Tether ThermalQ

Battery or mains powered, Sigfox connected indoor temperature and humidity sensor





The Tether ThermalQ is an indoor temperature and humidity sensor that interfaces with the Tether software ecosystem to report on the quality of living, working and learning environments.

It can be powered by 6 x AA batteries and has a terminal block that can receive power from any 5V 0.5A DC supply. The ThermalQ can be mounted to a wall or a ceiling and connects to the Tether software platform via an independent Sigfox connection.

https://Tether.co.nz

Device Features





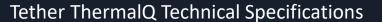
Measure Humidity



Measure Dew Point



3 Years Battery Life





| Mechanical Specifications | | |
|-----------------------------|---|--|
| Compact and Sleek design | The ThermalQ is made of a strong and sleek ABS/Polycarbonate plastic. The device is low profile and utilises a mounting bracket for ease of installation. | |
| Dimensions | 127mm x 127mm x 40mm | |
| Weight | +- 171g (without batteries) +- 307g (with batteries) | |

| | Power Specifications |
|------------------|--|
| 6 x AA Batteries | The ThermalQ uses 6 x AA size 1.5V batteries |
| Battery Life | > 3 Years |
| Mains Powered | The ThermalQ contains a terminal block that can receive power from any 5V 0.5A DC Power Supply |

| Sensor Specifications | | | | |
|-----------------------|-------|---------------|----------|--|
| Sensor | Units | Range | Accuracy | |
| Temperature | °C | –40°C to 85°C | ± 0.2°C | |
| Relative Humidity | % | 0-100% | ± 2% | |

ThermalQ Physical Installation

The Tether device has a wall mounting plate that the device securely slides down on to. The ideal mounting location is on an interior wall (above ground level) between 1.2m and 1.6m above the floor with the Tether logo positioned at the bottom right corner. The Tether ThermalQ can be easily removed from its wall mount by sliding the device up where the user will then have access to the battery compartment and a reset button.

ThermalQ Operation

Once powered the ThermalQ will work continuously and the battery level will be available on the Tether software portal to indicate to the user when a battery change is necessary. After the start up sequence, no lights should appear in normal operation.

| Connectivity Specifications | | |
|-----------------------------|---|--|
| Sigfox Communication | The ThermalQ uses a high power radio transmitter/receiver that operates on the Sigfox network, and is available in any RCZ4 Regions | |
| Sigfox Regions | RCZ4 – Australia, New Zealand, South America, Hong Kong, South East Asia | |



Reading Intervals

When the Tether ThermalQ is powered by either mains power or batteries. The following reading intervals have been carefully chosen to maximize battery life while still maintaining valuable and usable data. Reading intervals are configurable down to near real-time when plugged into mains power.

| Metric | Interval |
|-------------------|------------------|
| Temperature | 15 Min (Default) |
| Relative Humidity | 15 Min (Default) |
| Dew Point | 15 Min (Default) |