

Safety, IH, Stacks, Process, Carbon Bed Breakthrough, Drying Ovens, Leak Detection, Environmental & Process Measurement in Chemical, Petrochemical & Manufacturing Plants



Model 900 Transmitters



Model 202 IR



Model 1000 Toxic Gases



Model 301C 19" Rackmount PID



DataWorks™ Software



Model 201B Wallmount PID



Model 610 Water Quality Analyzer



Model 210 19" Rackmount O₂



Model 204 TCD



CONTINUOUS ANALYZER PRODUCT LINE

Hydrocarbons, VOCs, benzene, 1,3 BD, VC, ETO, CO, CO₂, fixed gases, O₂

PROCESS GCs, CONTINUOUS ANALYZERS: PID, FID & PARAMAGNETIC O₂

Model 201-B- Analyzers for Total VOCs (total HC) in Air or Water

PID or FID with 5 digit Smart Meter

Features: No H₂ or air required for PID; Fast response-PID- **10 sec. to 90%**- Rack (19") or wall mount enclosures available; Autocal, RS232; Alarms for PID or FID out...; Range 0.1 to 3000 ppm (higher ranges available with dilution system- for PID; 1-20,000 ppm for FID; **Class 1 Div. 1 or 2 (X or Z) purging** available for hazardous areas; **Options:**Datalogger & alarms; 4-20 mA, 2 or 4, 8, 12, 16, 24 or 32 pt. Multipoint. **Applications:**Carbon bed breakthrough, Total hydrocarbons in air, Area monitoring for total hydrocarbons, or Selected inorganic cpds via PID; **Stack and incinerator monitoring** - sampling systems available; **Total VOCs in water** with optional Model 650 sparging system

Model 210 - Paramagnetic Oxygen Analyzer

Paramagnetic O₂ with temperature and pressure compensation & 5 digit Smart Meter

Features: Temperature & pressure compensation for additional stability; fast response-PID- **10 sec. to 90%**- Rack (19") or wall mount enclosures available; Autocal, RS232; Alarms, Range- ppm 100%; **Class 1 Div. 1 or 2 (X or Z) purging** available for hazardous areas; **Options:**Datalogger & Alarms; 4-20 mA, 2 or 4, 8, 12, 16, 24 or 32 pt. Multipoint

Applications: Air liquification plants, Gas purity analysis, Hydrocarbon stream monitoring, Fermentation processes, Heat treating & annealing, Protective blanketing, Combustion efficiency, Stack Gas monitoring, Blast furnace ga, Natural gas

Stack and incinerator monitoring- sampling systems available

Model 301C & 501C - Process Gas Chromatographs

The 301C is a low cost Process GC with an embedded Pentium PC and Windows operating system, PeakWorks chromatography software, touch screen, Color VGA Display

Enclosures- 301C: 19" Rack (33 Lbs) or NEMA 4 wall (55 Lbs) mount enclosure, Class 1 Div. (1 or 2) for hazardous area

The Model 501C is a Process GC with an embedded Pentium PC and Windows XP operating system, PeakWorks chromatography software, multiple diagnostics, PeakWorks communication software, network card, touch screen, Color VGA Display

Enclosure- 501C: NEMA 4 wall (85 Lbs) mount 2 enclosures- electronics & oven, Class 1 Div. (1 or 2) for hazardous area

Detectors: Specific (ECD, FPD), Selective (FID, PID) and Universal detectors (FUV, TCD & HID) available

Gas or liquid (heated) **valves** available, Multipoint (1, 4, 8, 12 pt.), 1 alarm per channel, 2nd level optional

Applications: Ambient air, fenceline monitoring, process, stack emissions from ppb to % levels, measurement of non-methane HC, natural gas analysis, chlorinated HC, sulfur compounds, aromatic

ENCLOSURE SPECIFICATIONS

Model 201 B

19" Rack Mount

19" W x 5^{1/2}" H x 14" D

Weight: PID 12.2 lbs / FID 14 lb

NEMA 4- Wall Mount

PID 23"W x 21"H x 10"D

FID 27"W x 21"H x 10"D

Wallmount Weight:

PID 19 lbs / FID 22 lbs

Model 210

19" Rack Mount

19" W x 5^{1/2}" H x 14" D

Weight: 12.2 pounds

NEMA 4 - Wall Mount

23"W x 21"H x 10"D

Weight: 19 pounds

Model 301C

19" Rack Mount

19" W x 11" H x 17" D

Weight: 33 pounds

NEMA 4- Wall Mount

23"W x 21"H x 20"D

Weight: — 53 pounds

Model 501C

Electronics Enclosure-

NEMA 4- Wall Mount

23"W x 21"H x 20"D

Weight: — 56 pounds

NEMA 4- Wall Mount

23"W x 21"H x 15"D

Weight: 29 pounds

VOGs, H₂S, SO₂, Cl₂, O₂, CO, CO₂, ETO, CH₄, HCN, NH₃, PH₃, H₂, SiH₄

DUAL BEAM IR, THERMAL CONDUCTIVITY, & ELECTROCHEMICAL - TRANSMITTERS

Model 202 IR+

-This dual beam (reference and measurement wavelength) IR instrument is very stable and has a fast response (15 sec. to 90%). It is ideal for process control, stack measurements or even ambient levels of CO₂, N₂O or freons
- Measure Lower explosive limit (LEL) for hydrocarbons in drying processes; measure methane (CH₄) in landfill gas, mines and other sources;

Applications: Monitor ambient CO₂ in buildings, greenhouses, stacks, landfill gases ..., CO in parking lots, CO, CO₂ in stacks, Freons leaks from refrigeration

-Typical Range (CH₄/CO₂/Freons) high ppm to 100%

-Species Measured: CH₄, CO₂, CO, N₂O, Refrigeration Gases (Freons)- Z purging available

Model 112 PID +

- Compact wall mount PID or FID based sensor in a NEMA 4 enclosure with 5 digit bright LCD, and an optional RS485 output. Can add 1-3 additional sensors such as LEL and 2 electrochemical or 3 electrochemical sensors. For safety monitoring. Z purging available; Monitoring total VOCs and toxic gases.

