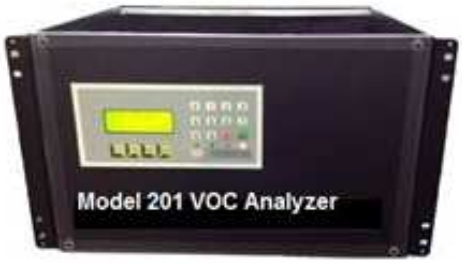
PID ANALYZERS

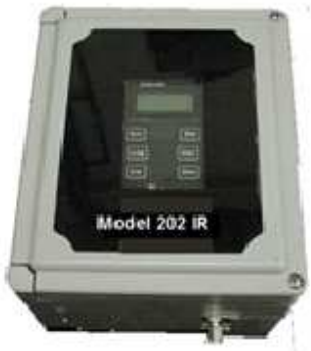
GUIDE TO CONTINUOUS INSTRUMENT SELECTION

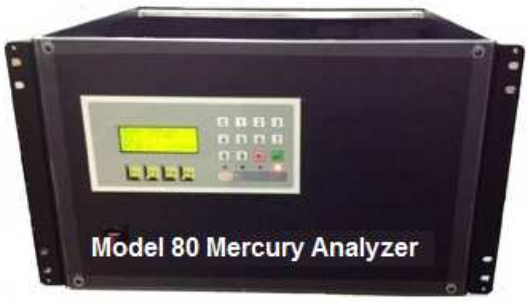
Species to be Measured	Concentration Range	Model # & Technology
VOC's total	ppm	112 PID, FID
	ppm - %	1000 TCD, CG, EC (>25 sensors)
VOC's total- (no CH_4 response)	ppm-low ppt	PID- 201-PPB w concentrator
	PID- ppb	PID-201- HS
	PID-ppm	PID -201C
VOC's total	ppm	201-FID-ppm (incl. CH_4)
Non Methane HC	ppm	201-FID (CH_4 and Total HC)-catalytic Converter
CO2, CH_4, CO	ppm to 100% CO_2, CH_4, CO 1% to 100%	202 IR-CH_4, CO, CO_2
N_2O	0-1,000 ppm	202 IR-N_2O
Mercury (Hg)	0-100 ppb	80-UV-coal fired power plant stacks
	0.1 ppt to 10 ppb	80-GPC-PID- ambient air
	Low ppt to high ppb	80-GPC-PID- ambient air
H_2, He, Ar binary gases	ppm to %	204- TCD
Exogas (H_2, CO_2,CH_4)	%	205-TCD, 2 x IR
O_2	%	209-EC-O_2
Specific VOC's, S, P, H_2, He	ppb to %	301-C-PID, FID, TCD ,FPD, FUV
Abbreviations		Photoionization Detector (PID), Flame ionization Detector (FID), Flame Photometric Detector (FPD), Thermal Conductivity Detector (TCD), Electrochemical (EC), Infrared (IR), Ultraviolet (UV),GPC (gold pre concentrator)

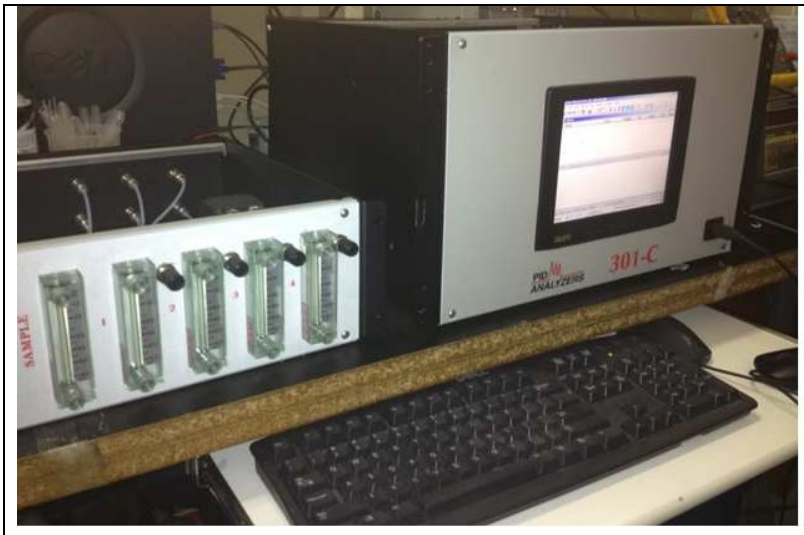
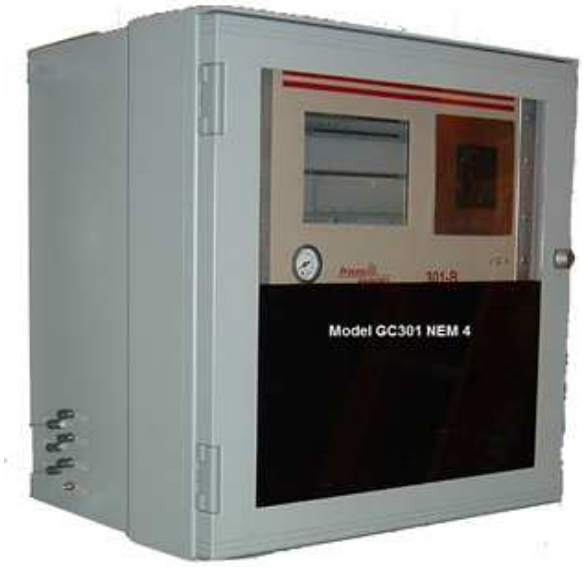
List of Literature

