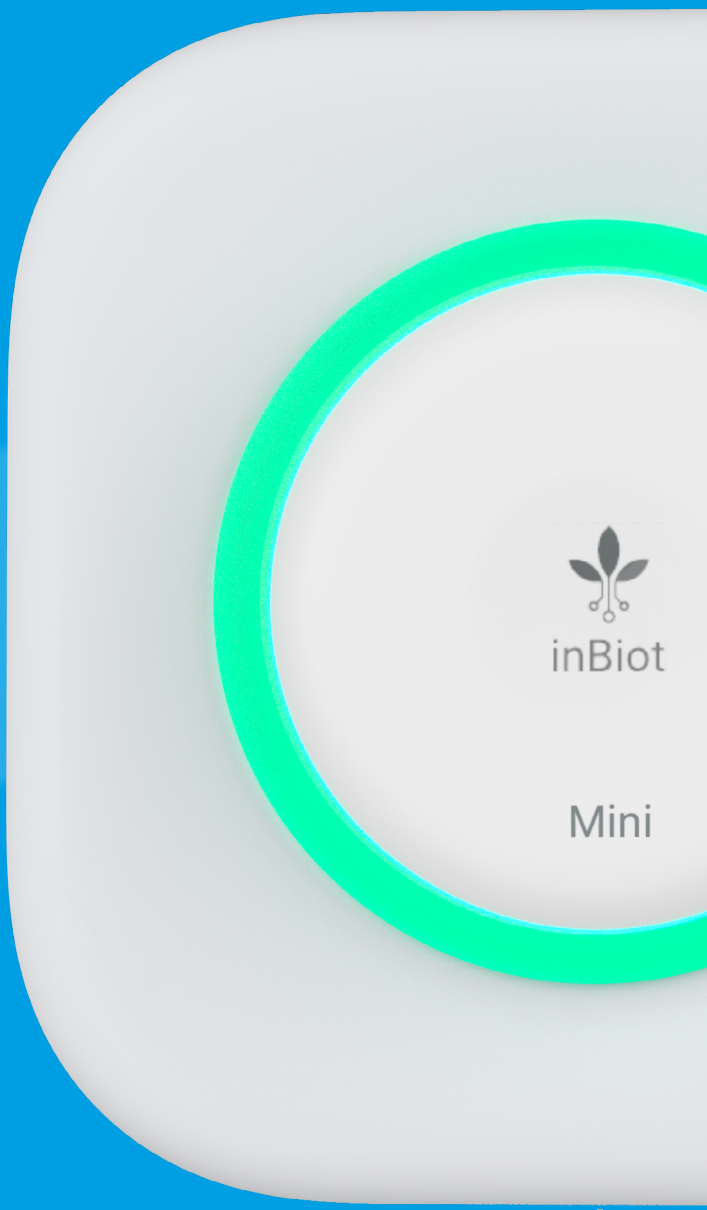
MICA Mini



V2.5 06/25

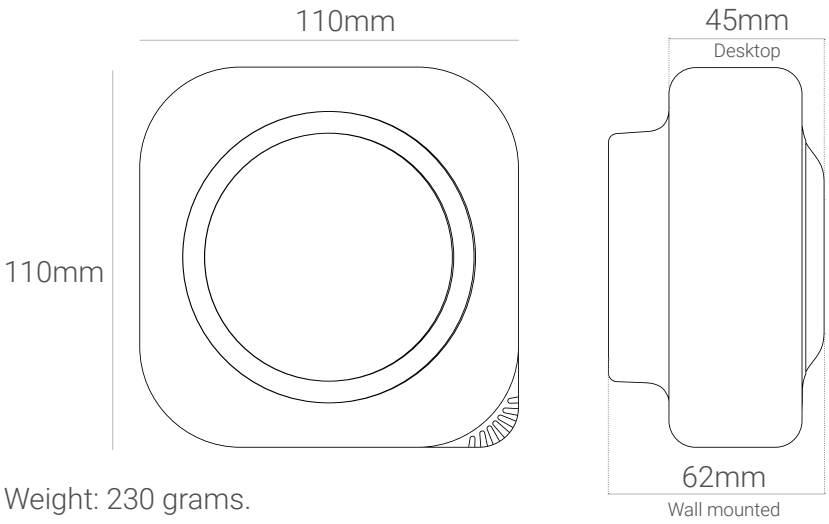
DATASHEET

General Information

Features

Multifunction touch button.
Customizable status light ring.
USB type C connector.
Wi-Fi Connectivity.*

Dimensions and weight



Weight: 230 grams.

