

# PROCESS ANALYZER PA 7.0

for O<sub>2</sub>, CO<sub>2</sub> or O<sub>2</sub>/CO<sub>2</sub>



PA 7.0 S

**Compact analyzer for monitoring protective atmospheres in food packaging and other MAP applications. For continuous analysis (in-line) and also intermittent sampling via needle. A flexible analyzer to guarantee quality and increase productivity.**

### Benefits

- improved touch panel operation
- large illuminated graphic display
- mini SD and mini USB port
  - update firmware updates
  - data transfer via mini USB
- minimal sample gas required for analyzing even the smallest volumes (e.g., food packaging)
- sample measuring results in seconds
- integrated data log of the last 500 measurements
- assignment of measurements to different product names, users and product lines
- multilingual menu guide: German, English, French, Italian, Spanish, Dutch, Swedish, Finish, Polish, Hungarian, Romanian and Turkish (more to come)
- system errors or exceeding of set limits trigger an alarm or potential free contact, e.g., to shut down machinery (only P- and L-version)
- splash-proof, robust housing
- interface for transfer of logged data

### Options

- O<sub>2</sub> measurement also in ppm range
- handle (as pictured)
- separate table printer for instant documentation

### Equipment selection

| Applications | Analysis |                     | Gases          |                 |                                 | Type of equipment          |
|--------------|----------|---------------------|----------------|-----------------|---------------------------------|----------------------------|
|              | Sampling | Continuous Analysis | O <sub>2</sub> | CO <sub>2</sub> | O <sub>2</sub> /CO <sub>2</sub> |                            |
| Food         | •        |                     | •              | •               | •                               | PA 7.0 S <sup>3)</sup>     |
|              |          | •                   | •              | •               | •                               | PA 7.0 L <sup>3)</sup>     |
|              | •        | •                   | •              | •               | •                               | PA 7.0 S+L <sup>2)3)</sup> |
|              |          | •                   | •              | •               | •                               | PA 7.0 P <sup>1)3)</sup>   |

<sup>1)</sup> without pump, with inlet pressure regulation

<sup>2)</sup> with 2 chemical sensors for oxygen

<sup>3)</sup> gases to be specified

All versions also available with zirconia measuring cell for O<sub>2</sub>. Please add Zr to the model type.

### Measuring systems

| Gases                                       | Measuring system        | Measuring range                              | Repeatability | Response time | Service life           |
|---|-------------------------|--|---------------|---------------|------------------------|
| O <sub>2</sub> for sampling                 | chemical measuring cell | 0 – 100%                                     | ± 0.2% abs.   | 6 sec.        | approx. 2 years in air |
| O <sub>2</sub> for continuous analysis      | chemical measuring cell | 0 – 100%                                     | ± 0.2% abs.   | 10 sec.       | approx. 3 years in air |
| O <sub>2</sub> for sampling and continuous  | zirconia measuring cell | 1 ppm – 100%                                 | ± 0.2% rel.   | 4 sec.        | long lifetime          |
| CO <sub>2</sub> for sampling and continuous | infrared measuring cell | 0 – 30%<br>or<br>0 – 100%<br>please indicate | ± 0.5% abs.   | 6 sec.        | long lifetime          |

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|  |  |
|--|--|
| <b>Type</b>  | PA-O <sub>2</sub> ; PA-CO <sub>2</sub> ; PA-O <sub>2</sub> /CO <sub>2</sub>  |
| <b>Finish</b>  |  |
| <b>P-version</b>   | over pressure measurement  |
| <b>L-version</b>   | measurement via lance with pump  |
| <b>S-version</b>   | sample measuring   |
| <b>Gases</b>   | O <sub>2</sub> and/or CO <sub>2</sub> ; balance gas: N <sub>2</sub> , Ar (others on request)<br>not for flammable, corrosive or toxic gases!   |
| <b>Measuring system</b>  | see table  |
| <b>Measuring range O<sub>2</sub>/CO<sub>2</sub><br/>with chemical or infrared<br/>measuring cell</b> | 0 – 100%; in 0.1%-steps  |
| <b>Measuring range O<sub>2</sub><br/>with zirconia measuring cell</b>                                | 1ppm – 0.1%; in ppm steps<br>0.1% – 1%; in 0.001% steps<br>1% – 10%; in 0.01% steps<br>10% – 100%; in 0.1% steps   |
| <b>Sample gas requirement</b>  | O <sub>2</sub> < 3 ml<br>O <sub>2</sub> /CO <sub>2</sub> < 7 ml  |
| <b>Calibration O<sub>2</sub>/CO<sub>2</sub></b>  | simple two point calibration   |
| <b>Withdrawal<br/>sample<br/>continuous</b>  | automatic via needle using integrated pump<br>by pump or pressure regulator (optional)   |
| <b>Temperature (gas/environment)</b>   | 41 – 104°F   |
| <b>Gas connections<br/>sample<br/>continuous</b>   | needle with integrated pump<br>hose connection for ID 4 mm with integrated pump  |
| <b>Inlet pressure<br/>pump<br/>pressure regulator<br/>L-version<br/>S-version</b>                    | max. 4.35 PSIG<br>max. 145 PSIG<br>pressureless<br>pressureless  |
| <b>Alarm contacts</b>  | 2 potential free contacts for min. and max. settings,<br>adjustable for each gas (only P- and L-version)   |
| <b>Interfaces</b>  | RS 232 with ASCII-output of date, time, measured value and<br>system informations (more detailed information on request)<br>analog output 4-20 mA or 0-10 V  |
| <b>Housing</b>   | splash proof   |
| <b>Weight</b>  | approx. 13.23 lb   |
| <b>Dimensions (HxWxD)<br/>with carry handle</b>  | approx. 7.32 x 11.22 x 10.63 inches<br>(without connections)   |
| <b>Voltage</b>   | 90 – 250 V AC, 47 – 63 Hz or 24 V DC   |
| <b>Power consumption</b>   | 230 V AC, 0,07 A   |
| <b>Approvals</b>   | Company certified according to ISO 9001 and ISO 22000<br>CE-marked according to:<br>- EMC 2014/30/EU<br>- Low Voltage Directive 2014/35/EU<br><br>for food-grade gases according to:<br>- Regulation (EC) No 1935/2004<br><br>Cleaned for Oxygen Service according to:<br>- EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems |