SYNAP IoT

CONNECTED & COMPLIANT

ROOMGUARD CO_2

AUTOMATIC DOCUMENTATION & MONITORING

COMPLIANCE MADE AND MANUFACTURED IN DENMARK

ROOMGUARD CO_2

The Danish manufactured RoomGuard CO_2 temperature logger documents CO_2, temperatures, humidity and air pressure in the measuring range very accurately and has been specially developed for monitoring clean rooms, storage and manufacturing areas in pharmaceutical, hospitals, pharmacies and the food industry.

The sensor is mounted on the wall, the external sensor and power supply are connected, and the device automatically goes online with a cellular connection.

You can access all telemetry at any time through the SYNAP IoT portal. Cloud automatically generates audit reports that contain all data and events and meet all relevant requirements.

Multiple notification levels and cumulative alarms are individually and easily managed in the portal. High-precision Sensors measures parameters every minute regardless of the individually selected logging interval. Thanks to edge computing, it is immediately determined if there is an irregularity. Within one minute, a notification is sent by mail as a warning or alarm.

The yearly Calibration is included in the subscription and done on-site with SYNAP IoT's patent pending automated calibration solution.

+ PORTAL.SYNAPIOT.COM

SYNAP IoT

+PLUG & PLAY

+CELLULAR

+FDA COMPLIANT

+ALL DATA

+ONE REPORT

+ALL INCLUSIVE

+ONE PRICE

+ONE PORTAL

+REAL-TIME

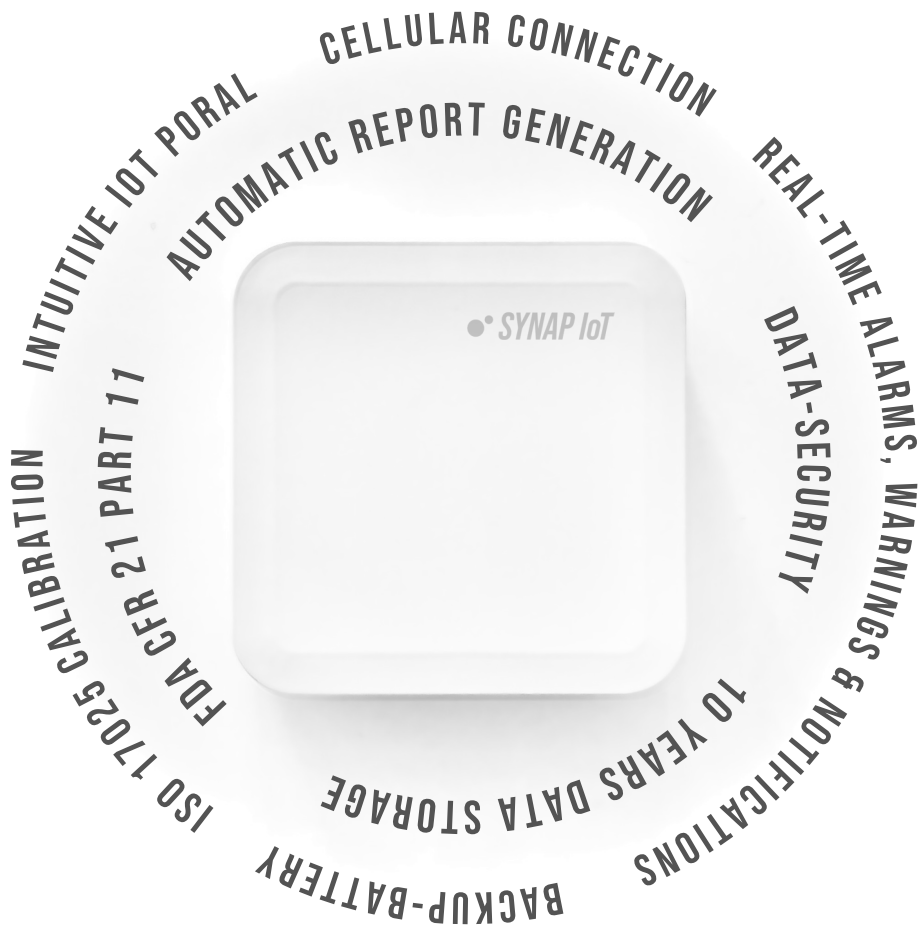
+WARNINGS

+ALERTS

+NEXT GENERATION

SYNAP IoT

COMPLIANCE 4.0



ROOMGUARD CO_2

+ONE REPORT
+ONE PORTAL
+ONE PRICE
+ONE IOT-BOX
+ONE SOLUTION

+ALWAYS CONNECTED

In a few seconds, the system automatically connects to the Internet via cellular (4G, LTE, 3G, 2G, EDGE and NB-IoT). All SYNAP IoT products work immediately in 180 countries at no extra charge.

+REPORT GENERATION

The captured data is available as a ready-to-use compliance report in the portal and can be sent automatically as an email or made available on a cloud storage of your choice.

+REAL-TIME ALERTS

Notifications of deviations from the set values are sent via email within one minute.

+TRANSPARENT PRICE

One transparent price. No hidden costs or setup fee. Available on a monthly or annual subscription basis.

+BACKUP BATTERY

All SYNAP IoT products are equipped with a backup battery. If the AC power is lost, logging continues to ensure no data is lost.

