Jeweller

LifeQuality Jeweller

Smart air quality detector. Runs automation scenarios when the set temperature, humidity, and CO_2 concentration thresholds are exceeded.

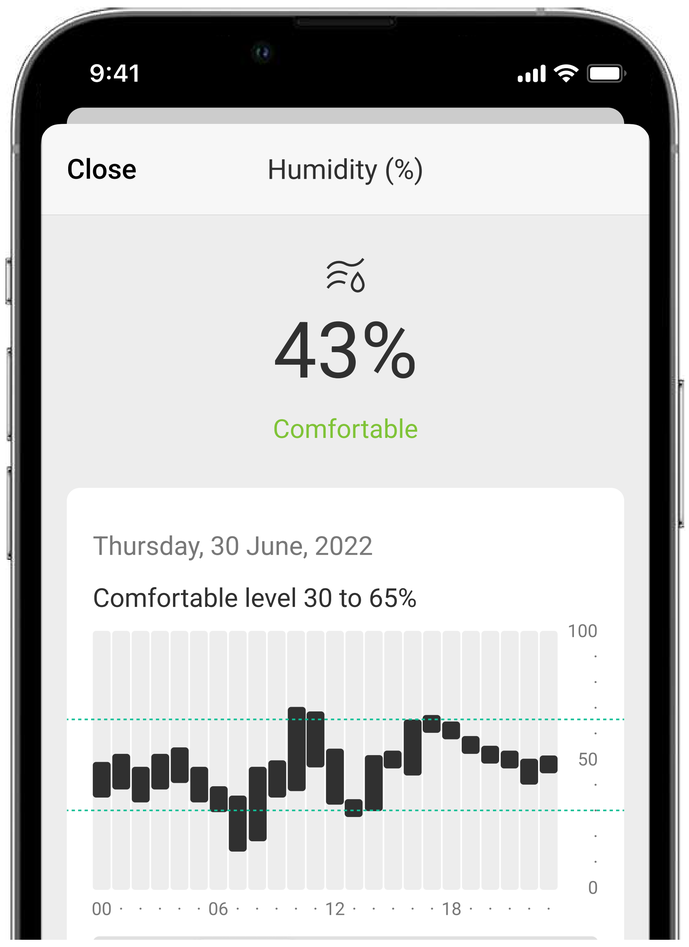


An Ajax hub is required for operation. Find the detailed information on the device at the link:

ajax.systems/support/devices/lifequality/

Key features

- Detailed statistics of indicators in the Ajax apps
- Automation scenarios by CO_2 level, temperature, and humidity
- Notification of indicators exceeding the set limits
- LED indication of the CO_2 level
- Up to 3 years of operation from pre-installed batteries
- Easy wall or ceiling mounting with SmartBracket mounting panel
- Remote control and configuring via the Ajax apps
- Adding to the system via QR code



Device for maximized productivity

High air quality is the key to productive work, good health, and healthy sleep. LifeQuality provides comprehensive CO_2 concentration, temperature, and humidity information through Ajax apps. This allows you to understand whether the microclimate in the room is optimal and what exactly you should improve if not.

Part of a comprehensive system

In the Ajax apps, an installer sets the temperature, humidity, and CO2 concentration thresholds to run automation scenarios. Users will enjoy high–quality air in the room thanks to the LifeQuality in combination with automation devices from Ajax, supply systems, humidifiers, and air conditioning.



The detector is suitable for any room. You can offer it as a solution for offices, industrial premises, and for home use.

Scenarios by temperature

Scenarios by CO_2 level

Scenarios by humidity

Precise readings

The Swiss detector **SHT40** by **Sensirion** ensures the accuracy of LifeQuality's temperature and humidity readings. The Swedish detector **Sunrise** from **Senseair** measures CO_2 concentration.. These reliable detectors are used even in medical equipment.

The combined humidity and temperature detector is installed in an isolated area of the board so that the detector readings are not affected by the heating of other elements of the device. To measure CO_2, an NDIR detector is used instead of VOC sensors calculating carbon concentration mathematically. LifeQuality does not give false readings that can occur due to substance vapours, aerosols, or perfumes.

