



Total Health.IO™ Environmental Sensor

Model No. EN1 — Wi-Fi Connectivity



Total Health.IO™ EN1

Total Health.IO™ Environmental Sensor (EN1):

The New Age Micro Total Health.IO™ Environmental Sensor provides detection and monitoring of air quality for industrial environments.

Total Health.IO™ provides monitoring of the following environmental conditions:

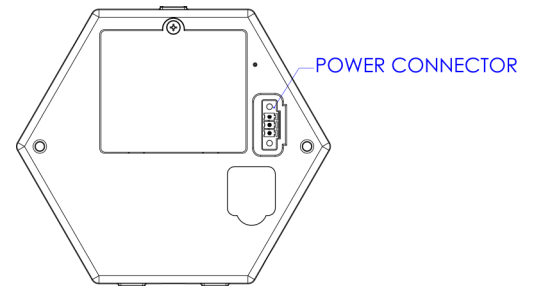
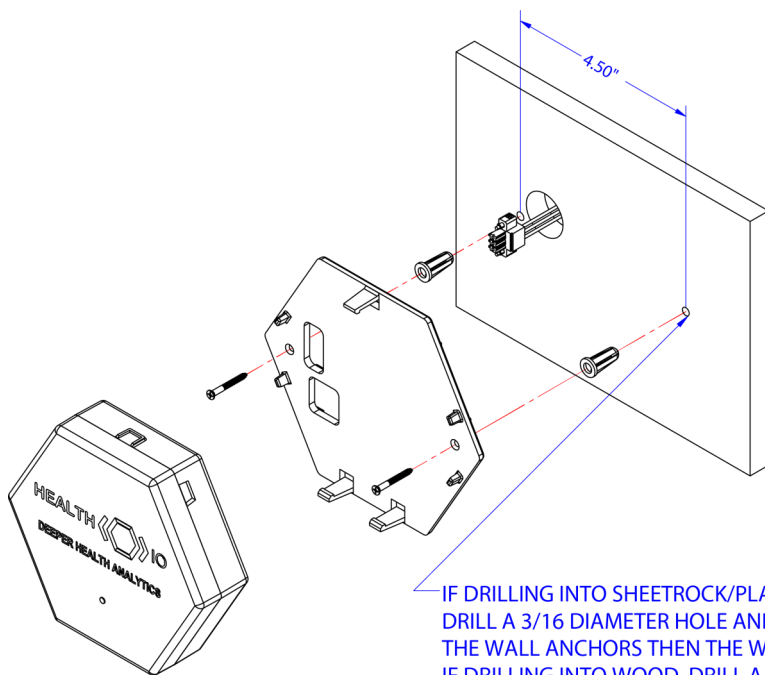
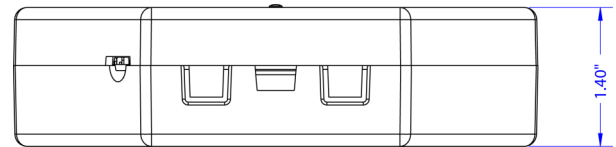
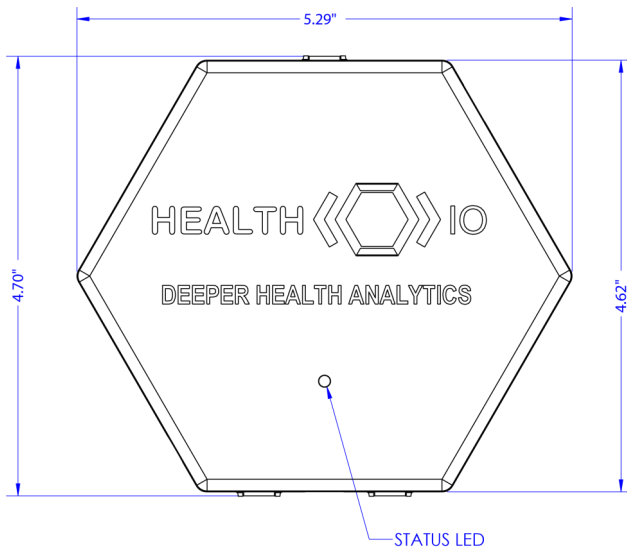
- Temperature
- Barometric pressure
- Humidity
- VOC — Volatile Organic Compounds
TVOC — Total VOC
eCO₂ — equivalent CO₂
IAQ — Indoor Air Quality
- PM1.0, PM2.5, PM10.0

