

Data Logger for Indoor Air Quality

DK-Klima



CO₂ Data Logger DK-Klima-Log

CO₂, Humidity, Temperature and Barometric Pressure



DK-Kilma - Data Logger for CO₂, humidity, temperature and barometric pressure

The DK-Klima was developed from our indoor air monitors which use a traffic light style indication. In addition to these easy and convenient LED indicators, the DK-Klima comes with an internal memory for simultaneous recording of CO₂, temperature, relative humidity and barometric pressure.

IAQ and ventilation monitoring

Since the beginning of global Corona pandemic, closed rooms are required to be effectively supplied with fresh air in order to reduce risk of infection indoors. Recent studies show that aerosols carrying viral load are the most common way of infection. Tiny aerosols are emitted by coughing, sneezing, talking and even breathing normally. CO₂ is also breathed out by humans and is thus often used as an easy to measure surrogate for indoor pollutants.

IAQ monitors measuring CO₂ can therefore help detect inadequate ventilation, e. g. in class rooms or day-care facilities, and decrease the risk of infection.

The DK-Klima visualises indoor air quality by its traffic light style LED indicators and displays all measurement parameters on the large LCD. Document, verify and improve your ventilation measures with data recorded with the DK-Klima.

CO₂ also causes impaired cognitive performance and energy

Increased levels of carbon dioxide are known to impair cognitive performance and energy levels in humans thus reducing the ability to concentrate and productivity. This is also true for uneasy temperature and humidity conditions, which can also be measured and recorded with the DK-Klima.

It helps establish adequate and need-based ventilation in day-care facilities, schools, universities and in the workplace.

Features

Traffic light style LED indicators (adjustable thresholds)
Maintenance-free NDIR CO ₂ sensor
Long lifespan and excellent long-term stability
Audible alarm (enable/disable using InfraLog)
Free software InfraLog Basic
Battery operation or USB power supply operation
Pressure-compensated precision CO ₂ measurements
Optional: wall holder, laptop lock, certificate of calibration, software upgrades with charts and reports



Lack of concentration and fatigue caused by high levels of CO₂

Thresholds

Indoor CO₂ levels below 1000 ppm are generally considered to indicate good air quality. Germany's Federal Environmental Agency recommends ventilation measures in offices or class rooms once CO₂ levels exceed 1000 ppm.

While indoor air monitors are being used to monitor CO₂ levels in real time, the DK-Klima also provides reliable recordings which can be used to verify or document health and safety measures, and contribute to scientific studies.

Fields of Application

Schools
Day-care facilities
Conference rooms
Work stations
Residential buildings
Waiting rooms
Restaurants
Factory buildings
Green houses
Ripening processes in food

Traffic Light Style



Red: CO₂ levels exceeding 1500/2000 ppm* require immediate supply of fresh air. Thresholds can be adjusted using InfraLog.

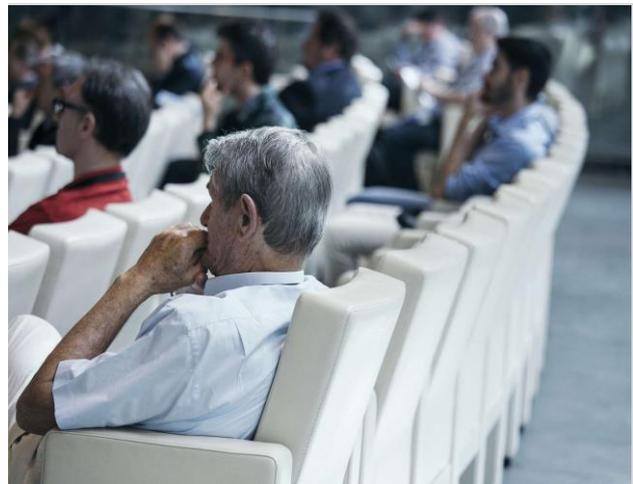


Amber: Above 1000 ppm there is a higher risk of infection, ventilation should be commenced.



Green: CO₂ concentration below 1000 ppm indicates hygienically sufficient ventilation.

