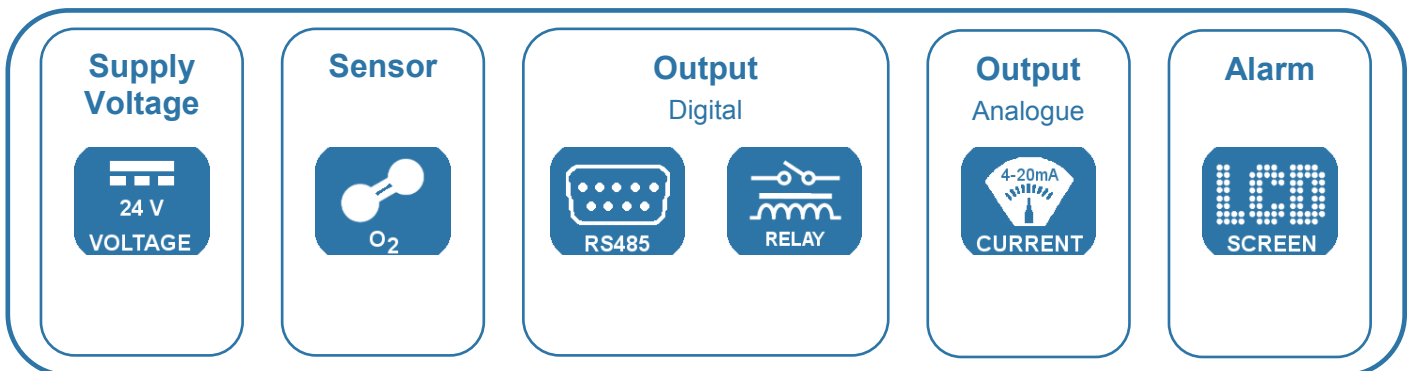


## GASTRACK

### Gas Analyzer Probe (GAP-100)

#### OXYGEN ANALYZER

A compact zirconium-oxide analyzer to measure percentage level (0-25%) oxygen in combustion processes. The probe is manufactured from 316 stainless steel and can handle sample temperatures up to 700°C with an insertion length of 435mm. The sample is extracted to the sensor chamber and returned to the flue via the Pitot effect, so there is no need for instrument air. The analyzer operates without the need for an air reference.



#### FEATURES

- The GAP-100 provides customers with a single gas flue or ventilation monitoring system
- Barometric pressure and temperature sensors included
- RS485 MODBUS RTU as standard
- User configurable relay outputs
- Easy to swap sensor module, no special tools
- Calibrate in fresh air

#### APPLICATIONS

- Combustion control of boilers fuelled by natural gas, light oil, diesel, coal and biomass
- Excess air analysis
- Boiler trim control
- Incineration furnaces
- Power generation
- Combined cycle gas turbines (CCGT)
- Ceramic furnace monitoring

#### TECHNICAL SPECIFICATIONS

##### Performance

<b>Measurement technology</b>	Zirconium Oxide (ZrO <sub>2</sub> )
<b>Gas</b>	Oxygen
<b>Measurement range</b>	0.1—25%
<b>Output resolution</b>	0.01 mA or 0.01% O <sub>2</sub>
<b>Accuracy (0.1-25%)</b>	< 0.25% O <sub>2</sub>
<b>Response time (T90)</b>	< 15 seconds
<b>Repeatability</b>	< 0.25%
<b>Sample Flow Effect</b>	±0.5% of full scale
<b>Sample cell temperature</b>	+700°C (1292°F)
<b>Temperature measurement</b>	Pt100

##### Operating Conditions

<b>Ambient temperature</b>	-20 to +55°C (-4 to +131°F)
<b>Ambient relative humidity</b>	0-95% RH
<b>Background gas</b>	Combustion gas from natural gas, biogas or oil
<b>Sample gas temperature<sup>a</sup></b>	+700°C (1292°F)
<b>Sample pressure</b>	260—1260mbar Absolute