Additional features include:

- Ruggedized construction in a compact lightweight design
- RTC allows setting time of measurement
- Programmable wake-up time
- Up to 1 second sampling rate
- 3 years plus operation
- Power source: Universal 10-30 V AC/DC or 3 AA batteries
- Battery backup in the event of power failure
- Wi-Fi connectivity — 2.4 GHz and 5 GHz
- Tri-color status LED
- SD Card for autonomous data logging
- Dashboard (iOS, Android, web browser) for monitoring air quality data
- Total Health.IO™ AI System — Thio



Total Health.IO™ Physical Specifications and Mounting



IF DRILLING INTO SHEETROCK/PLASTER, DRILL A 3/16 DIAMETER HOLE AND USE THE WALL ANCHORS THEN THE WOOD SCREWS. IF DRILLING INTO WOOD, DRILL A 1/16 DIAMETER HOLE AND USE ONLY THE WOOD SCREWS.





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Model No. EN1 — Wi-Fi Connectivity

Total Health.IO™ Technical Specifications

- Wi-Fi Connectivity — 2.4 GHz and 5 GHz per IEEE 802.11ac
- Communication Protocols — BACnet/IP, Modbus, MQTT, OPC UA
- Cloud Connectivity — Amazon AWS IoT Greengrass and Microsoft Azure using MQTT
- Particle Range of Measurement — 0.3, 0.5, 1, 2.5, 5, and 10 micrometers
- Particle Effective Range — 1, 2.5, 10 $\mu\text{g}/\text{m}^3$
- Particle Maximum Range — $\geq 1000 \mu\text{g}/\text{m}^3$
- Particle Resolution — 1 $\mu\text{g}/\text{m}^3$
- Particle Maximum Consistency Error — $\pm 10\%$ @ 100~500 $\mu\text{g}/\text{m}^3$, $\pm 10 \mu\text{g}/\text{m}^3$ @ 0~100 $\mu\text{g}/\text{m}^3$
- Regulatory Compliance — FCC, CE, UL Listed

Total Health.IO™ Humidity Specification

Total Health.IO™ Pressure Sensor Specification

- Absolute Tolerance Accuracy — $\pm 3\%$ RH
- Response time to complete 63% of step — 1 second

- Absolute Pressure Accuracy — ± 1.0 hPa
- Relative Pressure Accuracy — ± 0.12 hPa

Total Health.IO™ Temperature Sensor Specification

- Operating Range Full Accuracy — 0-65°C
- Absolute Temperature Accuracy @ 25°C — $\pm 0.5^\circ\text{C}$
- Absolute Temperature Accuracy @ 0-65°C — $\pm 1.0^\circ\text{C}$
- Output Resolution — 0.01°C

Breath Equivalent VOC with Nitrogen Gas Carrier

Molar Fraction	Compound	Production Tolerance	Certified Accuracy
5 ppm	Ethane	20 %	5 %
10 ppm	Isoprene /2-methyl-1,3 Butadiene	20 %	5 %
10 ppm	Ethanol	20 %	5 %
50 ppm	Acetone	20 %	5 %
15 ppm	Carbon Monoxide	10 %	2 %

IAQ Classification and Color Coding

IAQ Index	Air Quality
0—50	Good
51—100	Moderate
101—150	Unhealthy for Sensitive Groups
151—200	Unhealthy
201—300	Very Unhealthy
301—500	Hazardous



TEMPERATURE



VOC



HUMIDITY



PARTICULATE



AI