1011 NH_3, 0-500/2000 ppm
- 00-1012 CO, 0-50/1000 ppm
- 00-1013 H_2, 0-1/10%
- 00-1041 H_2, 0-500/2000 ppm
- 00-1014 O_2, 0-5/25%
- 00-1015 $COCl_2$, 0-1/5 ppm
- 00-1016 $COCl_2$, 0-5/100 ppm
- 00-1017 HCl, 0-10/200 ppm
- 00-1018 HCN, 0-10/200 ppm
- 00-1019 HF, 0-10/200 ppm
- 00-1020 H_2S, 0-10/200 ppm
- 00-1469 H_2S, 200/1000 ppm
- 00-1021 NO, 0-50/500 ppm
- 00-1022 NO_2, 0-10/200 ppm
- 00-1023 SO_2, 0-10/500 ppm
- 00-1024 AsH_3, 0-500/2000 ppb
- 00-1025 AsH_3, 0-10/200 ppm
- 00-1026 B_2H_6, 0-500/2000 ppb
- 00-1027 B_2H_6, 0-10/200 ppm
- 00-1028 GeH_4, 0-500/2000 ppb
- 00-1029 GeH_4, 0-10/200 ppm
- 00-1030 H_2Se, 0-500/2000 ppb
- 00-1031 H_2Se, 0-10/200 ppm
- 00-1032 PH_3, 0-500/2000 ppb
- 00-1033 PH_3, 0-10/200 ppm
- 00-1034 PH_3, 0-200/2000 ppm
- 00-1035 SiH_4, 0-10/200 ppm
- 00-1036 I_2, 0-1/5 ppm
- 00-1037 I_2, 0-5/200 ppm
- 00-1038 Acid Gas, 0-10/200 ppm
- 00-1039 ETO, 0-20/200 ppm
- 00-1040 HCOH, 0-20/200 ppm
- 00-1349 HCOH, 500/2000 ppm
- 00-1042 H_2O_2, 0-10/100 ppm
- 00-1169 H_2O_2, 200/2000 ppm
- 00-1043 Alcohol, 0-50/500 ppm
- 00-1044 Alcohol, 0-500/2000 ppm
- 00-1057 C_2H_2, 0-200/2000 ppm
- 00-1181 NO_X, 0-50/500 ppm
- 00-1450 DMA, 100/200 ppm
- 00-1455 HBr, 10/200 ppm
- 00-1516 HC Sensor – Consult Factory
- 00-1045 CH_3COOH, 100/500 ppm
- 00-1704 PAA Vapor, 1/5 ppm
- 00-1705 PAA Vapor, 10/100 ppm
- 00-1883 IR CH_4, 0-20/100% LEL
- 00-1886 IR CO_2, 0-0.2/1.5%

Notes:
1. X/XX for each sensor indicates minimum and maximum data logging ranges for that sensor.
2. 00-1883 LEL CH_4 sensor also responds to many other hydrocarbons. Response to other hydrocarbons is not 1:1 with CH_4.

PortaSens III Gas Detectors are supplied in a padded carrying case for easy storage and transport. An extra battery is provided plus space for up to two sensor keepers which means up to 8 extra sensors ready for immediate use.

The following components are standard.

- PortaSens III Gas Detector
- Spare Filters
- 10" Teflon Lined Sampling Wand
- Flowmeter
- USB Cable
- Spare NiMH "D" Cell Battery
- NiMH Battery Charger
- Sensor Keeper
- Calibration "T" Fitting

ORDERING INFORMATION

#00-1876 MODEL D16 PortaSens III

SPECIFICATIONS

Range:	Dependent on sensor module used
Display:	Backlit, touch-sensitive color graphics LCD
Accuracy:	Sensor dependent but generally ± 5% of value (limited by cal. gas)
Sensitivity:	Typically 0.1-1% of sensor module range
Output:	USB transfer of stored gas values
Memory:	4 Gb (millions of data points)
Storage Interval:	Programmable from 1 minute to 60 minutes
CE	2014/35/EU – Low voltage directive 2014/30/EU – Electromagnetic compatibility
Alarms:	Three concentration alarms (caution, warning, and danger with adjustable setpoints). Low flow and low battery alarms displayed on LCD & indicated by audible beeper
Power:	Rechargeable NiMH D cell battery runs about 10 hours continuously. Two D cells supplied with unit. Alkaline D cell battery may also be used.
Charger:	2-Cell Charger, 100-240 VAC input
Operating Temp.:	-25° to +55°C
Humidity:	0-95% Non-condensing
Detector Material:	Glass Filled Polycarbonate
Size:	3.5"(W) x 9"(H) x 5.5"(D) 89mm x 229mm x 140mm
Shipping Weight :	7 lbs. (3.2 Kg.)
Environmental	RoHS Compliant

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