

# OIL or VOCs IN WATER ANALYZER

## Patented Sample Transfer Stripper/Sensor & Liquid Calibration

Model 204L



### FEATURES - Patented & Exclusive

- **Continuous On-Line Analysis**
- **20 Year Experience**
- **Lower Detectable Limit 1 ppb w thru ppm w to Saturation**
- **Liquid Calibration by PermTube**
- **4-20ma & RS-232/485**
- **Reduced Downtime**
- **Proven On-Line Reliability**
- **TCEQ “Best Available Control Technology” & “Equivalency” Letters**

### Description & Principle of Operation

The ability to analytically quantify highly reactive volatile organic compounds VOCs & oil in water is greatly enhanced with the Sample Transfer Stripper (Patented Membrane Technology) & solid state sensor offered Analytical Systems Int'l./KECO R & D. The analyzer system utilizes many patented and exclusive features only available from Analytical Systems Int'l./KECO R & D.

The principle of operation requires a consistent free flowing liquid sample into a Sample Transfer Stripper unit which separates the liquids from the VOCs. A hydrocarbon free consistently flowing air carrier then sweeps the VOCs in a gaseous phase into the solid state sensor resulting in a quantitative analysis in ppb w, ppm w, or up to saturation levels. An optional liquid calibration by patented Perm Tube is available. This unattended on-line analysis is economically superior to inaccurate laboratory analyzers where unstable grab samples result in VOCs deterioration that produce analytical errors. Downtime is reduced to less than 10% of the El Paso, TOC or Sparger methods and the economic pay out is increased because of reduced product loss. In one case, 12,000 pounds of product loss per day was quickly identified by this proven and accurate on-line analytical method.

TCEQ letters have designated the Model 204 as “Best Available Control Technology” and “Equivalency” for continuous monitoring of cooling tower water applications.

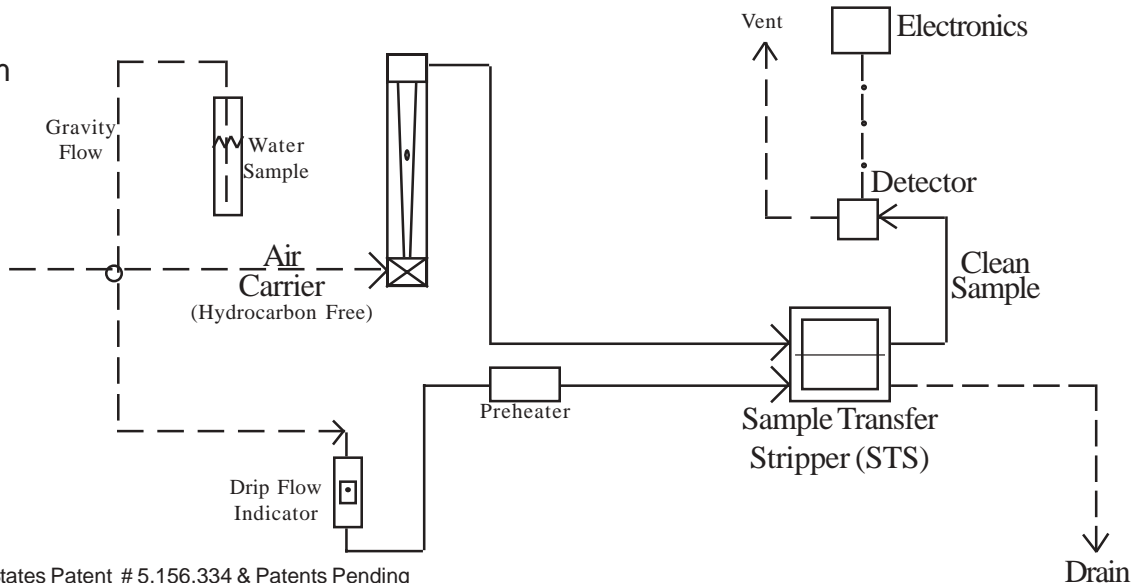
Applications include analysis of VOCs & oil in water for cooling towers, heat exchangers, holding ponds, run off water, and waste water.



Analytical Systems Int'l./KECO R&D

(281) 516-3950 \* FAX (281) 351-8925 \* [www.ASIWebPage.com](http://www.ASIWebPage.com) \* [Sales@ASIWebPage.com](mailto:Sales@ASIWebPage.com)

## Model 204L Flow Diagram



PATENTED: United States Patent # 5,156,334 & Patents Pending

## MODEL 204L SPECIFICATIONS

### POWER INPUT

110 VAC 50/60 Hz @ 6 Amps.  
220 VAC 50/60Hz (optional)

### TEMPERATURE

Operating: 5C to 50C  
Storage: 0C to 70C  
PPB W Range Requires Temp. Control Building

### PERFORMANCE

Range: Customer Specified  
PPB W thru PPM W to Saturation  
Primary Chemical Component:  
Customer Specified  
Resolution: 1% of Calibrated Range  
Repeatability: +2% of Full Scale

### ACCESSORY OPTIONS

Primary Filter, One Liter/min. Sweep  
Cabinet Heater & Thermostat  
Special Sampling Systems  
Patented Liquid Validation System  
by Perm Tube™  
Air Purifier For Hydrocarbon Free Carrier

### MEMORY / COMPUTER INTERFACE

RS-232/485 Serial Port Communication

### DISPLAY

Alpha Numeric Large LCD

### ANALOG OUTPUT SIGNAL

4-20ma Isolated & (optional)  
4-20ma Linearized (standard)

### SAMPLE INPUT

Pressure Regulator & Gauge (Optional)  
10 PSIG Minimum @ 20 ml/min. Sample Flow

### UTILITY SUPPLY

Carrier: Zero Air or Breathing Quality  
(Hydrocarbon Free) @ 200 ml/min.  
Calibration Supply Chemical

### ALARM CONTACTS (optional)

Diagnostic Alarms for Loss of Sample Flow,  
Air Flow, Purge Flow & Power Loss

### AREA CLASSIFICATIONS

General Purpose  
R, B,C,D (optional)

### CABINET DIMENSIONS & WEIGHT

Aluminum 14" Hx12" Wx12" D  
20 Lbs.

### Analyzer Quote Request Form:

Analytical Systems International provides design and application engineering assistance for the User's analyzer requirements. For a quotation, please complete ASI Analyzer Quote Request Form at [www.ASIWebPage.com/info\\_form.asp](http://www.ASIWebPage.com/info_form.asp)

**PH (281) 516-3950 \* FX (281) 351-8925**  
**Sales@ASIWebPage.com \* [www.ASIWebpage.com](http://www.ASIWebpage.com)**