

[Home](#) » [Products](#) » [Indoor air quality](#) » [Siro](#)

## SIRO

### Multifunctional indoor air quality transmitters for building automation systems

Siro is an indoor air quality transmitter with a modern design. The transmitter is available with several optional air quality sensors. The modular device can be equipped with CO2 concentration and VOC (Volatile Organic Compounds) measurements or alternatively PM (Particulate Matter) measurement and in addition temperature and humidity measurements. It offers easy installation and adjustment, several different model options and various output signals that are configurable separately for each measurement parameter. The Siro series devices are available with user interface that includes LCD display and buttons making the configuration of the device quick and easy. An external configuration tool is available for devices without user interface. Siro utilizes the industry standard NDIR measurement principle with self-calibrating ABC logic™ for CO2 measurement.

**Siro series devices include:**

- Several options for indoor air quality measurements (CO<sub>2</sub>, VOC, PM, rH, T).
- Field configurable outputs for selected measurements.
- Proportional output options including voltage (0–10 V, 0–5 V, 2–10 V) and optional current (4–20 mA).
- Offset feature enabling field calibration for each measurement parameter (CO<sub>2</sub>, VOC, PM, rH, T).
- Optional LCD-display and buttons.



## TECHNICAL DETAILS

Accuracy:	CO <sub>2</sub> : ±33 ppm + 3 % of reading (typical), additional ±60 ppm for first weeks Relative humidity: ±2.4 % rH (typical at 20 °C, 30 % rH) Temperature: ±0.5 °C (typical at 20 °C) VOC: ±15 % of reading (typical)
	PM: 0...100 µg/m <sup>3</sup> : PM2.5: ±15 µg/m <sup>3</sup> (at 25 °C ±5 °C) PM1/PM10*: ±15 µg/m <sup>3</sup> (at 25 °C ±5 °C) 100...1000 µg/m <sup>3</sup> : PM2.5: ±15 % (at 25 °C ±5 °C) PM1/PM10*: ±15 % (at 25 °C ±5 °C) *PM1 and PM10 values are calculated from PM2.5 measurement reading with the default particle distribution.
Measuring elements:	CO2: Non-dispersive infrared (NDIR) VOC: Complementary Metal Oxide Semiconductor (CMOS) PM: Laser-based light scattering particle sensing Temperature: Integrated to CMOS Relative humidity: Thermoset polymer capacitive sensing element
Measuring units:	CO <sub>2</sub> : ppm Relative humidity: % rH Temperature: °C VOC CO <sub>2</sub> eq: ppm TVOC: ppm, µg/m <sup>3</sup> PM1/2.5/10: µg/m <sup>3</sup>
Calibration (CO <sub>2</sub> ):	Automatic self-calibration, ABC Logic™
Supply voltage:	24 VDC/VAC ±10 %
Output signal 1–4:	0...10 V (optional 2...10 V / 0...5 V, display or configuration tool required) optional 4...20 mA linear to selected measurement (CO <sub>2</sub> , VOC, PM, rH or Temp)
Operating temperature:	0...50 °C
Protection standard:	IP20

## SIRO

Example Siro-CO2-T-D	Product series						
	Siro	Indoor air quality transmitter					
		CO <sub>2</sub> sensor					
	-CO2	With CO <sub>2</sub> sensor (option not available with PM sensor)					
		Without CO <sub>2</sub> sensor					
		VOC sensor					
	-VOC	With VOC sensor (option not available with PM sensor)					
		Without VOC sensor					
		PM sensor					
	-PM	With PM sensor (option not available with CO <sub>2</sub> and VOC sensors)					
		Without PM sensor					
		Relative humidity sensor					
	-rH	With relative humidity sensor					
		Without relative humidity sensor (option not available with VOC sensor)					
		Temperature sensor					
	-T	With temperature sensor					
		Without temperature sensor (option not available with VOC or rH sensor)					
		Output					
		Voltage output					
	-A	Voltage and current output					
		Display					
		-D With display					
		Without display					
Model	Siro	-CO2				-T	-D

### Other Indoor air quality:

CMT

Siro-MOD

## HK INSTRUMENTS

USER-FRIENDLY MEASURING DEVICES



**HK INSTRUMENTS**

Keihästie 7  
FIN-40950 MUURAME  
FINLAND  
Phone. +358 14 337 2000  
Fax. +358 14 337 2020  
Email: [info@hkstruments.fi](mailto:info@hkstruments.fi)

### Contact



SEND