



The F-950 Three Gas Analyzer measures levels of Ethylene, CO<sub>2</sub> and O<sub>2</sub> to maintain optimal produce quality at every phase of the supply chain. The F-950's versatile design allows it to be scaled to many environments, from cold storage to transportation container.

Simple to operate and weighing less than a kilogram, the F-950 uses an electrochemical cell to measure ethylene between 0-200 ppm. The F-950 is ideal for measuring ethylene production across a wide range of fruit types.

### Features



- Measures C<sub>2</sub>H<sub>4</sub>, CO<sub>2</sub> and O<sub>2</sub>
- Displays results in under 30 seconds
- Past records stored on the device
- Handheld and lightweight
- Internal data logging and storage (4GB SD card)
- Bluetooth data transfer
- Battery lasts for 8+ hours
- Display easily viewed in dimly lit environments
- PolarCept!™ water filter for removing non-ethylene hydrocarbons

### Uses

- Controlled Atmosphere storage facility management
- Ethylene mitigation verification
- Packing house inspection
- Precision citrus degreening
- Storage assignment in distribution centers
- Headspace sampling for Modified Atmosphere Packaging (MAP) quality assurance



## Specifications

<b>Sampling Flow Rate:</b>	70mL/min
<b>Total Sampling Time:</b>	80 seconds
<b>Data Saving:</b>	Automated, 1 second intervals
<b>Display:</b>	Sunlight visible transfective LCD
<b>Operating Environment:</b>	0°C - 50° C (0-90 % humidity non-condensing)
<b>Operating Atmospheric Pressure:</b>	500-1200mbar
<b>Dimensions:</b>	18 cm x 13.5 cm x 5.5 cm
<b>Weight:</b>	0.95 kg
<b>Enclosure:</b>	Powder coated aluminum
<b>Battery Life:</b>	8.5 hours
<b>Power Source:</b>	Removable rechargeable lithium-ion battery
<b>PC Interface:</b>	USB and WI-FI SD card + Bluetooth
<b>Data Recorded with Each Measurement:</b>	Ethylene, CO2 and O2 concentrations, date, time, RH, GPS location

## Trigger Mode Measurements

	<b>C<sub>2</sub>H<sub>4</sub></b>	<b>CO<sub>2</sub></b>	<b>O<sub>2</sub></b>
<b>Sensor Type:</b>	Electrochemical	IR Sensor, Pyroelectric detector	Electrochemical
<b>Range:</b>	0-200ppm	0-100%	0-100%
<b>Resolution:</b>	0.1ppm	0.01%	0.10%
<b>Lower Detection Limit:</b>	0.15ppm	0.50%	0.30%
<b>Sampling Volume:</b>	30 ml	12 ml	12 ml
<b>Response Time:</b>	35 seconds	12 seconds	12 seconds
<b>Accuracy (absolute):</b>	0.15 ppm	0.50%	0.30%
<b>Accuracy (relative):</b>	5%	3%	2%
<b>Offset Calibration:</b>	Weekly	Weekly	Weekly
<b>Span Calibration:</b>	3 months	12 months	6 months
<b>Sensor Replaceable (by user):</b>	yes	no	yes
<b>Lifetime:</b>	2 years	5 years	2 years

## Continuous Mode Measurements

	<b>C<sub>2</sub>H<sub>4</sub></b>	<b>CO<sub>2</sub></b>	<b>O<sub>2</sub></b>
<b>Sensor Type:</b>	Electrochemical	IR Sensor, Pyroelectric detector	Electrochemical
<b>Range:</b>	0-200 ppm	0-100%	0-100%
<b>Resolution:</b>	0.1 ppm	0.01%	0.10%
<b>Lower Detection Limit:</b>	0.2 ppm	0.01%	0.10%
<b>Response Time:</b>	80 seconds	6 seconds	12 seconds
<b>Accuracy (absolute):</b>	0.2 ppm	0.01%	0.10%
<b>Accuracy (relative):</b>	5%	3%	2%
<b>Offset Calibration:</b>	Weekly	Weekly	Weekly
<b>Span Calibration:</b>	3 months	12 months	6 months
<b>Sensor Replaceable (by user):</b>	yes	no	yes
<b>Lifetime:</b>	2 years	5 years	2 years