

EM7000 - Communication Board for Gas Sensor Evaluation Modules

Features:

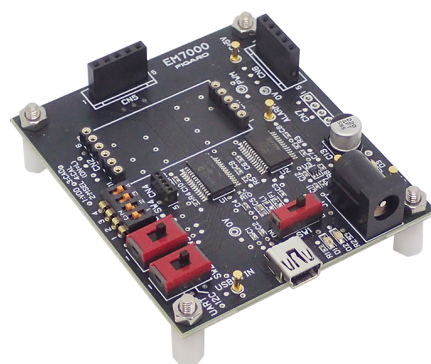
- * Communication interface for transferring output signals from Figaro sensor evaluation modules to an external PC
- * PC application software for importing and saving gas measurement data on a PC
- * Real-time graphic display of gas concentration or output voltage of the gas sensors on a PC monitor
- * Easy control of gas measurement operations through the control panel on a PC monitor

Description:

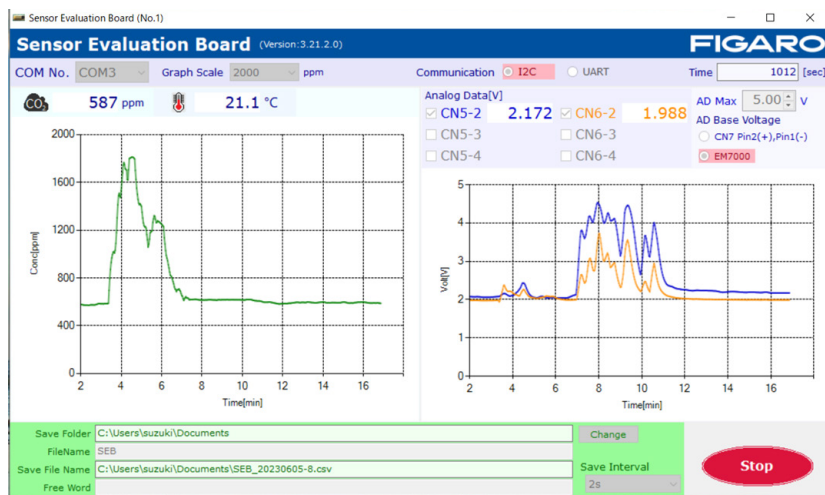
The **EM7000** communication board is designed to transfer output from EM series sensor evaluation modules to an external computer for facilitating evaluation of the characteristics of various Figaro gas sensors. Equipped with a USB connector to transfer output data from the EM series evaluation modules to a PC via serial communication, an output terminal for gas concentration data in PWM format from the CDM series CO₂ sensor, and a terminal for voltage output converted from PWM output, this communication board allows for a quick and easy start to evaluate the characteristics of Figaro gas sensors.

Once the PC application software is installed on an external PC, it allows for the transfer of measurement data in serial format to the PC and the graphic display of output data on the PC monitor. Measurement data can be imported and saved in CSV format on the PC using the application software and then utilized for data processing and analysis after gas measurements using other software, such as Microsoft Excel (Note 3).

The communication board includes a USB memory stick containing PC application software and a Mini-B USB cable. Please note that Figaro gas sensors or EM series evaluation modules are not included, but can be purchased separately depending on evaluation needs.



PC Application Software:



Operating System	Japanese and English language version Windows® 10 (Note 3)
Graphic display of measured data	0 - 5,000ppm for CO ₂ sensor modules 0 - 5V for other gas sensors and evaluation modules (according to the specifications of each EM series modules)
Data file format	CSV
Data saving interval	2, 30, 60 sec., 6, 10, 30, or 60 min.
Data file capacity	Measurement data for up to approx. 24 hours per each file

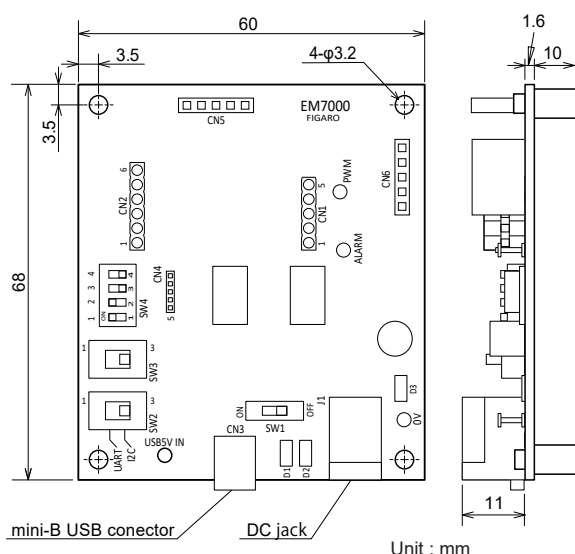
- * Downloading the Measurement Data Management Software
Download a set of the PC Application software for EM7000 from the following website of Figaro Engineering Inc. onto a PC.

<https://www.figaro.co.jp/en/product/entry/em7000.html>

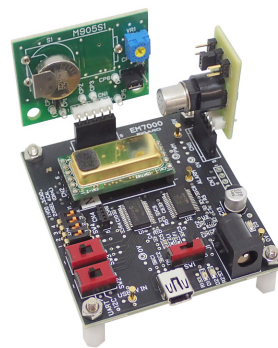
Specifications:

Product Name	Communication Board for Gas Sensor Evaluation Modules
Model No.	EM7000
Compatible evaluation modules and sensors	EM series evaluation modules, CDM7162 (Note 2)
Power Supply	via USB Connector or 5.0V DC
Serial Output	0~65,535ppm CO ₂ sensors Output varies according to specifications of EM series evaluation modules other than CO ₂ sensor. (Note 2)
PWM Output	0 – 100% duty cycle for 0 - 5000ppm for CO ₂ sensors only
Voltage Output	0 - 5VDC for 0 - 5000ppm for CO ₂ sensor module Output varies according to specifications of EM series evaluation modules.
Alarm Output	CMOS output for CO ₂ sensors only (High: @CO ₂ conc. > 1000ppm Low: @CO ₂ conc. < 900ppm) (Note 2)
Operating Conditions	0~50°C/0~95%RH (no condensation) excl. CDM7162 (Note 2)
Dimensions	approx. 60 x 68 mm Height includes spacers, excluding protruding parts.
Standard Accessories	1 pce. mini-B USB cable

Dimensions:



Example of the communication board fitted with an evaluation board and a CO₂ sensor:



*Gas sensors, CO₂ sensors, and EM series evaluation modules are available for purchase from Figaro Engineering.

Note 1) For the evaluation of the CO₂ sensor module CDM7162, please solder terminal pins available in the marketplace to the CDM7162 to attach it to the communication board.

Note 2) Please refer to the Product Information of each gas sensors and EM series evaluation modules for specification details.

Note 3) Windows and Excel are registered trademarks of Microsoft Corporation in the United States.