

# Yanzi Comfort



## Your Smart Building Foundation

*Simple to install  
Provides motion detection and multiple comfortability sensors  
Easily mounted on walls or in ceiling above work desks for accurate monitoring of illuminance  
Battery lifetime expectancy up to 5 years with included batteries*

### Temperature

Provides motion detection as well as multiple comfortability sensors

### Simple

Simple to install - single tap encryption

### Secure

Easily mounted on walls or in ceiling above work desks for accurate monitoring of illuminance

- Yanzi Comfort monitors indoor air quality by measuring levels of carbon dioxide (CO2) and volatile organic compounds (VOC), as well as temperature, humidity, and barometric pressure. Yanzi Comfort also continuously monitors ambient noise in office spaces, schools, stores, etc.
- Yanzi Comfort connects wirelessly to Yanzi Gateway or Yanzi IoT Access Point in a secure way through Yanzi's "Zero-Touch configuration" and it can be immediately accessed through the Cirrus API or Yanzi Live dashboard. Yanzi Comfort is powered from a USB wall outlet and acts as a mesh node for other Yanzi sensors.



## Good Air Quality

Often defined in open offices as:

- Carbon Dioxide <1,000 ppm
- VOC <200 ppb (building), <500 ppb (humans)
- Humidity 30% to 70% RH
- Temperature +20°C to +24°C
- Noise <58 dBA average

## Calibration

The CO2 sensor is automatically calibrated and is normally finished within 48-72 hours after each power on. Automatic calibration requires that the CO2 level reaches 400 ppm at least once over a 24 hour period which is usually the case for office environments.

## Sound Pressure Monitoring

The sound pressure level (SPL) is internally measured every second over a period of 250ms. The sensor sends pre-analysed data to the Gateway typically every minute (depending on configured activity level). The data consists of the average SPL over the last 60 samples, as well as the minimum and maximum SPL values recorded over that same 60 samples. Note that the sensor DOES NOT record sound.

## Ordering Information

SWAQ3-0372 : Yanzi Comfort (WW)

Country specific wall adapter and USB-C cable must be ordered separately.

## Packaging Information

Box size: 561 x 217 x 142 mm  
22" x 8.5" x 5.6"

Box weight: 4.4 kg / 9.7 lb

Units/box: 50

Minimum order quantities apply

*Yanzi Networks reserve the right to change this specification at any time without notice. Disclaimer: Yanzi Networks can not guarantee that this specification is 100% correct. Solution to be used for described purposes only. NOT to be used for medical, life-saving, or life-sustaining applications.*

## Specifications

### Measurements

#### Carbon Dioxide (CO2)

Range: 400 to 5,000 ppm  
Accuracy:  $\pm(50 \text{ ppm} + 5\% \text{ reading})$   
1 ppm tVOC\*\*\*125 to 600 ppb  
Resolution: 1 ppb

#### Temperature

Range: +5°C to +40°C  
Accuracy:  $\pm 1^\circ\text{C}^*$   
Resolution: 0.001°C

#### Humidity

Range: 20% to 80% RH  
Accuracy:  $\pm 5\% \text{ RH}^*$   
Resolution: 0.1% RH

#### Sound Pressure

Range: 38 to 90 dBA  
Accuracy:  $\pm 4\text{dB}$  (80 - 6,000Hz)  
Resolution: 0.01 dB

#### Barometer

Range: 260 to 1260 hPa  
Accuracy:  $\pm 1 \text{ hPa}$   
Resolution: 0.01 hPa

### Power

5V, Max 200mA, USB Type-C connector External AC/DC wall adapter required\*\*

### Wireless Performance

- IEEE 802.15.4 2.4GHz IPv6 Sensor Network supporting Mesh Technology
- Wireless Output Power 0dBm-8dBm
- Wireless Range 5-25m indoor, 50-100m Line of Sight (Indicative)
- Automatic security key management using ECC with AES encrypted communication

### Environmental Requirements

- Operating Requirements +5°C to +40°C, 20-80% RH (non-condensing).
- Indoor office use only. Dusty environments must be avoided.

### External Buttons

- Stat/Rst (press to show status on LED)  
(press and hold for >20s to reset)

### Dimensions

- 96 x 58 x 29 mm (excluding sleeve)  
76 grams (including sleeve)

### Agency Approvals

- Europe: EU (CE and RoHS)
- North America: US (FCC), Canada (IC)
- Asia-Pacific: China (SRRC), Hong Kong (LCB), Japan (TELEC), Singapore (IDA), India (WPC), Australia and New Zealand (RCM)

\* Accuracy requires vertical mounting in no draft and time for auto calibration. See installation manual for details.

\*\* Wall adapter not included. Ordered as accessory.

\*\*\* See installation manual for details on tVOC