Model 204 TCD

-This technique determines the difference in thermal conductivity between a reference and a sample stream using a Wheatstone bridge circuit.

-NEMA 4 enclosure with 5 digit bright LCD, and a 4-20 mA output

Applications: -It is most useful for binary mixtures where the gases have a difference in thermal conductivity or for leak detection because of its universal response

-Range 100 ppm to 100% for Hydrogen, Helium, CO₂, Neon ...Z purging available

Model 1000 Toxic Gases, O₂, LEL, TCD

-Measure- CO, SO₂, H₂S, Cl₂, HCl, H₂, NO, NO₂, O₂, HCN, CO₂, NH₃, PH₃, Phosgene, HF, F₂, SiH₄ via electrochemistry for worker safety at ppm levels- single component only; Model 1004 for 2-4 Components including LEL + 3 electrochemical sensors- note no PID

-NEMA 4 enclosure with 5 digit bright LCD digit meter & optional RS485 output, calibration stored in software- no pots to set, built in pump provides a fast response; dual setpoint, alarms, RS232 for multiple sensors

Model 900 Transmitters

IR, TC, PID or various Electrochemical sensors in an explosion proof enclosure with a glass window. Output is 4-20 mA. Measure CH₄, CO₂ by IR, H₂ by TCD, VOCs by PID, and toxics by electrochemistry. These units are powered by 18-30 VDC. OEM versions available for many of these analyzers - please consult the factory.

ENCLOSURE SPECIFICATIONS

Model 202

NEMA 4 Wall Mount (Only)

7" W x 9" H x 5" D

Weight: 7.4 lbs.

Material: Fiberglass

Model 112

NEMA 4 Wall Mount (Only)

7"W x 9"H x 5"D

Weight: 7.4 lbs

Material: Fiberglass

Model 204

NEMA 4 Wall Mount

23"W x 21"H x 10"D

Weight: 19 lbs.

Material: Fiberglass

Model 1000

NEMA 4 Wall Mount (Only)

7"W x 9"H x 5"D

Weight: 7.4 lbs.

Material: Fiberglass

Model 900

Aluminum Explosion proof enclosure with 3.5" glass window

Class 1 Div. 1

Diameter: 4.75"

pH, conductivity, ORP & DO

pH, CONDUCTIVITY, ORP & DO CONTROLLERS- DATAWORKS SOFTWARE

Model 1000 Series for pH, ORP, T, dissolved O₂ in water

- A variety of systems are available from 1/8 to 1/2 DIN panel mounts
- Measure and/or control pH, ORP, conductivity, T, dissolved O₂
- 4-20 mA output, dataloggers available
- Industrial pH, conductivity, ion selective, & dissolved O₂ electrodes available
- Easy to maintain- designed to reduce maintenance by plant personnel
- Range pH- 0.0 to 14.00;
- Clean Water Act compliance
- pH , ORP ,T, conductivity, dissolved O₂ transmitters or Controllers
- Effluent monitoring
- Municipal water treatment
- Analysis of water for process input
- Monitoring cooling water

610 Water Quality Analyzer

The Model 610 is a reliable, flexible and versatile analyzer based on ion selective electrodes such as: NH₃, Cl⁻, S²⁻, F⁻, CN⁻, CO₃²⁻, SO₃²⁻...The ion selective electrodes are potentiometric (reversible) devices that respond to a change increase as the ion is increased/de-creased. The concentration is calculated via:Nernst Equation: $E = E_0 + [RT/nF] \log [\text{concentration}]$ where E is the potential, E₀ is a mixture of several potentials in the system, R is the gas constant, T is the absolute temperature OK, and F is the faraday constant. *This product is available in a NEMA 4 wall mount configuration only.*

DATAWORKS DATA COLLECTION SOFTWARE

Data Works is PIDs data collection and logging software that can be used with a wide variety of sensor or analyzer outputs such as ethernet, RS485 & 4-20 mA. The latter two outputs are for long distance transmission of data. In-plant installations are typically 4-20 mA or RS485 because of the long distances involved 1,000-5,000 feet.

pH Controller



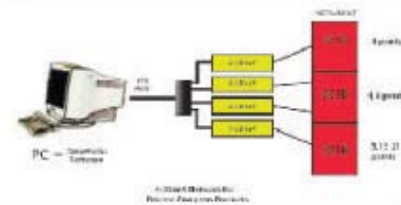
Conductivity Controller



DO Controller



Model 610 Water Quality Analyzer



DataWorks schematic



25 Walpole Park South Dr. Walpole, MA 02081

Tel. 1-508-660-5001 USA or Canada 1-800-724-5600 Fax. 1-508-660-5040 Web: <http://www.hnu.com> E-mail: sales@hnu.com

PID Analyzers, UK, 9 Pennington Close, Frodsham Cheshire WA6 7NL Tel/Fax 01928-732-395

Web: <http://www.pidanalyzers.co.uk> E-mail: sales@pidanalyzers.co.uk

HNU Nordion, Ltd, OY, Atomitie 5 A 3, PL 1, Helsinki, Finland Tel. +358-9-565 7240 Fax +350-9-562 6801

Web: <http://www.hnunordion.fi> E-mail: Info@hnunordion.fi