Power supply options **

USB type C cable + EU 5V USB power adapter (for desktop only).
Alternating current 110 - 240V 50-60 Hz 0.2A fast connector.
Direct current 8 - 36V 2A 10W fast connector.
PoE (802.3af and above) 54VDC 12.95W RJ45 connector.

Other connectivity options **

LoRaWAN.
Sigfox.
NB-IoT / LTE-M.
Ethernet.

Local communication options **

Modbus RTU (RS-485).
Modbus TCP/IP (wireless) .
BACnet IP
API.
MQTT.

* The device can only connect to 2.4 GHz WiFi networks with 802.11 b/g/n (802.11n up to 150 Mbps) protocols. Supported authentication and security protocols: WPA2 (Personal), WPA2 Enterprise, WPA3 (Personal), and WPA3 Enterprise.

** Connectivity other than Wi-Fi, power supply other than USB type C and any local communication option must be specified and requested by the costumer.

Sensors and indicators

Sensors

Temperature

Sensor: Silicon bandgap / Unit: ºC
Range: -40 - 145 ºC / Resolution: 0,1 ºC
Accuracy: ± 0,5 ºC
Lifespan[1]: >10 years

Relative Humidity

Sensor: Capacitive / Unit: %RH
Range: 0 - 100 %RH / Resolution: 1 %RH
Accuracy: ± 2 %RH
Lifespan: >10 years

CO_2

Sensor: NDIR / Unit: ppm
Range: 400 - 10.000 ppm / Resolution: 1ppm
Accuracy: ±(30 + 3% m.v.) ppm
Lifespan: >10 years

Additional sensors

Noise

Sensor: MEMS Microphone / Unit: dB
Range: 30 - 120 dB / Resolution: 1 dB
Accuracy: ± 5 dB

[1] Lifespan is based on the average lifetime of the sensor, at which the specified accuracy is guaranteed. After the indicated years, it is recommended to replace the sensor to guarantee the accuracy of the measurement.

Indicators

Indoor Air Quality

Range: 0 - 100 index point
Resolution: 1 index point

Thermohygrometric Comfort

Range: 0 - 100 index point
Resolution: 1 index point

Resistance to Mold Growth

Range: 0 - 100 index point
Resolution: 1 index point

Resistance to Virus Spread

Range: 0 - 100 index point
Resolution: 1 index point

Ventilation Efficiency

Range: 0 - 100 index point
Resolution: 1 index point

Use Notes

1. To install and configure your MICA, please refer to the documentation in the support page of our website.

2. Some sensors require preheating so they may not display data for the first few minutes or hours after powering up.

3. During the first 24 hours after connecting the MICA, ensure that clean ambient air concentration values are reached through proper ventilation to ensure optimal initial calibration.

4. Maintain sufficient ventilation periodically to ensure sensor performance, as some operate with auto-calibration algorithms.

5. The CO_2 calibration cycle is 48 hours by default. If you wish to change it, access the “calibration” section of the inBiot Setup App.

6. MICA devices ventilate both through the sides and through the air intake located at the back, so it is essential not to cover them to ensure correct sensor measurements.

7. MICA devices should not be installed in air ducts or in areas exposed to drafts with high air flow rates, as this may affect its performance, accuracy and lifetime.

8. MICA devices should not be installed in locations exposed to direct sunlight or near heat sources, as measurements may be affected.

9. Refrain from manipulating or using unofficial spare parts for device repair or maintenance. Any attempt to do so will result in the automatic loss of device warranty.

10. The MICA is designed for indoor air quality monitoring. Outdoor use is under the customer’s responsibility and any damage resulting from such use will invalidate the warranty.

11. Avoid installing MICA in indoor spaces with continuous relative humidity above 85% without condensation, as it could cause irreparable damage to the device.

12. For any further questions, please contact us using the form available on inBiot’s support page.

www.inbiot.es