

Yanzi Health



Indoor Air Quality & Human Presence Sensor
Welcome to good health

- PM
- CO2
- VOC
- Temperature
- Humidity
- Barometer
- Light
- Noise
- Occupancy
- Tamper detection

Scalable

IP communication and standardized technologies enables scalability

Simple

Scan, remove adhesive protection and data is available in cloud within minutes

Secure

Enterprise security with automatic security key management using ECC with AES encrypted communication

- Yanzi Health monitors room occupancy as well as indoor air quality including particulate matter in multiple sizes from PM1, PM2.5, and PM10, carbon dioxide (CO2), VOC Index, temperature, humidity, and barometric pressure. Yanzi Health also monitors ambient light and sound pressure in office spaces, schools, stores, etc.
- Yanzi Health is optimized for building owners targeting a high level of quality in the work environment.
- Yanzi Health connects wirelessly or via ethernet to Yanzi IoT Gateway in a secure way through Yanzi's "Zero-Touch configuration" and it can be immediately accessed through the Cirrus API or Yanzi Insights dashboard.
- Yanzi Health is powered from a USB wall outlet or a PoE and acts as a mesh node for other Yanzi sensors.



For instructions and information about safety, warranty, and recycling, please visit www.yanzinetworks.com

Good Indoor air quality

Type	Acceptable	High Performance
PM2.5	<35 $\mu\text{g}/\text{m}^3$	<12 $\mu\text{g}/\text{m}^3$
VOC Index	<150	<50
CO2	<1,000ppm	<600ppm

Other typical recommendations

Type	Target
Humidity	30% to 70% RH
Temperature	+20°C to +24°C

Calibration

The CO2 and TVOC sensors operate using an automatic baseline calibration and is normally finished within 72 hours after each power on. Automatic calibration requires that the CO2 level reaches 400 ppm and TVOC to reach <50ppb at least once over a 24 hour period which is typically the case for office environments.

Sound Pressure Monitoring

The sound pressure level is measured every 5 poll periods (default every 10 minutes) over a period of 250ms. Actual frequency of measurements depend on the configured level. Note the sensor DOES NOT record sound.

Ordering Information

SWAR4 1730 : Yanzi Health

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

Packaging Information

Box size: 560 x 220 x15 mm
22" x 8.5" x 6" inch
Box weight: 5.6kg / 12.4lbs
Units/box: 20
Minimum order quantities apply



Specifications

PIR Based Motion Detection

- Up to 10m motion detection distance
- 10 0° Vertical / 9 0° Horizontal field of view

Measurements

Range	Accuracy	Resolution
Particulate Matter (PM1, PM2.5, and PM10)		
0 to 100 ppm	±10 µg/m ³	1 ng/m ³
100 to 1,000 ppm	±10%	1 ng/m ³
Carbon Dioxide (CO ₂)		
400 to 5,000 ppm	±(30 ppm + 3.5 % reading)	1 ppm
VOC Index***		
0 to 500	<±15%	1 unit
Temperature		
+5°C to +40°C	±0.5 °C *	0.001°C
Humidity		
20% to 80% RH	+ 3 % RH *	0.1% RH
Illuminance		
0.1 to 20,000 Lux	±15%	0.001 Lux
Barometer		
260 to 1260 hPa	±1 hPa	0.01 hPa
Sound Pressure		
38 to 90 dBA	±4 dB (80 6000Hz)	0.01dB

Power

- 5V, Max 600mA , USB Type C connector
- External AC/DC wall adapter required*
- Power over ethernet IEEE 802.3af max 5 Watts

Wireless low power high density network

- IEEE 802.15.4, 2.4GHz IPv6 Sensor
- Network with Mesh technology
- Wireless Output Power 3dBm 14dBm****
- Wireless Range - 25m indoor, (Indicative) *****
- Omnidirectional internal antenna, 0.5dBi peak gain

Wireless low power long range network

- IEEE 802.15.4g, 868/915MHz IPv6 Network
- Wireless Output Power 3dBm 14dBm****
- Wireless Range 30 - 70m indoor (Indicative) *****
- Omnidirectional internal antenna, 0.4dBi peak gain

Wired local area network

- IEEE 802.3 10/100/1000Base T compatible networks
- AutoMDIX with IEEE 802.3af PoE+ support

Environmental Requirements

- Operating Requirements +5 °C to 4 0 °C,
- 20 - 80% RH(non condensing)
- Storage Requirements 0°C to +50°C,
- 20 - 80% RH(non condensing)
- Indoor office use only. Dusty environments must be avoided.

External Buttons

- Stat /Rs T (press to show status on
- (press and hold for >8 s to reset

Dimensions

- 110 x 110 x28 mm , 160 grams

Agency Approvals

- Contains FCC ID 2AE7LVAI1-0004
- Europe: EU (CE and RoHS)
- UK: UKCA
- North America: US (FCC), Canada (IC) [PENDING]

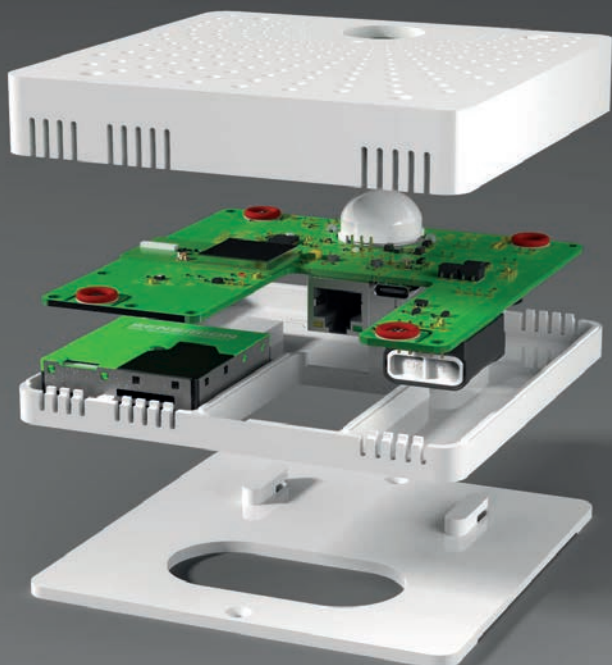
* Accuracy requires vertical mounting in no draft and time for auto calibration

*** Wall adapter not included. Ordered as

*** See installation manual for details on VOC Index

**** Actual output power depend on regional regulations

***** Actual range depends on walls, obstacles, radio disturbances, See manual for more details.



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.