112, 1000, 201, 202 204, 205, 80 UV,80 GPC/PID, GC301C, G301C MP

Rotating Images	Specs/Applications
Model 112 Total VOC's  	**Model 112 PID or FID** Dimensions: Weight: 10 # Total VOC's in air or water (HS) Applications: Carbon bed breakthrough, VOC's in water Z purge can be added for Class 1 Div.2 areas Outputs: 0-1 VDC, RS232, 4-20 mA.
Model 1000 Gas Analyzer  	**Model 1000** GG or TCD, and 0-3 EC sensors (>25) Dimensions: 6.75"W x 6"D x 10 3/8 "H Weight: 7.5 EC Sensors: LEL, H2, He, EC (HCl, Cl_2, SO_2, NO, CO, H_2S…) Z purge can be added for Class 1 Div.2 areas Outputs: 0-1 VDC, RS232, 4-20 mA.
Model 201 C Total VOC's  	Model 201 19" Rack Mount Detectors; PID or FID Dimensions: 19"W x 14"D x 11"H Weight: 21# Total VOC's in air or water Applications: Total VOC's In stacks, incinerators, carbon bed breakthrough, catalytic combustor output, leak detection of toxic chemical, VOC's in water Outputs: 0-10 VDC, RS232, RS485, 4-20 mA

Model 201C Total VOC's  	**Model 201C NEMA 4 Wall Mount** Dimensions: 21”W x 1”D x 23”H Weight: 30 # Total VOC’s Detectors: PID+ or FID* Applications: Total VOC’s In stacks, incinerators, carbon bed breakthrough, catalytic combustor output, leak detection of toxic chemical, VOC’s in water Outputs: 0-10 VDC, RS232, RS485, 4-20 mA Z purge can be added for Class 1 Div.2 areas *FID requires zero air and hydrogen for operation + PID does not respond to CH_4
Model 202 CO2, CH4, CO, N2O  	**Model 202 IR NEMA 4** Dimensions: 6.75”W x 6”D x 10 3/8 ”H Weight: 7.5 CO2 0-1,000 to 0-100% CH4 0-5,000 to 0-100% CO 0-10% to 0-100% N2O 0-1,000 ppm Z purge can be added for Class 1 Div.2 areas Outputs: 0-1 VDC, RS232, 4-20 mA.
Model 80 GPC/PID Hg in ambient air  	Model 80 Hg Analyzer GPC/PID 19”W x 14”D x 11”H Applications: Mercury ambient air ppt to ppb Uses a gold preconcentrator to collect and concentrate the Hg, then thermally decompose the Au/Hg amalgam to provide a specific Hg (IP= 10.4 eV) measurement by PID (10.6 ev Lamp)

	Outputs: 0-10 VDC, RS232, RS485, 4-20 mA
Model 80 UV Hg in Stack Gases  	Model 80 UV 19”W x 14”D x 11”H Applications: Mercury in Stack Gases UV absorbance with SO2 correction Outputs: 0-10 VDC, RS232, RS485, 4-20 mA
Model 204 H2, He, binary systems  	Model 204 TCD Z Purge Dimensions: 6.75”W x 6”D x 10 3/8 ”H plus Z purge Weight: 14# with Z purge; 7.6 # Analyzer only Useful for Binary gas systems % H_2 in CO_2 %H_2 in N_2 % He in N2 Z purge can be added for Class 1 Div.2 areas Outputs: 0-1 VDC, RS232, 4-20 mA
Model GC301C Specific Analysis of VOC's, S, P, Inert Gases and Inorganics  	Model 301C Process GC 19” Rack Dimensions: 19”W x 14”D x 11”H Weight: 29# Embedded PC with Windows 7.0 Peal works Chromatography SW Detectors: PID, FID, TCD, FPD (S, P), FUV VOC’s % ppm, ppb, ppt (with optional concentrator) S, P ppb, ppm) Natural Gas Analysis Stack and Process Gas Analysis, OSHA Compliance Outputs: 0-1 VDC, RS232, 4-20 mA

	**Model 301-C MP** 4 point GC Multipoint 2-4 point MP 6- 16 point MP Available in bench or NEMA 4 wall mount GP or Z- purge Embedded PC Direct internet connection, 4-20 mA, Modbus, RS232
Model GC301C Specific Analysis of VOC's, S, P, Inert Gases and Inorganics 	**Model GC301C NEMA 4** Dimensions: 21”W x 16”D x 23”H Weight: 40 # Embedded PC with Windows 7.0 Peal works Chromatography SW Detectors: PID, FID, TCD, FPD (S, P), FUV VOC’s % ppm, ppb, ppt (with optional concentrator) S, P ppb, ppm) Natural Gas Analysis Stack and Process Gas Analysis, OSHA Compliance Z purge can be added for Class 1 Div.2 areas Outputs: 0-1 VDC, RS232, 4-20 mA