+INTUITIVE PORTAL

The telemetry from multiple sites can be easily compared and monitored in near-real time by using the intuitive portal. You can easily add an unlimited number of different hierarchical user groups, with various levels of privileges.

+EASY INSTALLATION

The SYNAP IoT device is installed in less that 5 minutes with no technical skills required. Plug in the temperature probe and the power cable and that is it. The user does not require any special training or skills.

+RE-CALIBRATION

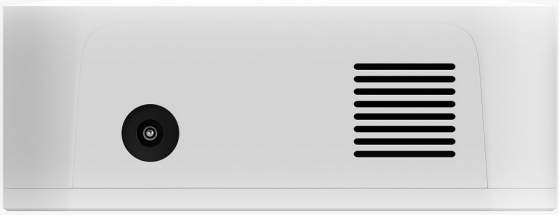
The yearly Calibration is included in the subscription and done on-site with SYNAP IoT's patent pending automated calibration solution

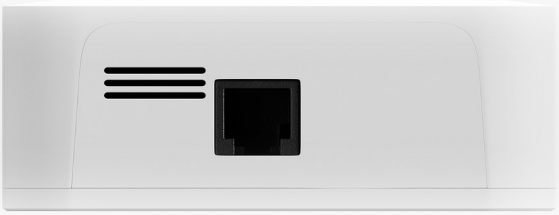
SYNAP IoT

ROOMGUARD CO_2 SPECIFICATIONS

Dimensions	10cm x 10cm x 4cm
Weight	155g
Enclosure material (IP Rating)	ABS (IP30)
Operating Temperature (Box)	5°C to 65°C
External Probe (T, CO_2)	PT-100, SCD30 (NDIR-Technology)
Cable	PVC-cable (4mm / 200cm)
Mounting of probe	Wall-mounted
Monitoring Area (T, RH, Air, CO_2)	-5°C to +50°C, 0–80% RH, 900-1100 mb, 400–10.000 ppm
Accuracy (T, RH, Air, CO_2)	± 0.1°C, ± 3%, ± 0.25%, ±30 ppm, ±3%MV
Factory Calibrated (T)	Yes
Yearly Re-Calibration (T)	Optional
Resolution	0,00000001
Response time (T63%)	< 30 Seconds
Logging Parameters	Temperature, Humidity, Air-Pressure
Logger Interval	Adjustable (5 to 60 minutes)
Power Supply	110V / 230V (AC)
Backup Battery	6 Hours
Data Connection	4G / LTE / 3G / 2G / EDGE / NB-IoT
Alarms & Warnings	Individual corridors, multiple levels and threshold values
Notifications	Mail within 1 minute after deviation
Standards	FDA CFR 21 Part 11 / EMA / WHO / GxP (GMP & GDP)
Data Access	Browser based portal / Open API
Data Format	Online access / PDF / Microsoft Excel / CSV
Data Center	Microsoft
Included in the box	The Box, External Probe, Power Supply, Mounting Kit

[1] SYNAP IoT qualifies its sensors to work properly within ambient clean air. Qualification for use in harsh environment is the duty of the user of the sensor. Exposure to volatile organic compounds, acids or bases, etching substances such as H_2O_2, NH_3, shall be avoided. [2] 95 % of the sensors measure within these typical limits in equilibrium state at time of delivery. For evaluation of the total measurement error hysteresis and long-term drift must be taken into account.[3] Product specifications are subject to change without prior notice.





INSTALLATION & SETUP

The installation itself is intuitive, the external sensor and power supply are connected, and the device automatically goes online with a cellular connection. Alternatively, if a cellular connection (4G, 3G, 2G, EDGE, NB-IoT) is not possible, a dedicated Wi-Fi network can be selected.
Finally, parameters for alerts and alarms are set in multiple levels in the portal. Any number of users can also be created, and unlimited recipients assigned to notifications.

+AUTOMATIC REPORT GENERATION

The SYNAP IoT Cloud solution automatically generates compliance and audit reports that include all data and events and meet all relevant compliance requirements. All data can be monitored through the intuitive cloud portal, where data is analysed, aggregated and stored securely for 10 years. SYNAP IoT helps digitize and automate the entire logging and compliance process. Automatic capture of telemetry, as well as automatic report generation means increased quality and significant time savings.

+ALARMS & WARNINGS

Multiple levels of notifications and cumulative alerts are individually and easily managed in the portal. The sensor system measures parameters every minute regardless of the individually selected logging interval. Thanks to edge computing, it is immediately determined that an irregularity has occurred. Within one minute, a notification is sent by mail as a warning or alarm.

SYNAP IoT uses two different notification levels for irregularities:

WARNING: A warning is sent before something goes wrong and before the point is reached to document an event. This means that you will receive a warning that you can respond to in order to correct an error before an alarm is triggered. Only alarms are documented in the device's audit log.

ALARM: An alarm is triggered when a threshold, set by the compliance department for example, is reached. If an alarm is triggered, this means that you must document what happened and what you are doing to prevent this from happening in the future, according to the FDA. This information is recorded in the audit log of the report.

+SECURITY THANKS TO TECHNOLOGY

Minute-by-minute measurement, edge computing, machine learning, AI and two-way cellular communication enable various intelligent alert and alarm levels in real time, allowing the right people to be informed immediately. SYNAP IoT provides the highest level of data security and uses authentication throughout the login process. A transparent audit trail is always available. Telemetry is transmitted encrypted and stored securely in geo-redundant Microsoft data centres.

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