

LifeQuality Lite Jeweller

Wireless temperature and humidity monitor

Communication	<p>Jeweller communication technology Proprietary wireless communication technology to transmit commands, alarms, and events.</p> <p>Key features:</p> <ul style="list-style-type: none">● Two-way communication.● Advanced sabotage protection.● Block encryption featuring a dynamic key.● Instant notifications.● Remote control and configuration in Ajax apps. <p>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.</p> <p>Maximum effective radiated power (ERP) up to 20 mW Automatic power control to reduce power consumption and radio interference.</p> <p>Radio signal modulation GFSK</p> <p>Radio communication range up to 1,700 m up to 5,550 ft Between the device and a hub (or a range extender) in open space. Radio communication may be unavailable in industrial refrigeration chambers with shielded panels. It is recommended to perform Signal strength test at the installation site.</p> <p>Encrypted communication</p>
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All stored and transmitted data is protected by block encryption featuring a dynamic key.

Frequency hopping

To prevent radio interference and jamming.

Wings communication technology

Proprietary wireless communication technology for transmitting large data packets.

Key features:

- Two-way communication.
- Advanced sabotage protection.
- Block encryption featuring a dynamic key.
- Reloading data packets in case of transmission errors.

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.

Radio communication range

up to 1,700 m

up to 5,550 ft

Between the device and a hub (or a range extender) in open space. Radio communication may be unavailable in industrial refrigeration chambers with shielded panels. It is recommended to perform **Signal strength test** at the installation site.

Encrypted communication

All stored and transmitted data is protected by block encryption featuring a dynamic key.

Frequency hopping

To prevent radio interference and jamming.

Temperature measurement

Sensitive element

digital temperature and humidity sensor

Values in Ajax apps are updated at least once per minute, depending on the device

	<p>polling interval.</p> <p>Measurement range from -30 °C to +50 °C from -22 °F to +122 °F</p> <p>Measurement accuracy ±0.2 °C (from 0 °C to +50 °C) ±0.3 °C (from -10 °C to 0 °C) ±0.4 °C (from -20 °C to -10 °C) ±0.5 °C (from -30 °C to -20 °C) ±0.36 °F (from 32 °F to 122 °F) ±0.54 °F (from 14 °F to 32 °F) ±0.72 °F (from -4 °F to 14 °F) ±0.90 °F (from -22 °F to -4 °F)</p> <p>Measurement pitch 0.1 °C 0.18 °F The minimum temperature change value recorded in the Ajax app.</p>
<p>Humidity measurement</p>	<p>Sensitive element digital temperature and humidity sensor Values in Ajax apps are updated at least once per minute, depending on the device polling interval.</p> <p>Measurement range from 0% to 100%</p> <p>Measurement accuracy ±1.8% When the temperature is above 0 °C. When the temperature is above 32 °F. At low temperatures, humidity measurement accuracy may decrease.</p> <p>Measurement pitch 1% The minimum humidity change value recorded in the Ajax app.</p>
<p>Additional features</p>	<p>Charts of temperature and humidity</p>

	<p>Available in Ajax apps. The data is updated in real time. The measurements are stored for up to two years. Discrete value: 1 min.</p> <p>LED indication green: acceptable level yellow: beyond acceptable levels The LED indicator on the device enclosure lights up when a critical change in air quality is detected. A user can also enable the indication by touching the front-panel touch button on the detector.</p> <p>Scenarios responses to changes in temperature or humidity For example, enabling plenum ventilation if air quality deteriorates.</p> <p>Backup memory up to 3 days The device stores all measured values if it loses communication with the hub (or radio signal range extender). Once the connection is restored, all values are sent to Ajax apps.</p>
Recommendations	<p>The device is designed only for indoor installation at any height. The SmartBracket mounting panel is not required.</p> <p>After the device has been exposed to low temperatures, keep it at room temperature for 8–12 hours to prevent condensation and ensure stable sensor operation.</p> <p>The device can be placed on a table or shelf.</p>
Sabotage protection	<p>Protection against spoofing device authentication</p> <p>Accelerometer Signals attempts to detach the device from a surface, remove it from the mounting panel, or move from a table or shelf.</p> <p>Connection loss detection after 36 s Detection time depends on Jeweller or Jeweller/Fibra settings.</p>
Power supply	Battery

	<p>2 × CR123A Pre-installed.</p> <p>Calculated battery life up to 5 years When operating at room temperature.</p> <p>up to 2.5 years When operating at sub-zero temperatures.</p>
Enclosure	<p>Dimensions 77 × 77 × 35 mm 3.03" × 3.03" × 1.36"</p> <p>Weight 118 g 4.16 oz</p> <p>Operating temperature range from -30 °C to +50 °C from -22 °F to +122 °F</p> <p>Operating humidity up to 85% non-condensing</p>
Color	<p>Black White</p>
Complete set	<p>LifeQuality Lite Jeweller SmartBracket mounting panel 2 × CR123A battery (pre-installed) Installation kit Quick start guide</p>
Warranty	<p>24 months</p>