Measurement accuracy

±0,2°C

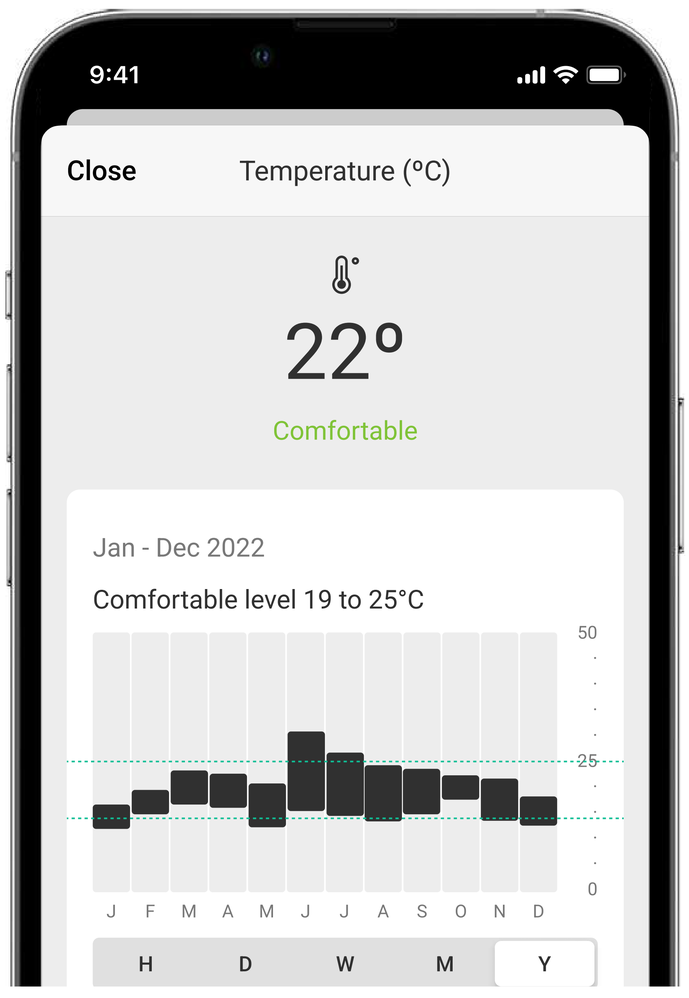
±1,8%

± (30 + 3%) ppm

In-app monitoring

Your customers can log into the Ajax app to check indoor air quality at any moment. LifeQuality indicators are available on the devices and rooms screen.

Users can check the indicators for a certain time or date. In the app, each indicator is represented by a chart for dynamic air quality assessment and time dependence detection.