*Germany's Federal Environment Agency defines CO₂ levels between 1000 and 2000 ppm in indoor air as problematic and recommends an increase in ventilation. Concentrations above 2000 ppm are considered unacceptable and require immediate remedial measures.



Software InfraLog for Windows V5 for the DK-Klima

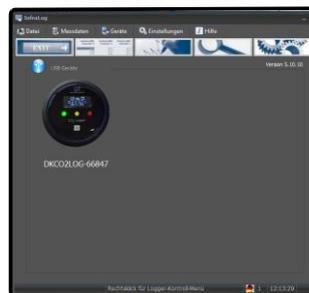
Easy - Reliable - Convenient

Easily, reliably and conveniently configure and control all of data loggers with our InfraLog software. InfraLog automatically detects connected devices and can be run on all recent Windows based computers such as PCs, notebooks or tablets.

The DK-Klima benefits from a broad range of features already included in InfraLog Basic: configuration, start / stop, data download, saving real-time readings and export for Excel.

InfraLog Basic is included in delivery (free download), but you can also upgrade to InfraLog Light (graphic charts) or InfraLog Enhanced (includes daily/weekly/monthly/annual reports) both of which offer advanced features.

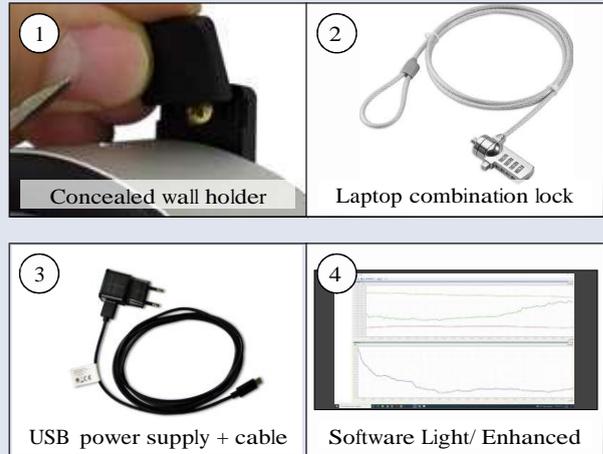
InfraLog updates are provided on our website and can be downloaded free of charge.



Order Codes

Model	Order No.
DK-Klimaor CO ₂ , humidity, temperature and barometric pressure	DKLL1010
Concealed wall holder	DKLZ0010
Laptop combination lock	DKLZ0020
USB power supply with 1.8 m cable	DKLMLZ0030
Software InfraLog Light	InfraLog00040
Software InfraLog Enhanced	InfraLog00050

Optional Accessories



Specifications

DK-Klima (integrate sensors)	Measuring Range	Resolution	Accuracy
CO ₂	0...5000 0...10000 ppm (optional)	1 ppm	±30 ppm + 3% of reading ±5% of reading
Relative Humidity	0...100% RH (non-condensing)	0.01% RH	±2.5% RH <80% RH / ±3%RH >80% RH
Temperature	0...50°C	0.01 K	±0.3°C
Barometric Pressure	70...1300 hPa	0.1 hPa	±2 hPa

Long-term stability: 15 years thanks to self-correcting algorithm

Dimensions: D=120, H=40 mm

Thresholds:
By default amber > 1000 ppm, red > 1500 ppm
Both can be adjusted using InfraLog

Audible Alarm: Internal buzzer, triggers at red level (disengageable)

LED indicators: green: flashes every 5 seconds
amber: flashes every 2 seconds
red: flashes every second

LEDs are permanently lit when powered by USB wall adapter

Power Supply:
Included in delivery

Battery life expectancy

Data Logging:

Interval
Memory capacity
Software

3x type AA alkaline batteries, internal battery compartment, table stand
ca. 6-12 months (with LCD switched off)

1 minute ... 24 hours
4 million readings
InfraLog V5 Basic (included)

InfraLog V5 Light with comprehensive graphic charts (optional)

InfraLog V5 Enhanced with additional statistics (optional)