

PORTABLE ETHYLENE ANALYZER

- Real-time, continuous monitoring of CO₂, O₂ and ethylene.
- Take measurements in seconds.
- Ethylene detection down to 25 ppb.

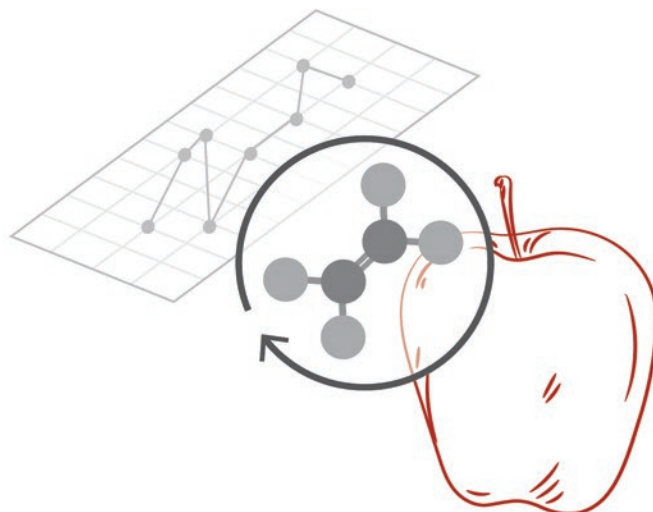
The F-900 Portable Ethylene Analyzer **non-destructively** measures ethylene in real time, providing Quality Assurance professionals with the data they need to **manage ethylene accurately** and efficiently.

Using **two electrochemical sensors**, the F-900 measures ethylene from 0-200 parts per million (ppm) with a lower detection limit of 0.025 ppm.

The "PolarCept filter **removes polar hydrocarbons** from the gas stream to ensure that measurements are not polluted by interfering gasses such as ethanol.

KEY APPLICATIONS

- **Monitoring controlled atmosphere facilities** to ensure ethylene levels do not exceed critical thresholds.
- **Assisting research and development efforts** by providing a simple, portable platform to measure ethylene, O₂, and CO₂.
- **Measuring flux from a single fruit** to understand how ethylene emission levels may vary across treatments.
- **Measuring head-space accumulation** for analysis of small-volume samples or fruits with low ethylene emission rates.



SPECIFICATIONS

Air sampling rate.....	80 ml/min
Measuring rate.....	1 second intervals, open or closed loop
Display.....	Sunlight visible transfective LCD
Operating environment.....	0°C - 45°C (0 - 90% humidity non-condensing)
Battery capacity.....	5 hours, rechargeable li-ion (5000 mAh) battery
PC interface.....	USB & Wi-Fi SD card
Dimensions.....	255mm x 210mm x 138mm
Weight.....	2.96 kg
Enclosure.....	Anodized aluminum
Warm-up time.....	1 min (C ₂ H ₄)

SENSOR SPECS

C₂H₄ PPB

Sensor type.....	Electrochemical
Range	0-10 ppm
Resolution	0.001 ppm
Accuracy.....	5% ± 0.025 ppm
Lower detection limit.....	0.025 ppm (25 ppb)
Offset recalibration.....	Weekly
Span recalibration.....	3 months

C₂H₄ PPM

Sensor type.....	Electrochemical
Range.....	0-200 ppm
Resolution.....	0.1 ppm
Accuracy.....	5% ± 0.5 ppm
Lower detection limit.....	0.5 ppm
Offset recalibration.....	Weekly
Span recalibration.....	3 months

C₂H₄ PCT SENSOR (OPTIONAL)

Range.....	0-20%
Resolution.....	0.01%
Accuracy.....	5%
Offset recalibration.....	6 months
Span recalibration.....	6 months*
Sensor type.....	Infrared sensor, pyroelectric detector

O₂ SENSOR (OPTIONAL)

Sensor type.....	Electrochemical
Range.....	0-100%
Resolution.....	0.1%
Accuracy.....	5%
Offset recalibration.....	6 months
Span recalibration.....	6 months

CO₂ PPM SENSOR (OPTIONAL)

Range.....	0-2000 ppm
Resolution.....	0.1 ppm
Accuracy.....	5%
Offset recalibration.....	Weekly
Span recalibration.....	6 months*
Sensor type.....	Low power, non-dispersive IRGA

