

## Ozone Analyzer



Model : ML9810

### 용도

### Applications

- 대기 및 실내 공기 중의 O<sub>3</sub> 가스 농도 연속 모니터링
- 대기 오염 측정망 구성에 사용

### 특징

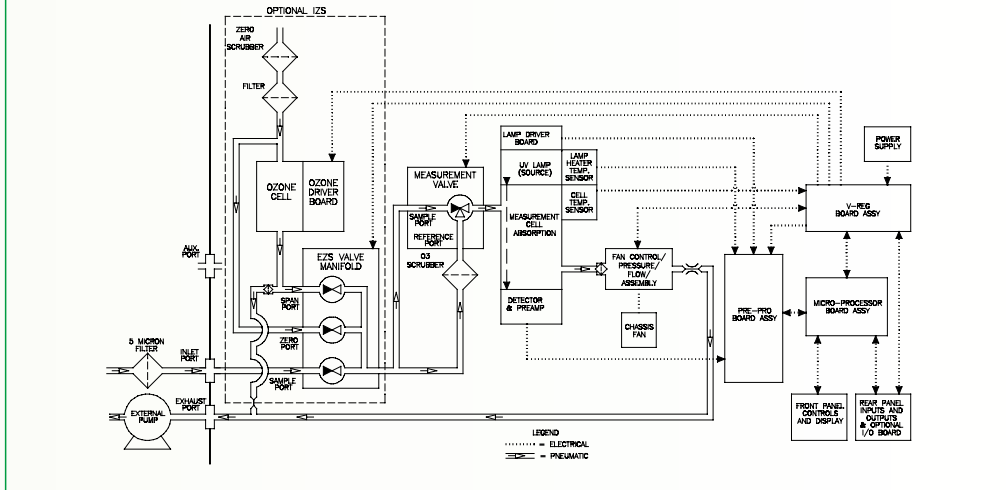
### Features

- 형식승인 : US-EPA, TUV, MCERTS, CE
- 소형 유리셀을 채용함으로 오존 손실을 감소
- 12VDC 전원으로 안전성과 낮은 전력 소비를 실현
- 자가 진단 및 RS232를 통한 원격 관리 기능
- 자동 ZERO 교정 가능

## SPECIFICATIONS

Range	<ul style="list-style-type: none"> <li>• Display &amp; digital output : Auto ranging 0-20 ppm Display resolution : 0.001 ppm Serial output resolution : 1 ppt</li> <li>• Analogue output : 0-full scale from 0-0.05 ppm to 0-20 ppm with 0, 5 and 10% offset (with optional 50-pin I/O board)</li> <li>• Auto-ranging Analogue output : 2 user-specified 0-full scale range values.</li> <li>• USEPA designated range : Any full scale range between 0-0.05 ppm and 0-1 ppm</li> </ul>
Noise	<ul style="list-style-type: none"> <li>• Measurement process : 0.25 ppb or 0.1 % of concentration reading, whichever is greater. with Kalman filter algorithm active.</li> <li>• Analogue interface : 0.5 ppb or 0.2 % of analogue output FS (whichever is greater)</li> </ul>
Sensitivity. Lower detectable limit	<ul style="list-style-type: none"> <li>• Measurement process : &lt;0.5 ppb or 0.2 % of concentration reading, whichever is greater. With Kalman filter algorithm active.</li> <li>• Analogue interface : &lt;0.5 ppb or 0.2 % of analogue output FS (whichever is greater)</li> </ul>
Zero Drift	<ul style="list-style-type: none"> <li>Temperature dependent : &lt;0.5 ppb per °C</li> <li>Time dependent (fixed temperature): &lt;1 ppb/ 24hrs, &lt; 1 ppb/ 30 days</li> </ul>
Span Drift	<ul style="list-style-type: none"> <li>Temperature dependent : &lt;2 ppb per °C with Span gas</li> <li>Time dependent (fixed temperature) : &lt;0.5 %/ 24 hrs of concentration reading, &lt;0.5 % / 30 days of concentration reading</li> <li>Lag Time : &lt;20 seconds.</li> <li>Rise/Fall time, T95 : &lt;120 seconds (Kalman filter algorithm active).</li> </ul>

## Analyser Block Diagram



Linearity Error	±1 % of full scale (from best straight-line fit).
Precision	1 ppb or 1 % of concentration reading (whichever is greater)
Sample flow Rate	Approx. 0.5 L/min
Ambient Temperature Range	TUEV : 5 °C to 40 °C,
Mains Power	USEPA designated range : 15 °C to 35 °C 99-132 VAC, or 198 to 264 VAC, 47 to 63 HZ
Weight	21.3 kg
Dimensions ( W x H x D )	432 mm × 178 mm × 648 mm
User interface Analogue Output	Menu selectable current output of 0-, 2- and 4-20 m Optional jumper selectable voltage output with 50 pin connector board of 100 mV, 1 V, 5 V and 10 V, With menu Selectable zero offset of 0.5 % or 10 %.
User interface Digital output	Multi-drop RS232 port shared between analyzers for data, Status and control. DB50 with discrete status, user control and analogue output.
Extended Memory	Storage-288 Kbytes, battery backed SRAM device. Compatible RS232 with all common terminal programs. Min-Max storage from one minute conc. Period of 8.5 days up to 60 minutes conc. Period of 512 days.
Optional components	50 pin I/O PCA, Sample pump, particulate filter, charcoal scrubber(not 9830), external zero span Values, rack slides
Optional zero and span(i.z.s) modules	Type : internal Three point Ozone/Span on calibration device Repeatability : span is typical ±3 % of previous reading

## CONFIGURATIONS

Multi Drop RS232 serial interface	1 ea
Operation and Service Manual	1 ea
External Vacuum Pump, 230V/50Hz, 4slpm@20 in Hg	1 ea
Sample Inlet Particulate Filter Assy(Holds 47mm Filter)	1 ea
Sample Inlet Filter Elements, 47mm, 5 Micron (50ea)	1 box
Valve Manifold Kit, External Zero/Span(EZS)	1 set

## OPTIONAL ACCESSORIES

I/O PC-Board, 50 PIN (mV, V)	1 ea
Service Kit for 6 month operation	1 set
Rack Mount Kit with Slides	1 ea
Rack Mount Kit without Slides	1 ea