



## 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.arbnwell.com](http://www.arbnwell.com) 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, and CO<sub>2</sub>.

## INTERNAL SENSOR CAPABILITIES

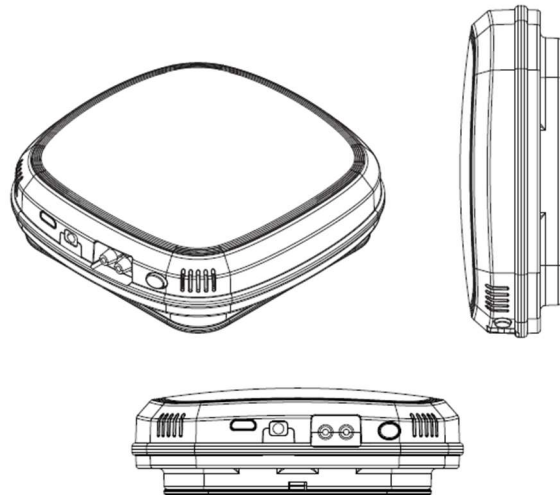
The individual internal sensors used in this arbn well device have the following reported capabilities:

INTERNAL SENSOR	RANGE	REPORTED ERROR	REPORTED RESOLUTION
Temperature	-40 – 125 °C	0.2 °C	0.01 °C
Relative humidity	0 – 100 %	2 %	0.01 %
CO <sub>2</sub>	0 – 5000 ppm	50 ppm, at 0 – 50 °C	N/A

## DEVICE ERROR TOLERANCES

The following are the device error tolerances for the individual parameters:

DEVICE PARAMETER	MIN. ERROR	MAX. ERROR
Temperature	0.75 °C	0.75 °C
Relative humidity	5 %	5 %
CO <sub>2</sub>	75 ppm	10% of value



<b>GENERAL</b>	
<b>MOUNTING</b>	Command Brand® Damage-Free Hanging Strips; 2 strips per sensor
<b>DIMENSIONS</b>	112x112x35mm
<b>WEIGHT</b>	205g
<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>ELECTRICAL</b>	
<b>POWER SOURCE</b>	ER26500 battery; approx. 3-year lifespan.
<b>VOLTAGE</b>	3.6V
<b>BATTERY CAPACITY</b>	30.6Wh
<b>COMMUNICATIONS</b>	
<b>Sub-GHz (DASH7)</b>	Supported channels: US902-928, EU863-870, AS923, AU915-928, KR920-923, CN470-780