## TECHNICAL SPECIFICATIONS

### Electrical Input / Output

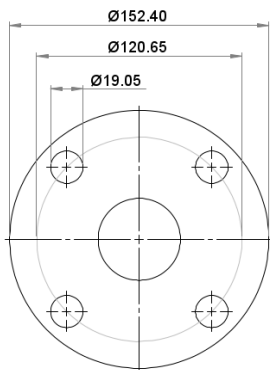
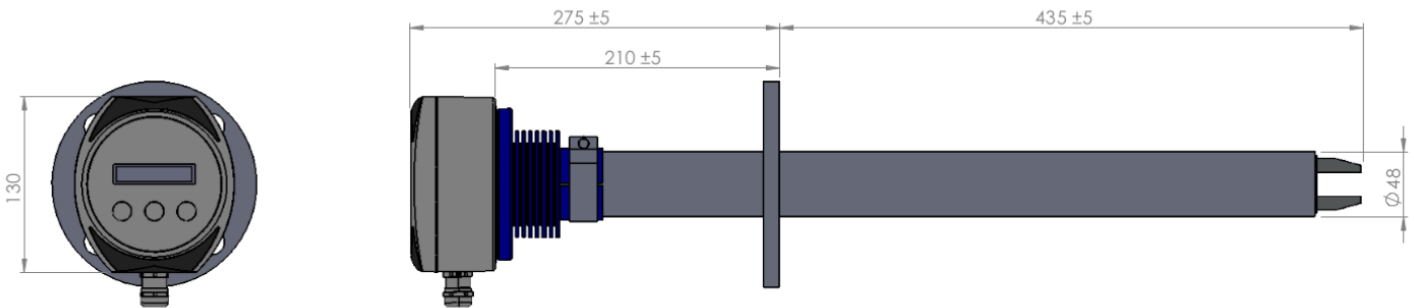
<b>Power supply</b>	24V <sub>DC</sub> , ±10% LPS
<b>Power consumption</b>	700mA maximum @ 24V <sub>DC</sub>
<b>Analog outputs</b>	Single or Dual 4—20mA
<b>Output ranges (oxygen)</b>	0-25% O <sub>2</sub>
<b>Output ranges (temperature)</b>	-50 to +300°C (-58 to +572°F)
<b>Output ranges (pressure)</b>	260—1260mbar (0.017—0.086psia)
<b>Relays (SPST, N/O as std.)</b>	1 x system alarm (SPST) 1 x user configurable alarm
<b>Digital communications</b>	RS485 protocol
<b>Display</b>	16 character, 2-line, backlit

### Mechanical Specifications

<b>Warm up time</b>	< 90seconds
<b>Stabilisation time</b>	< 5minutes
<b>Dimensions</b>	see Outline Dimensions
<b>Weight:</b>	
<b>Head</b>	1.6kg (3.5lbs)
<b>Probe</b>	3.9kg (8.6lbs)
<b>Wetted materials</b>	Stainless steel, Macor®, PTFE, aluminium and platinum
<b>Process connection</b>	2" 150lbs ANSI flange
<b>Ingress protection</b>	IP65
<b>Housing material</b>	Painted aluminium

## OUTLINE DIMENSIONS

All dimensions shown in mm. Tolerances = ±1mm.



#### Flange profile to match ANSI Class 150 lb.

Nominal pipe size	2"
External diameter	152.40 (6.000")
PCD	120.65 (4.750")
Flange thickness	19.05 (0.750")
No. of holes	4
Bolt hole diameter	19.05 (0.750")

**NOTE:** The flange is NOT pressure retaining.

### ORDER INFORMATION

Contact CO2Meter for assistance;  
call (877) 678-4259 or email  
[Sales@CO2Meter.com](mailto:Sales@CO2Meter.com)



#### CAUTION

Do not exceed maximum ratings and ensure sensor(s) are operated in accordance with their requirements. Carefully follow all wiring instructions. Incorrect wiring can cause permanent damage to the device. Do NOT use chemical cleaning agents.

**Failure to comply with these instructions may result in product damage.**

#### INFORMATION

##### Notice Warranty:

The gas analysis probe comes with a (90) days warranty starting from the date the probe was shipped to the buyer.

For more information, visit our website:

[www.co2meter.com/pages/terms-conditions](http://www.co2meter.com/pages/terms-conditions)

For technical assistance or advice, please email:  
[Support@CO2Meter.com](mailto:Support@CO2Meter.com)

**Contact Us:** CO2Meter, Inc. 131 Business Center Drive Ormond Beach, FL 32174 USA