



## PRODUCT OVERVIEW

arbn well is an environmental quality measurement and analysis system based on high-quality, low-cost sensing. It comprises a dense network of sensors measuring a variety of parameters affecting human health and comfort. This continuous and ubiquitous sensing is supplemented by occupant feedback (collected using the arbn well app), to create a uniquely rich and detailed picture of environmental conditions inside buildings and the satisfaction of occupants. Based on the needs of a client, three devices are available: Comfort, AQ, and AQ+.

For more information, go to [www.arbnco.com/arbn-well](http://www.arbnco.com/arbn-well) or write to us as [info@arbnco.com](mailto:info@arbnco.com).

## APPLICATIONS

The arbn well system can be used in several applications including:

- Commercial (offices, conference rooms)
- Education (classrooms, auditoria, offices)
- Government (offices, conference rooms)
- Healthcare (wards, offices, common areas)
- Residential (bedrooms, living spaces)
- Urban farming (non-condensing applications)

**Each application does not necessarily require each device.** The AQ+ device described in this sheet measures: Temperature, Humidity, CO<sub>2</sub>, PM, and TVOC.

## TEMPERATURE MEASUREMENTS

- **Accuracy:** 0.2 °C
- **Resolution:** 0.01 °C
- **Range:** -40 – 125 °C

## HUMIDITY MEASUREMENTS

- **Accuracy:** 2 %
- **Resolution:** 0.01 %
- **Range:** 0 – 100 %

## CO<sub>2</sub> MEASUREMENTS

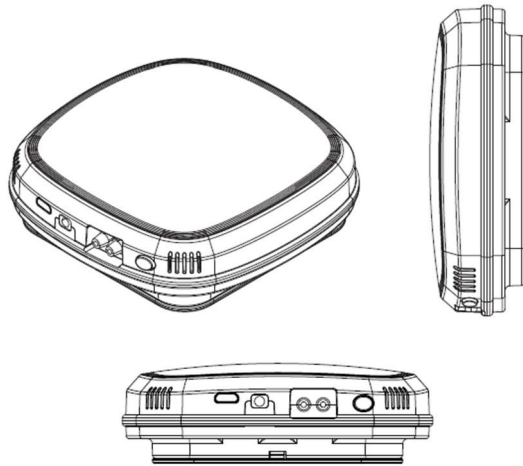
- **Accuracy:** 50 ppm, at 0 – 50 °C
- **Range:** 0 – 5000 ppm

## PM MEASUREMENTS

- **Accuracy:**
  - 10 µg/m<sup>3</sup>, at less than 100 µg/m<sup>3</sup>
  - 10%, at more than 100 µg /m<sup>3</sup>
- **Resolution:** 0.3 µg /m<sup>3</sup>, at -10 – 60 °C
- **Range:** 1 – 999 µg /m<sup>3</sup>

## TVOC MEASUREMENTS

- **Resolution:** 1 ppb
- **Range:** 0 – 32768 ppb



<b>GENERAL</b>	
<b>MOUNTING</b>	Command Brand® Damage-Free Hanging Strips; 2 strips per sensor
<b>DIMENSIONS</b>	112x112x35mm
<b>WEIGHT</b>	200g
<b>OPERATING/STORAGE TEMPERATURE</b>	-10-70 °C
<b>OPERATING/STORAGE HUMIDITY</b>	0-95 % (RH), non-condensing
<b>SENSOR/DEVICE LIFETIME</b>	Approx. 5 years. Deployment in high contamination environments will significantly shorten the lifespan of the humidity and CO2 sensors, and potentially the circuits.
<b>WARRANTY</b>	Standard warranty of 1 year for factory defects
<b>CERTIFICATIONS</b>	CE, FCC
<b>SENSORS</b>	
<b>TEMPERATURE and RELATIVE HUMIDITY</b>	Sensirion SHT30-DIS-B
<b>CO<sub>2</sub></b>	GSS CozIR-IP (NDIR-type)
<b>PM</b>	Plantower PMSA003
<b>TVOC</b>	AMS CCS811
<b>ELECTRICAL</b>	
<b>POWER SOURCE</b>	Micro USB B cable
<b>ADAPTOR INPUT</b>	AC 100-240V, 50/60Hz 0.4A
<b>ADAPTOR OUTPUT</b>	DC 5V, 750mA
<b>COMMUNICATIONS</b>	
<b>Sub-GHz (LoRa)</b>	Supported channels: US902-928, EU863-870, AS923, AU915-928, KR920-923, CN470-780
<b>WiFi</b>	Requires 2.4GHz network