

**Accurate. Reliable. Cost Effective.**

Emissions Monitoring for Compliance & Process Improvement



## ETD-300 Real Time Sub-ppb Ethylene (C<sub>2</sub>H<sub>4</sub>) Analyzer

### Technology

Introducing the world's most sensitive, compact, fast and user friendly ethylene analyzer. Based on the newest laser technology with fast response time for real time measurements, the ETD-300 ethylene analyzer, has a detection limit ( $2\sigma$ ) of 0.3 ppbv with time resolution of 5 seconds.

Currently the ETD-300 is used for monitoring dynamic processes in plant physiology, molecular biology, post-harvest research, microbiology, ecology, environmental monitoring and medical applications around the world.

The ETD-300 is specially designed for non-specialists; its single-button operation and specially designed software makes it easy to use for workers of all skill levels.



*ETD 300 Ethylene Analyzer*

### Features and Benefits

- Online and absolute measurements
- Detection range 0-5 ppmv
- Gas flow rate 0.25-5 l/h
- Operating temperature between 10 and 28°C
- Low maintenance
- Easy to operate
- Analog input for logging of external data
- User friendly software included

### Applications

- Environmental
- Medical
- Agriculture
- Industry
- Biology

In combination with the valve control box the ETD-300 can monitor up to six experiments simultaneously. It is fully controlled and analyzed by versatile software that produces data, which is ready to publish.

Other available peripherals include a catalyzer, that provides hydrocarbon free air to perform your experiments, scrubbers, cuvettes, and a fully automated mini incubator that controls light intensity, temperature and gas mixture, for small biological samples.

These products can also operate as stand-alone devices.

Performance Data	
<b>Detected Gas</b>	Ethylene (C2H4)
<b>Measurement Range</b>	0-5 ppmv
<b>Noise Level (2σ)</b>	0.3 ppbv
<b>Accuracy</b>	<1% of value or 0.3 ppbv (which ever is larger)
<b>Linearity</b>	Better than 1%
<b>Stability</b>	<1% over 24 hours
<b>Zero Drift</b>	+/-1 ppbv
<b>Measurement Time</b>	5s
<b>Response Time T90</b>	30 s (with airflow = 1 l/h)
<b>Flow</b>	0.25-5 l/h
<b>Calibration</b>	Annually (With calibrated gas mixture)
<b>Warmup time</b>	30min

Technical Characteristics	
<b>Dimensions</b>	50x50x14cm (LxWxH) (19" rack configuration, 3U)
<b>Operating temperature</b>	10-28 °C
<b>Humidity</b>	0-95 % (non-condensing)
<b>Power input</b>	90-264 VAC, 47-63 Hz
<b>Power Consumption</b>	<150 W
<b>Analog input</b>	0-5V
<b>Gas input/output</b>	1/8" Swagelok

Interface	
<b>Output</b>	USB and RS232 (19" rack configuration, 3U)
<b>Control</b>	- ETD-logger software Compatible with MS Windows XP or higher Min. 1 GHz, 512 MB RAM - .DLL for integration in other software
<b>Data Output</b>	.CSV, compatible with MS Excel, OOo Calc, Microcal Origin etc.
<b>Display</b>	Blue backlight LCD

