MICA Mini





V2.6 10/25

DATASHEET

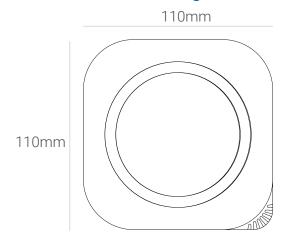
General Information

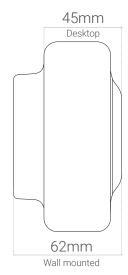


Features

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: °C Range: -40 - 145 °C / Resolution: 0,1 °C

Accuracy: ± 0,5 °C Lifespan¹: >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: $\pm(30 + 3\% \text{ m.v.}) \text{ ppm}$

Lifespan: >10 years

Additional sensors

Noise

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

Accuracy: ± 5 dB

Indicators

Indoor Air Quality 🗵

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

Thermohygrometric Comfort 🗵

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

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

Resistance to Virus Spread 🗷

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

Ventilation Efficiency 2

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

Use Notes



- 1. To install and configure your MICA, please refer to repository on our website.
- 2. Authorized Accessories: To ensure proper performance and device safety, use only inBiot-supplied cables and power adapters. inBiot is not responsible for any malfunction, damage, or loss of warranty resulting from the use of non-compliant accessories.
- 3. Some sensors require preheating so they may not display data for the first few minutes or hours after powering up.
- 4. 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.
- 5. Maintain sufficient ventilation periodically to ensure sensor performance, as some operate with auto-calibration algorithms.
- 6. The CO₂ calibration cycle is 48 hours by default. If you wish to change it, access the "calibration" section of the inBiot Setup App.
- 7. Recommended operating conditions: 5 45°C and 20 80%RH. Maximum operating conditions: -10 50°C and 0 95%RH.
- 8. 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.
- 9. 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.
- 10. MICA devices should not be installed in locations exposed to direct sunlight or near heat sources, as measurements may be affected.
- 11. 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.
- 12. 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.
- 13. Avoid installing MICA in indoor spaces with continuous relative humidity above 85% without condensation, as it could cause irreparable damage to the device.
- 14. For any further questions, please contact us using the form available on inBiot's support page.

