VAISALA

QUICK REFERENCE GUIDE



Field Check Adapter 26150GM



- Tool for easy field checking
- Compatible with Vaisala CARBOCAP® Carbon Dioxide Probes Series GMP220

FIELD CHECK OF CARBON DIOXIDE TRANSMITTERS

The performance of the Vaisala CARBOCAP® Carbon Dioxide Probes Series GMP220 can be checked on site using a reference gas. A field check ensures the probe is functioning and within its accuracy specification.

The field check adapter for Vaisala CARBOCAP® Carbon Dioxide Probes Series GMP220 can be used as

- a chamber for feeding in reference gas in a field checking of the probes
- a chamber for pump aspirated sampling system

NOTE A field comparison can only check the performance of the transmitter. For accurate calibration and adjustment, the probe or transmitter should be returned to Vaisala Service Center.



Field Checking in Progress

REQUIRED EQUIPMENT FOR FIELD CHECKING

- Accurate reference gas. Basically any concentration within the measurement range will do. If available, a good choice is one close to the normal measurement concentration.
- A pressure regulator for reducing the pressure of the calibration gas.
- A flow meter to adjust the gas flow.
- Tubing with 3mm (1/8") inner diameter (for example neoprene tubing, part no. 18229. (Teflon tube NOT recommended).
- The field check adapter (part no. 26150GM).

IMPORTANT – READ BEFORE USE

- Push the probe into the adapter deep enough, so that none of the diffusion holes are outside the adapter chamber.
- Minimize the excess space inside the chamber by pushing the probe well inside the chamber (this is especially important if using the field check adapter with inadequate gas flows of below 0.4 l/min).
- When using the shorter probe (GMP221) with the Field Check Adapter, insert the adapter on the probe so that the o-ring inside the adapter is not on the sticker of the probe. If the adapter is placed on the sticker, the seam between the probe and the adapter will let the gas leak from the chamber.



The Field Check Adapter and a GMP220 Series Probe



FIELD CHECK INSTRUCTIONS

- 1. Attach the adapter to the probe of your GMT220 series transmitter or GMM220 series module. The adapter fits both the probe sizes available (GMP221 and GMP222) and can be attached to a probe on a transmitter as well as one attached to a cable. Push the adapter up the probe. Connect tubing to the bottom port of the adapter.
- 2. Connect the adapter with the tubing to the flow meter, the pressure regulator, and further to the reference gas bottle. Leave the other port of the adapter open for gas outflow.

Flow meter Pressure regulator

116.1 mm 98.0 mm ⊗ 4.60 mm ⊗ 26.0 mm

Dimensions of the Field Check Adapter

DIMENSIONS

VAISALA CONTACT INFORMATION

For technical questions, contact the Vaisala technical support by e-mail at **helpdesk@vaisala.com**. Provide at least the following supporting information:

- Name and model of the product in question
- Serial number of the product
- Name and location of the installation site
- Name and contact information of a technically competent person who can provide further information on the problem.

If the product must be returned for service, see **www.vaisala.com/returns**.

For contact information of Vaisala Service Centers, see **www.vaisala.com/servicecenters**.

For warranty information, see **www.vaisala.com/warranty**.

| NOTE | This manual does not create any legally |
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| | binding obligations for Vaisala towards the |
| | customer or end user. All legally binding |
| | commitments and agreements are included |
| | exclusively in the applicable supply contract |
| | or Conditions of Sale. |

Field Checking Setup for GMT220 and GMM220 Series

- **3.** Let the reference gas flow through the pressure regulator and the flow meter to the adapter. The recommended flow rate is 0.6 l/min. Let the transmitter stabilize for 5 minutes.
- 4. Check the reading on the display (if you have GMT220 with display option) or the analog output. If the difference between the reading and the reference gas concentration after pressure and temperature correction is more than the accuracy and long-term stability specifications allow, detach the probe and send it to Vaisala for adjustment.