

Order form Orderer

Valid from August 2019 Order no.

# GMP251 Carbon Dioxide Probe for % measurements

|                               |                              |   | 1   | 2  | 3   | 4   | 5 | 6 | 7 | 8 |      |
|-------------------------------|------------------------------|---|-----|----|-----|-----|---|---|---|---|------|
| aisa                          | ala CARBOCAP <sup>®</sup> Ca | bon Dioxide Probe GMP251                              |     |    |     |     |   |   |   |   | PRIC |
|                               | Probe type / Analog          |   | A   |    |     |     |   |   |   |   |      |
|                               | Output Scaling               | 010 %with standard filter                             | в   |    |     |     |   |   |   |   |      |
|                               |                              | 05 % with standard filter                             | c   |    |     |     |   |   |   |   |      |
|                               |                              | 02 % with standard filter                             | D   |    |     |     |   |   |   |   |      |
|                               |                              | 03 % with standard filter                             | E   |    |     |     |   |   |   |   |      |
|                               |                              | 020 % with flow-through adapter                       | F   |    |     |     |   |   |   |   |      |
| 2                             | Output mode                  | RS-485 Modbus   |     | 0  |     |     |   |   |   |   |      |
|                               | •                            | RS-485 Vaisala protocol / Indigo™ use                 |     | 1  |     |     |   |   |   |   |      |
|                               |                              | 420 mA*   |     | 2  |     |     |   |   |   |   |      |
|                               |                              | 020 mA*   |     | 3  |     |     |   |   |   |   |      |
|                               |                              | 05 V*   |     | 4  |     |     |   |   |   |   |      |
|                               |                              | 010 V*  |     | 5  |     |     |   |   |   |   |      |
|                               |                              | RS-485 Vaisala protocol 9600 bauds, N, 8, 1           |     | κ  |     |     |   |   |   |   |      |
| 3 Temperature<br>compensation | Temperature                  | Temperature setpoint 25 °C**                          |     |    | Α   |     |   |   |   |   |      |
|                               | compensation                 | Temperature setpoint 37 °C**                          |     |    | в   |     |   |   |   |   |      |
|                               |                              | Active internal compensation***                       |     |    | С   |     |   |   |   |   |      |
| 4                             | Pressure                     | Pressure setpoint 1013 hPa**                          |     |    |     | ່ວ  |   |   |   |   |      |
| 4<br>5                        | compensation                 |   |     |    |     |     |   |   |   |   |      |
| 5                             | Background gas               | Background gas setpoint 0 %O2, 0 %RH**                |     |    |     |     | Α |   |   |   |      |
|                               | compensations                | Background gas setpoint 21 %O2, 50 %RH**              |     |    |     |     | в |   |   |   |      |
|                               |                              | Background gas setpoint 19.7 %O2, 93 %RH**            |     |    |     |     | С |   |   |   |      |
| 6                             | Cable                        | no cable  |     |    |     |     |   | 0 |   |   |      |
|                               |                              | Probe cable with open wires (1.5 m)                   |     |    |     |     |   | 1 |   |   |      |
|                               |                              | Probe cable with open wires and 90 ° plug (0.6 m)     |     |    |     |     |   | 3 |   |   |      |
|                               |                              | Probe cable with open wires (10 m)                    |     |    |     |     |   | 4 |   |   |      |
|                               |                              | Probe cable with open wires (3 m)                     |     |    |     |     |   | 5 |   |   |      |
|                               |                              | Probe cable with open wires and 90° plug (1.5 m)      |     |    |     |     |   | 6 |   |   |      |
|                               |                              | High-temperature cable (+180 °C) with open wires (1 r | m)  |    |     |     |   | 7 |   |   |      |
| 7                             | Mounting                     | no mounting accessories                               |     |    |     |     |   |   | N |   |      |
| 1                             | 5                            | Probe mounting clips (2 pcs)                          |     |    |     |     |   |   | С |   |      |
|                               |                              | Probe mounting flange                                 |     |    |     |     |   |   | F |   |      |
| 8                             | Package                      | Single package  |     |    |     |     |   |   |   | 1 |      |
|                               | -                            | 10 piece multi-package (to use this, order must conta | ain | 10 | uni | ts) |   |   |   | 2 |      |

Selections in bold are included in the prices of the basic version.

Selections in italic are available at an extra price.

