

Safety, IH, IAQ, Stacks, Process, Leak Detection & Environmental Measurements in Chemical, Petrochemical, Manufacturing & Power Plants



PID Snap-On Heads
9.5, 10.6, 11.7 eV



Model 102+



Sensors > 30



Model 103 IAQ Analyzer



Data Logging to PC



Model 106 Confined Space



Model 1100P Stack Gas



Model 104 Water Quality



Model 1000P NH₃



FIELD PORTABLE ANALYZER PRODUCT LINE

FIELD PORTABLE ANALYZERS

Model 102 - PID+ -Analyzers for total VOCs & Inorganics in air -measure 1-5 parameters

PID, 9.5, 10.6 or 11.7 eV heads available

Parameters: **PID +** 1-3 optional sensors (CG, IR, TC, EC, RH...)

FEATURES-Fast response-PID- **1 sec. to 90%**

- Datalogger (7,000 pts) & alarms, diagnostics, 5 digit display of concentration; Weight: 1.9 pounds; Dimensions: 10.5 H x 3W x 2.25"D; 16 bit ADC; Datalogging for 7,000 points (4 sensors), RS232
- **Applications:** Safety, IH. Leak Detection, Accelerants at Arson scenes, Hazardous waste spills and site evaluations, transportation, Total VOC's in Air, Water, Soil
- Detection of : VOC's (ppm, ppb), O₂, CO, H₂S, PH₃, SiH₄, Cl₂, HCN, HCl, HF, F, Phosphine, H₂, SO₂, NO, NO₂; LEL

Model 103 - PID- IAQ Analyzer- 4-6 parameters

For the industrial hygienist conducting indoor air pollution surveys.

- Minimum system is ppm, ppb, RH & T- options CO₂ by IR and an additional EC sensor (choose from 15 EC sensors) or IR-CO₂ & RH/T & EC (CO or other EC)
- PID + ppm (0.1-500 ppm) & ppb (0-20,000 ppb) range, snap on RH & T probe, CO₂, & 1 EC
- PID sensitivity library, Datalogging & alarms, diagnostics, 5 digit display of concentration
- Weight: 1.9 pounds; Dimensions: 10.5 H x 3W x 2.25"D

Model 104- Water Quality Analyzer- 3-6 parameters

- Simultaneous **Measurement of 3-6 parameters:** pH, Conductivity, Salinity, Temp., Turbidity, plus dissolved O₂
- Weight: 2.3 pounds total; Dimensions: 8"H x 3"W x 2.25" D -readout; 2.5" D x 6" L -sensor head
- Datalogging for >7,000 points, RS232, Diagnostics

Model 105- TCD+-

Simultaneous Measurement of **1-5 parameters:** LEL (TC) %, 0-100v/v % (TC), O₂%, CO, & H₂S (ppm), LEL library of > 50 compounds. **Ideal for natural gas measurements.**

Weight: 1.7 pounds; Dimensions: .5 H x 3W x 2.25"D, 16 bit ADC; Datalogging for 7,000 points (4 sensors), RS232

Model 106 CG+- Confined Space Site Entry

- Simultaneous Measurement of **1-4 parameters:** LEL (CG) %, O₂%, CO, & H₂S (ppm), LEL library of > 50 compounds
- Weight: 1.7 pounds; Dimensions: 8.5" H x 3W x 2.25"D,

FEATURES/RANGE

102 PID+

Snap-on PID Heads
Measure **1-5** parameters
Optional ppb range 0-20,000
Wide range 0.1-3,000 ppm to 30,000 with Dilution probe
PID Library for >250 cpds
Easy to calibrate, datalogging
Sensors: PID, TCD, CG, EC, (15), IR, RH, T sample pump

103-IAQ +

Snap-on RH/T probe
Measure **4-6** parameters
ppb range 0-20,000
Wide range 0.1-500 ppm.
PID Library for >300 cpds
Sensors: PID, EC <20, IR (CO₂), sample pump

104-WQA

Measure **3-6** parameters in water-
Applications: Water quality surveys, monitoring industrial outfalls, rivers, streams, lakes

105 TCD+

Measure **1-5** parameters

Sensors: TC (% LEL & %v/v), O₂, CO, & H₂S, datalogging & sampling pump

106 CG+

Measure **4** parameters
(2) EC & CG & O₂ - (4) parameters for confined space

PID, CG, EC, IR, TC, Capacitance, T, pH, Conductivity

1100-P Landfill Gas analyzer

CH₄, CO₂, O₂, CO, H₂S

0-100% CH₄, 0-30% O₂

Weight: 7.4 pounds; Dimensions: 7" H x 9"W x 5"D ;
16 bit ADC; Datalogging for 7,000 points (IR+ 2 EC
sensors), RS232
2 IR Sensors

Special sensors for high levels & acid gases
Sampling systems available

113 Electrochemical +

1 to 3 Electrochemical (EC) sensors, GC, TCD,
long lifetime O₂ sensor; headspace measure-
ments. **Choose from > 30 EC sensors**

114 IR+

IR sensor for CO₂ (0-2,000, 5,000 or 10,000 ppm)
IR sensor for CH₄; 0-100% LEL or 100% Vol; 0-
2,000 ppm N₂O; IR sensor for CH₄; 0-100% LEL
or 100% Vol; 0-2,000 ppm N₂O

1000-P-NH3

Battery operated system in a NEMA 4 enclosure.

- Datalogger (7,000 pts) & alarms, diagnostics, 5 digit display of concentration; Weight: 7.4 pounds; Dimensions: 7^{3/4} W x 9^{3/8} W x 5" D ; 16 bit ADC; (NH3 + additional EC sensors), RS232

1100-P/107/ Stack Gas Analyzer

CO, SO₂, NO; other sensors- NO₂, CO₂, O₂, H₂S,
NH₃ or IR-CO₂

Battery operated system in a NEMA 4 enclosure.

- Datalogger (7,000 pts) & alarms, diagnostics, 5 digit display of concentration; Weight: 7.4 pounds; Dimensions: 7^{3/4} W x 9^{3/8} W x 5" D ; 16 bit ADC; (4 sensors-3 EC), RS232
- **Applications:** Combustion sources, incinerators, scrubbers

Special sensors for high levels & acid gases

FEATURES/Range

Range

CH₄- 0-100% IR
O₂ - 0-30%
CO - 0-4,000 ppm
H₂S- 0-1,000 ppm
CO₂ - 0 - 50% IR
4 sensors

Safety surveys of toxic gases &
O₂, headspace measurements
for O₂ in pharmaceutical prod-
ucts, ...

Easy to use IR sensor for CO₂
measurements for IH, IAQ,
quality control; LEL or 0-100%
Methane or HC; N₂O
1IR Sensor (interchangeable)

Ideal Analyzer for ammonia
NH3 over a wide range from
0.1--10,000 ppm; ambient mea-
surements to wet scrubbers

Range

Standard Sensors

CO 0-4,000ppm
SO₂ 0-2,000 ppm
NO 0-5,000 ppm

Other sensors

NO₂ 0-200 ppm
CO₂ 0-20 % IR
O₂ 0-30%
H₂S 0-1,000 ppm
CG- 0-100% LEL

Brief Sensor Specifications for PID Analyzers, LLC

Table I
Sensor Specifications

Sensor	Range ppm	Det. Limit	Resp.Time (s)	Interferences/Sensor
Electrochemical				
Ammonia	0-50	0.1	30	Acid gases
Carbon Monoxide	0-1,000	0.5	15	H ₂ , C ₂ H ₄
CO-sg	0-10,000	1	15	H ₂ , C ₂ H ₄
Chlorine	0-10	0.1	30	---
Chlorine dioxide	0-1	0.03	90	Cl ₂
ETO	0-100	0.1	30	MEK, Ethanol
Fluorine	0-1	0.02	60	Cl ₂
Formaldehyde	0-100	0.1	30	Oxygenated HC
Hydrazine	0-1	0.05	90	Cl ₂ , NO ₂
Hydrogen bromide	0-30	0.2	20	H ₂ S, NO, SO ₂ , HCl
Hydrogen cyanide	0-100	0.1	50	C ₂ H ₄ , H ₂ S, SO ₂
Hydrogen chloride	0-100	0.1	15	SO ₂ , NO ₂
Hydrogen fluoride	0-10	0.01	65	HCl, SO ₂ , Cl ₂
Hydrogen sulfide	0-100	0.1	20	---
H ₂ S-sg	0-5,000	0.1	15	---SG with filter
Iodine	0-5	0.05	40	Cl ₂
Mercaptans	0-10	0.02	20	---
Nitric oxide	0-250	0.1	10	NO ₂
NO-sg	0-200	0.1	10	--- with filter
Nitrogen Dioxide	0-20	0.1	15	NO, H ₂ S
NO ₂ -sg	0-200	0.1	15	NO, H ₂ S
Oxygen	0-30%	0.1%	8	---
Oxygen-sg**	0-30 %	0.1%	8	---
Oxygen	0-2%	0.1	15	---
Ozone	0-2	0.02	75	NO ₂
Phosgene	0-1	0.02	90	HCl
Phosphine	0-5	0.05	40	SiH ₂ , GH ₄ , B ₂ H ₆
Sulfur Dioxide	0-5	0.1	20	NO ₂
Sulfur Dioxide-sg	0-5000	0.1	20	NO ₂
Silane	0-5	0.05	30	AsH ₃ , PH ₃ , B ₂ H ₆
Infrared				
Methane	0 100% v/v	1%	20	---IR/HC
	0 100% LEL	1%sg	20	---IR/HC
Carbon Dioxide	0 - 2,000 ppm	100	20	---IR
	0 - 5% v/v	0.05	20	---IR
N ₂ O	0 - 2,000 ppm	20	30	---
PID				
VOC-PID - ppm	0 - 3,000	0.1	1	---
VOC-PID - ppm	0 - 30,000	1.0	10	with dilution probe
VOC-PID - ppb	0 - 50,000	1	10	---
CG/TCD				
Combustible Gas	0-100 % LEL	0.1%	15	---
Thermal Cond.	0-100% v/v	0.1%	15	---



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