

# PORTABLE TRACE OXYGEN ANALYSER



A COMPACT MICROPROCESSOR BASED ANALYZER OFFERING HIGH ACCURACY, VERSATILITY AND EASE OF USE DESIGNED TO MAKE THE TASK OF TRACE OXYGEN ANALYSIS EASIER, FASTER AND MORE PRECISE THAN EVER BEFORE.



TA 20

Designed with the user in mind, it incorporates high accuracy, fast response, two adjustable alarms, auto diagnostics and a sensor failure alarm, taking the worry and work out of the end-user's hands. Two programmable failsafe concentration alarms (one high and one low setpoint) provide the versatility to satisfy nearly any requirement. . It includes an alpha-numeric digital meter for easy viewing and readout accuracy.

It utilizes a maintenance-free, Micro-fuel Cell and a highly reliable microprocessor based advanced electronic design that assures an outstanding reliability and performance. Power is supplied by rechargeable NiCad batteries, and as an option this unit is available with an integral pump.

The high accuracy and fast response of these units is ideal for measuring oxygen in hydrogen, nitrogen, argon, helium, acetylene, ethylene, butadiene, carbon dioxide & many other gases

## Insta-Recovery, Long Life Maintenance Free Oxygen Sensor

Historically, the recovery period required when changing or air calibrating trace Micro-fuel Cells was anywhere from 6 to 12 hours. The ENDEE SENSOR recovers to below 10 PPM oxygen within a few minutes of sensor installation. The user is assured of outstanding reliability and optimum performance in just a few minutes.

These Micro-fuel Cells are chemical devices with no electrolyte to change making them virtually maintenance free. They are specific to oxygen and are capable of accurately monitoring gas streams.. It is a self powered, diffusion limited, metal-air battery sensor which is not influenced by sample flowrate, or by reducing gases such as hydrogen, carbon monoxide and hydrocarbons.

## Ambient Air Calibration Offers Freedom From Support Gases

The analyser can be accurately & reliably calibrated on atmospheric air and does not require zero or certified gases for calibration and offers the user a distinct advantage in terms of economy.

## Convenient Outputs for Data

A unidirectional RS-232 serial interface is incorporated to relay information to a host computer for remote monitoring of all functions.

## FEATURES

- ALPHANUMERIC DIGITAL DISPLAY
- AIR-CALIBRATION
- TWO ADJUSTABLE CONCENTRATION ALARMS
- FAST RECOVERY MICRO FUEL CELL SENSOR WITH ONE YEAR WARRANTY AND EXPECTED LIFE OF TWO YEARS
- HIGH & ACCURACY & SENSITIVE; FAST RESPONSE
- SENSOR FAILURE ALARM
- AUTO RANGING CAPABILITIES
- UNAFFECTED BY HYDROCARBONS AND OTHER OXIDIZABLE GASES
- LOW BATTERY ALARM
- RS 232 OUTPUT

## SPECIFICATIONS

Diagnostics	Comprehensive self testing function
Ranges	Trace : 0-10, 0-100, 0-1000, 0-10,000, 0-25% ppm
Indication	Alpha numeric Digital LCD Continuous
Principle of Detection	Self Powered Diffusion Limited sealed Electrochemical Sensor
Relative Humidity	0-99% RH Non-condensing
Position Sensitivity	None
Housing	Hi Impact Plastic
Power	6 Volts Rechargeable batteries.
Recommended Sample	0.1 to 10 Litre / Min
Accuracy	±2% of full scale (±1 ppm for 0-10 ppm range) at a constant temperature
Operating temperature	0 to 50 deg.C
Relative Humidity	0-99% RH Non-condensing
Position Sensitivity	None
Response time	90% in 5 to 10 seconds 90% in 60 seconds (0-10 ppm range)
Reproducibility	±1% at constant temperature
Sample inlet/outlet	Quick connects (1/8" or 1/4")
Digital Interface.	RS-232
Alarm Setting	Hi & Very High Adjustable over full range
Approvals	Standard: Intrinsically safe (Class I, Division 1, Groups A, B, C and D) Intrinsically safe for zone1 and 2; hydrogen, ethylene
Weight	1.25 kg
Dimension	175 X 200X65 mm

## APPLICATIONS

- MONITORING INERT GAS BLANKETING
- AIR SEPARATION AND LIQUEFACTION
- CHEMICAL REACTION MONITORING
- SEMICONDUCTOR MANUFACTURING
- PETROCHEMICAL PROCESS CONTROL
- QUALITY ASSURANCE
- GAS ANALYSIS CERTIFICATION

## OPTIONS

- CARRYING CASE
- SPECIAL RANGES
- INTEGRAL SAMPLE PUMP

**The above Parameter and Ranges are only indicative. Endee will build up and supply the analyser with Parameters, range and features to any Practical Configuration.**

Note : Specifications and Features will vary with application. The above are established and validated during design, but are not to be construed as test criteria for every product. Due to endee's commitment to research, design and product improvement, specifications are subject to change without notice.



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