\*) Analog output mode requires grounding of pin 5 (connecting pin 3 and pin 5 together)
 \*\*) Compensation setpoint values can be updated via RS485 communications
 \*\*\*) Uses the probe internal temperature sensing, accuracy limited to ±3 °C in typical installation conditions

Examples of order codes with typical settings:

| Examples of order codes with                             | typical settings. |          |   |          |   |          |          |   |          |
|--|-------------------|----------|---|----------|---|----------|----------|---|----------|
|  |                   | <u> </u> |   | <u> </u> |   | <u> </u> | <u> </u> | 7 | <u> </u> |
| Standard CO <sub>2</sub> Probe for incubator application | GMP251            | Α        | 2 | В        | 0 | С        | 1        | Ν | 1        |
| -  |                   |          |   |          |   |          |          |   |          |

### End customer:

| <u>Accessories</u><br>Standard membrane filter<br>Porous sintered PTFE filter, extra protection            | <u>Item code</u><br>ASM211650SP<br>DRW243649SP |
|--|--|
| Flow-through adapter with gas ports<br>Probe cable with open wires (1.5 m)                                 | ASM211697SP<br>223263SP                        |
| Probe cable with open wires (3 m)  | 26719SP  |
| Probe cable with open wires (10 m)   | 216546SP                                       |
| Probe cable with open wires and $90^{\circ}$ plug (0.6 m)  | 244669SP                                       |
| Probe cable with open wires and 90° plug (1.5 m)<br>High-temperature cable (+180 °C) with open wires (1 m) | 255102<br>CBL210780-1MSP                       |
| Probe mounting clips (2 pcs)   | 243257SP                                       |
| Probe mounting flange  | 243261SP                                       |
| USB cable for PC connection  | 242659<br>CBL210472                            |
| MI70 connection cable for probe<br>Flat cable for GMP250 probes, M12-5pin                                  | CBL210472<br>CBL210493SP                       |
| Calibration adapter  | DRW244827SP                                    |



## GMP251 Carbon Dioxide Probe for % measurements For Indigo™ Transmitter

| <u>sala CARBOCAP<sup>®</sup> Carb</u> | on Dioxide Probe GM                            | P251     |       |      |       |    |   |   |   | PRI |
|---------------------------------------|--|----------|-------|------|-------|----|---|---|---|-----|
| 1 Probe type / Analog                 | 020 %with standard filter                      | Α        |       |      |       |    |   |   |   |     |
| Output Scaling                        | 010 %with standard filter                      | в        |       |      |       |    |   |   |   |     |
|                                       | 05 % with standard filter                      | С        |       |      |       |    |   |   |   |     |
| Indigo transmitter                    | 02 % with standard filter                      | D        |       |      |       |    |   |   |   |     |
| automatically use this                | 03 % with standard filter                      | E        |       |      |       |    |   |   |   |     |
| scale on its outputs                  | 020 % with flow-through adapter                | F        |       |      |       |    |   |   |   |     |
| 2 Output mode                         | Indigo™ use                                    |          | 1     |      |       |    |   |   |   |     |
| 3 Temperature                         | Temperature setpoint 25 °C                     |          |       | Ā    |       |    |   |   |   |     |
| compensation                          | Temperature setpoint 37 °C                     |          |       | в    |       |    |   |   |   |     |
| -                                     | Active internal compensation*                  |          |       | С    |       |    |   |   |   |     |
| 4 Pressure                            | Pressure setpoint 1013 hPa                     |          |       |      | 0     |    |   |   |   |     |
| compensation                          |  |          |       |      |       |    |   |   |   |     |
| 5 Background gas                      | Background gas setpoint 0 %O2, 0 %RH           |          |       |      |       | A  |   |   |   |     |
| compensations                         | Background gas setpoint 21 %O2, 50 %RH         |          |       |      |       | в  |   |   |   |     |
|                                       | Background gas setpoint 19.7 %O2, 93 %RH       |          |       |      |       | С  |   |   |   |     |
| 6 Cable                               | no cable                                       |          |       |      |       |    | 0 |   |   |     |
| 7 Mounting                            | no mounting accessories                        |          |       |      |       |    |   | N |   |     |
| 8 Package                             | Single package                                 |          |       |      |       |    |   |   | 1 |     |
|                                       | 10 piece multi-package (to use this, order mus | st conta | ain ' | 10 i | inite | s) |   |   | 2 |     |

Selections in bold are included in the prices of the basic ve

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\*) Uses the probe internal temperature sensing, accuracy limited to ±3 °C in typical installation conditions

Examples of order codes with typical settings:

 1
 2
 3
 4
 5
 6
 7
 8

 GMP251 with typical settings
 GMP251
 A
 1
 A
 0
 B
 0
 N
 1

End customer:

### Accessories

Probe connection cable for Indigo<sup>™</sup>, 1 m Probe connection cable for Indigo<sup>™</sup>, 3 m Probe connection cable for Indigo<sup>™</sup>, 5 m Probe connection cable for Indigo<sup>™</sup>, 10 m Standard membrane filter Porous sintered PTFE filter, extra protection Flow-through adapter with gas ports Probe mounting clips (2 pcs) Probe mounting flange USB cable for PC connection MI70 connection cable for probe Flat cable for GMP250 probes, M12-5pin Calibration adapter

#### Item code

INDIGOCABLE1M INDIGOCABLE3M INDIGOCABLE5M INDIGOCABLE10M ASM211650SP DRW243649SP ASM211697SP 243257SP 243261SP 243261SP 2432659 CBL210472 CBL210493SP DRW244827SP