uno®
lite

User Manual

VER 0.4

Revision
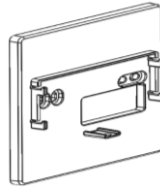
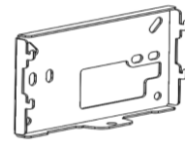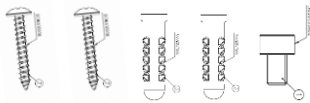| Date	Version	Description
2022/ 11 / 11	0.1	Initial Version
2022/ 11 / 12	0.2	Modified some typos
2022/ 12/ 27	0.3	Update missing icon, add APP direct link for China
2023/ 1 / 5	0.4	Add sensor notice

What's Included
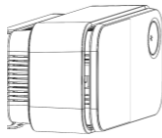
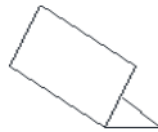| UNOlite	Surface / Drywall mount	Electrical box mount

| Drywall screws and anchors (1 pairs)	Quick start guide

Important Safeguards

Please read the safety warnings before use and take the necessary precautions to reduce the risk of fire, electric shock, or injury. The Delta limited warranty applies only if the unit is used according to these instructions.

> ## WARNING!!
>
> - To reduce safety risks, always use service personnel from the manufacturer or service provider, or other qualified personnel for installation and maintenance.
>
> - Make sure the power is OFF during installation or maintenance.
>
> - DO NOT tamper with or use nonofficial spare parts for repair or maintenance.
>
> - DO NOT use the device in environments with high humidity or possible direct exposure to water.
>
> - DO NOT use the device in an outdoor environment.
>
> - DO NOT use the device near heat sources such as radiators, furnaces, ovens, or stoves.
>
> - When the DIP switch and terminal block behind the product are changed, be sure to power off and then power on after setting.
>
> - Do not force the connector into the port. Check the port for foreign object obstruction.
>
> - If the product is damaged due to human operation, such as inserting the wrong pin, or not connecting the power in accordance with the power input specifications provided in the data sheet, it is not liable for warranty.

Getting Started

The UNOlite is a building-grade air quality monitor that can measure the ambient temperature / humidity / CO2 / PM1 / PM2.5 / PM10 / TVOC and provide multiple protocols for wired or wireless networks. Further information can be found on the UNOlite Resource at: https://isdweb.deltaww.com/resources/enter
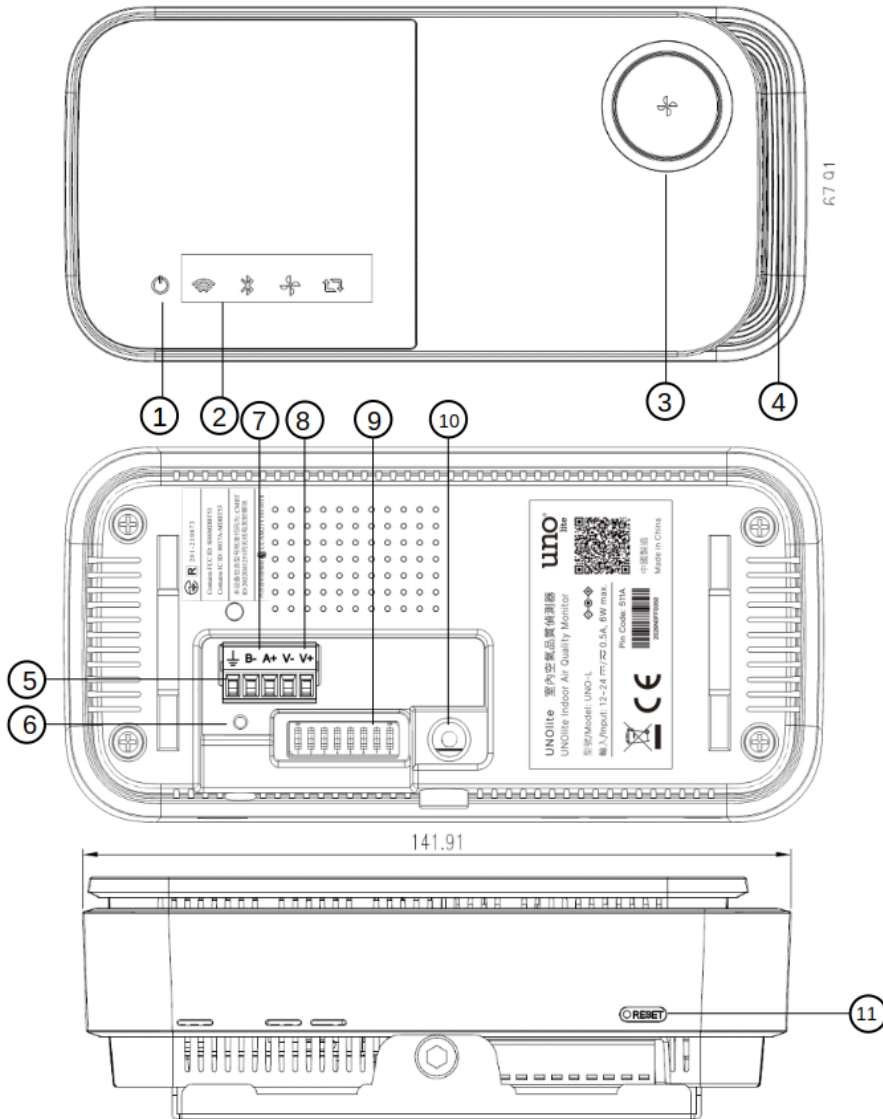
①	Power LED	⑦	RS-485
②	Status LED	⑧	Direct Wiring (12-24VDC or 24VAC)
③	Switch Button	⑨	DIP Switches
④	IAQ RGB LED	⑩	Power Adapter Hole
⑤	GND	⑪	Hardware Reset
⑥	Factory Reset Button		

Externals and Air Flow

Air is drawn into the UNOlite from the lower side, and there is natural air exchange on each side. It is vital that neither side of the device is covered. Any changes in airflow may affect the readings and accuracy.

