

Palacký University Olomouc
Podatelna RUP
Křížkovského 511/8, 771 47 Olomouc
Czech Republic



QUOTATION

Quotation date: July 20th, 2023
Quotation number: KCR-0723-197
Your reference: 068/PV/OVZ/2023

Dear [REDACTED]

Thank you for showing interest in our ethylene equipment. With this we would like to enter the tender: "FoS - LGR/UPOL – Plant hormone ethylene quantification device". Please find below the quotation for the following products:

Item / Description	Qty	Unit price	Amount
ETD-300 Ethylene analyzer <i>detection limit 300 pptv (6σ), incl. Software and transport case</i>	1	€ 29.800,00	€ 29.800,00
Cat-1 catalyzer <i>To provide ethylene free air</i>	1	€ 2,200.00	€ 2,200.00
CO2 and water scrubber tubes set (excl. chemicals)	1	€ 200.00	€ 200.00
PFA tubing 1/8" OD (100M)	1	€ 300.00	€ 300.00
Shipping, installation and training (2 days)	1	€ 2000.00	€ 2000.00
		Total	€ 34,500.00
This quote is without VAT This quote is valid for 3 months Payment conditions 30 days after delivery and invoicing Delivery time: 16 weeks (depending on delivery times of parts) Warranty: 12 months			

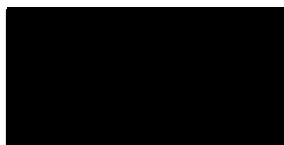
Notes:

- 1 The equipment measures ethylene in the air supplied to it. The supply of air from the samples has to be provided by the buyer.
2. Chemicals needed for the scrubber tubes are not provided.

General delivery and payment conditions apply to all our quotations, agreements and activities as filed at the Chamber of Commerce Centraal Gelderland under number 09135034.

Company & Bank details

ABN-AMRO
SWIFT/BIC
IBAN
CC
V.A.T.

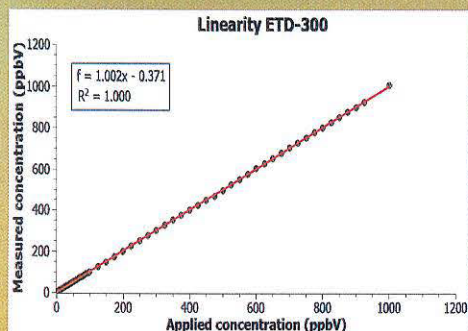
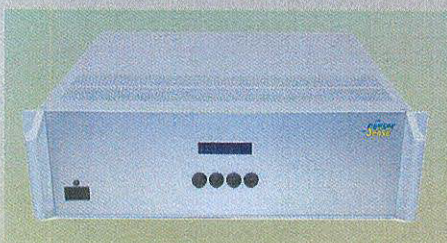


Contact details

Address
Email
Telephone

St. Agnetenweg 103
6545 AV Nijmegen
The Netherlands





Performance Data

Detected Gas	Ethylene (C ₂ H ₄)
Measurement Range	0-200 ppmv
Noise Level (2σ)	0.3 ppbv*
Accuracy	<1% of value or 0.3 ppbv*, whichever is larger
Linearity	better than 1%
Stability	<1% over 24 hours
Zero Drift	+/-1 ppbv
Measurement Time	7 s
Response Time T ₉₀	30 s (with airflow = 1 l/h)
Flow	0.25-5 l/h
Calibration	annually with calibrated gas mixture
Warmup time	< 30 min *1 ppbv for ETD-1000

Technical Characteristics

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

Interface

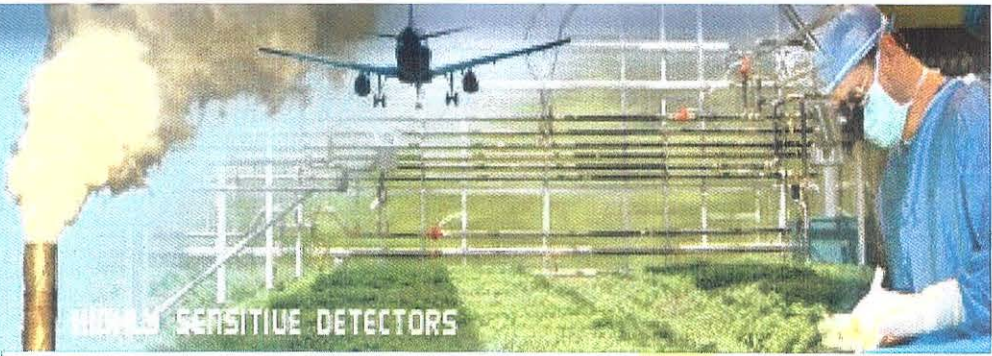
Output	USB
Control	- ETD-logger software Compatible with MS Windows XP or higher Min. 1 GHz, 512 MB RAM - .DLL for integration in other software
Data output	.CSV, compatible with MS Excel, OOo Calc, Microcal Origin etc.
Display	Blue backlight LCD

The ETD-300 can be used in combination with the Sensor Sense valve control box to monitor up to six samples simultaneously. User friendly, versatile software produces ready to publish data.

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

These products can also operate as stand-alone devices.

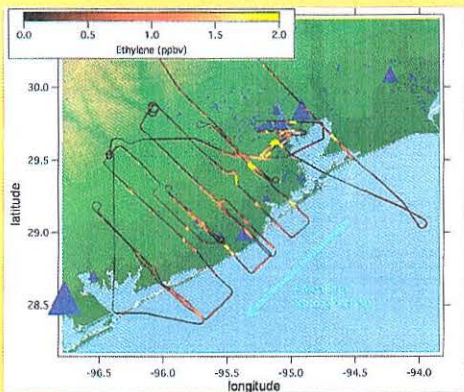
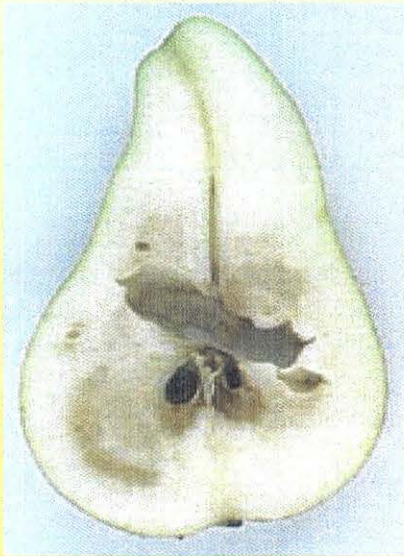
Sensor Sense



Ethylene detector

ETD-300

Detection limit 0.3 ppbv
Time resolution 7 s



Sensor Sense specializes in compact, highly sensitive ethylene detectors. Our user friendly detectors are robust and have a fast response time. This makes them suitable for real-time measurements.

The ETD-300 provides the world-best sensitivity of 0.3 ppbv top-noise level and a time resolution of 7 seconds.

Applications

- Environmental
- Medical
- Agriculture
- Industry
- Plant Biology
- Microbiology
- Fruit Storage

Features

- On-line and absolute measurements
- Detection range 0-200 ppmv
- Gas flow rate 0.25-5 l/h
- Operating temperature between 10 and 28 °C
- Low maintenance
- Easy to operate
- Analogue input for logging of external data
- User friendly software included



Catalyzer

Provides hydrocarbon-free air for experiments



To make full use of the possibilities of our detectors, Sensor Sense has developed a number of peripherals that make setting up experiments easy.

The catalyzer provides you with hydrocarbon-free air to perform experiments. It consists of containers filled with platinum granules that catalyse the oxidation of hydrocarbons into water vapour and CO₂.

This robust tool is built to be price effective, user friendly and to last for many years when used under atmospheric conditions.

The catalyzer is designed to meet the requirements for the ETD, however, it operates as a stand-alone device and can therefore be used for a broad range of other applications.

Technical Data

Gas	Air
Maximum dilution	100 ppmv
Output dilution	< 100 pptv
Removes	small hydrocarbons and particulate matter
Flow	0-30 l/h
Pressure	0-6 atm
Active Catalyst	Pt/SiO ₂
Catalyst Temperature	150 – 250 °C
Heat up time	< 10 min
Dimensions	40x25x20cm (LxWxH) (3U, half rack)
Operating temperature	5-40 °C
Humidity	0-95 % (non-condensing)
Power input	90-264 VAC, 47-63 Hz
Power Consumption	85 W
Gas input/output	1/8" Swagelok

Sensor Sense B.V.

St. Agnetenweg 103
6545 AV Nijmegen
The Netherlands

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www.sensor-sense.nl