Measurement storage
up to 2 years

Measurement discreteness
up to 1 minute

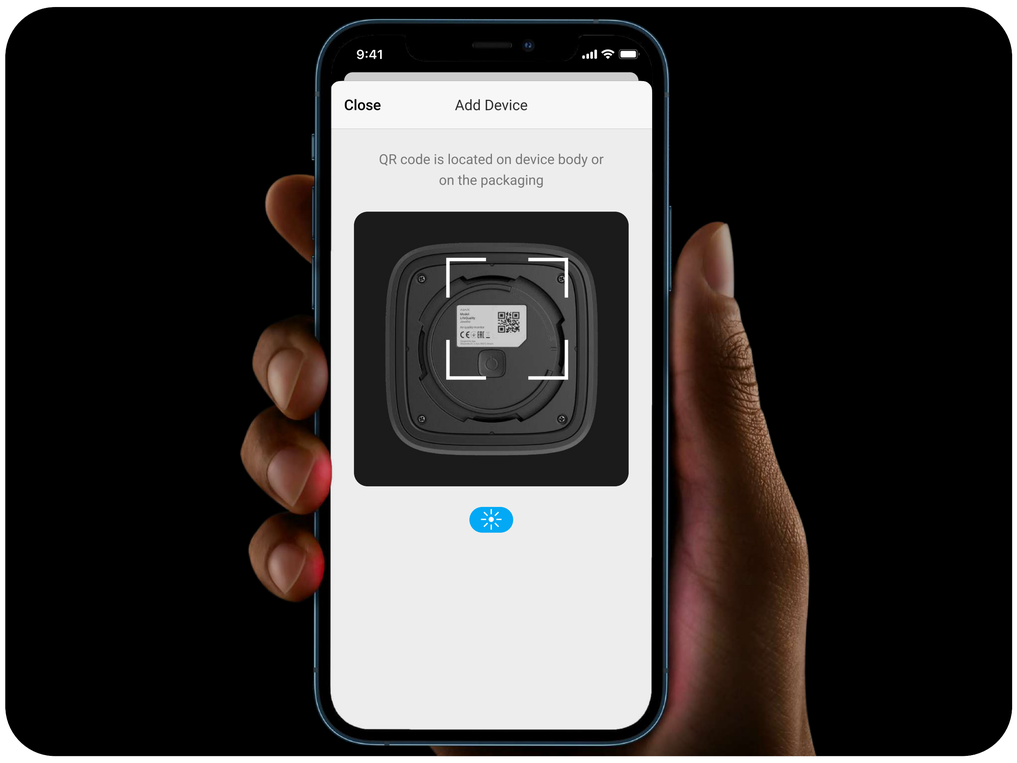


Jeweller and Wings are radio protocols for fast and reliable two-way communication between hubs and connected devices. The protocols provide a wireless radio communication range of up to 1,700 m, which allows you to install detectors even in a large open space.

Jeweller provides all the necessary information. This way, users will always have access to detector readings in the Ajax apps, regardless of the number of system devices. Wings transmits large amounts of data after the communication loss and recovery between the detector and the hub.

Quick pairing and installation

LifeQuality saves the installer's time. The detector connects to an Ajax security system in less than a minute. You simply need to open the Ajax app, scan the QR code, and add a detector to a room and group.



No need to disassemble the enclosure. SmartBracket mounting panel allowing to securely fix it on a wall or flat surface. The detector is equipped with an accelerometer to notify if someone tries to remove the device from the mounting panel or change its position.

Technical specifications

Communication with control panel or range extender	**Jeweller communication technology** **Wings communication technology** **Frequency bands** 866.0–866.5 MHz 868.0–868.6 MHz 868.7–869.2 MHz 905.0–926.5 MHz 915.85–926.5 MHz 921.0–922.0 MHz Depends on the sales region. **Maximum effective radiated power (ERP)** ≤ 20 mW **Communication range** up to 1,700 m In an open space.
Compatibility	**Hubs** Hub 2 (2G) Hub 2 (4G) Hub 2 Plus Hub Hybrid (2G) Hub Hybrid (4G) **Range extenders** ReX 2

Communication with control panel or range extender	**Polling interval** 12–300 s Adjusted by PRO or user with admin rights in the Ajax app. **Protection against spoofing** Device authentication
Temperature measurement	**Sensitive element** digital temperature and humidity sensor Values in Ajax apps are updated based on the “hub—detector” polling frequency, but at least once per minute. **Measuring range** from 0°C to +50°C **Measurement accuracy** ±0.2°C **Measurement pitch** 0.1°C
Humidity measurement	**Sensitive element** digital temperature and humidity sensor Values in Ajax apps are updated based on the hub — detector polling frequency, but at least once per minute. **Measuring range** 0% to 100% **Measurement accuracy** ±1.8% **Measurement pitch** 1%
Measurement of CO_2	**Sensitive element** digital carbon dioxide sensor Values in Ajax apps are updated based on the “hub—detector” polling frequency, but at least once per minute. **Measuring range** 400 to 5,000 ppm **Measurement accuracy** ±30 ppm or ±3% **Measurement pitch** 1 ppm
Additional features	**LED indication** The LED on the device enclosure lights up in the event of a critical change in air quality. You can turn on the indication by touching the touch button on the front panel of the detector.
Power supply	**Battery** 2 × CR123A battery Pre-installed **Battery life** up to 4 years

Additional features	**Automatic calibration** once every 1–14 days **Manual calibration** Run in Ajax apps. Suitable for non-ventilated rooms. **Backup storage** If the detector loses communication with the hub (or radio signal range extender), it stores all measured values for up to 3 days.
Installation	**Operating temperature range** from 0°C to +50°C **Operating humidity** up to 85% **Protection class** IP50
Enclosure	**Colour** white, black **Dimensions** 77 × 77 × 34.5 mm **Weight** 127 g **Accelerometer against dismantling**
Complete set	LifeQuality Jeweller 2 × CR123A battery Pre-installed SmartBracket mounting panel Installation kit Quick Start Guide