Power and Connectivity

The UNOlite provides multiple power and connectivity options:

Power:

- Adapter: Only use the cable and charger/adapter supplied with the device
- AC/DC direct wiring: Used for power supplies of 12-24V DC or 24V AC

Connectivity:

- 2.4GHz Wi-Fi (802.11 b/g/n)
- RS-485: Used for Modbus RTU communication, see the UNOlite Modbus User Manual for the detailed information
- BACnet: Used for BACnet MS/TP. See the UNOlite BACnet User Manual for detailed information.

Hardware Interface

IAQ LED Indications:

Standard operation	Description
Breathing light BLUE	Device is booting
Breathing light GREEN	Indoor air quality is good
Breathing light YELLOW	Indoor air quality is moderate
Breathing light RED	Indoor air quality is unhealthy
Breathing light PURPLE	Indoor air quality is very unhealthy
Steady OFF	Device is in DIM mode

Status LED Indications:

Standard operation	Description	
Power	Steady OFF	Device's power does not work
	Steady ON	Device's power is working normally
BLE	Steady OFF	No BLE connection
	Steady ON	In BLE connection
	Flash rapidly	In BLE binding process
Wi-Fi	Steady OFF	No Wi-Fi connection
	Steady ON	Wi-Fi connected
Equipment (RESERVED NOW)	Steady OFF	Equipment is OFF
	Steady ON	Equipment is running
	Flash slowly	Can't find/connect equipment.
Filter status (RESERVED NOW)	Steady OFF	Filter health is good
	Steady ON	Need to replace filter

In factory reset operation:

Standard operation	Description	
All LED	Flash rapidly	Device is performing a factory reset

Key	Description
Hardware reset	Press this button to trigger a power-cut reboot.
Factory reset	Click this button 3 times within 2 seconds to trigger a factory reset. The values below will be restored to default: ▪ Modbus baud rate ▪ BACnet saved mac address ▪ Wi-Fi MQTT broker setting (Wi-Fi model) ▪ CO2 auto baseline calibration is ON ▪ Sensor calibration settings
Switch button	ON/OFF IAQ and status LED (Enter/leave DIM mode)

NOTE: Use a paper clip to press the keys.

DIPs	Description
1-6	Refer BACnet or Modbus User Manual NOTE: PIN6 is unused in Modbus mode
7	Mode switch ON : BACnet MS/TP OFF : Modbus RTU
	RS485 terminator resistor (120 ohm)

NOTE: The dips should be adjusted to proper position in the power off state. **Adjust the dips, then power on the device.**

Installation

The UNOlite can be mounted on a concrete block wall, drywall, ceiling, or to an electrical box. For detailed instructions on the installation, power, and connectivity setup, please visit our support center website at https://isdweb.deltaww.com/resources/ or scan the QR code below.

IoT Application

iOS APP	Android APP	安卓 APK 连结	UNOweb(Wi-Fi Model)

Warranty Information

Delta provides a 1-year limited manufacturer warranty on the UNOlite. To obtain a copy of the warranty for this product, please visit https://isdweb.deltaww.com/resources/warranty.html or scan the QR code below.

Troubleshooting

For frequently asked questions about the UNO series sensors, please visit the FAQ webpage at https://isdweb.deltaww.com/resources/faq/index.html or scan the QR code below.

The product was calibrated in the factory, and no additional calibration is required. If a sensor value is affected by the environment at your site, please contact the distributor for manual calibration.

This controller has built-in multiple sets of precision sensors. Collision and vibration during transportation may affect its readings. It is recommended that you turn it on and install it, and then wait for about one hour until the chamber reaches balance.

【Note】 The temperature module built into this product has been calibrated in the factory, but the accuracy may be impacted by the installation environment, such as nearness to a heat source or high air flow. To get more accuracy, calibrate the product after installation. Wait for one hour after installation for calibration. User can use APP's engineer mode to calibrate it.

After you turn on the device, these sensors needs to warm-up for 5 minute or less for PM2.5, PM10, and carbon dioxide, and 5 minutes for formaldehyde, carbon monoxide, ozone, and TVOC. Sensor data is updated every 10 seconds.

The CO_2 sensor uses an Automatic Baseline Calibration (ABC) algorithm to maintain accuracy. If the component encounters vibration when it is reinstalled in a different place, values may drift. Please keep operation for weeks to find the baseline in this case.

【Note】 Follow the instructions below to facilitate the automatic calibration of CO_2 components.

- · This product needs a continuous power supply, please install it in a fixed position
- · The indoor environment reaches the level of the outdoor environment for four consecutive hours each week

DELTA

For additional support,
please contact your sales representative
or email us at uno.service@deltaww.com