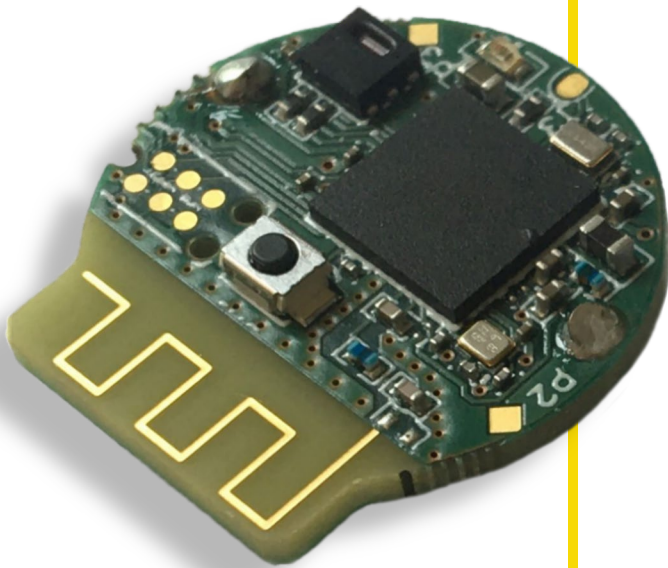


# FMod-BTH TI

v1.5 03/23/2021



## Compact Bluetooth module for secure temperature and humidity recording

Typical applications :

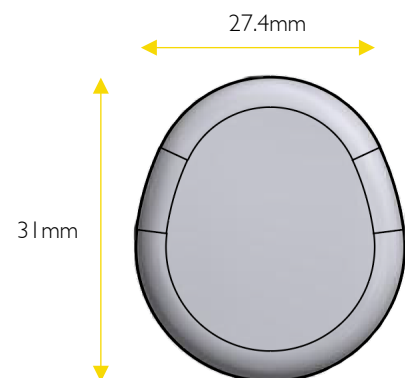
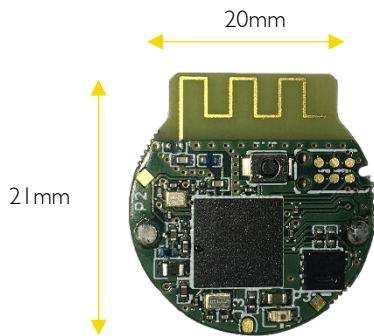
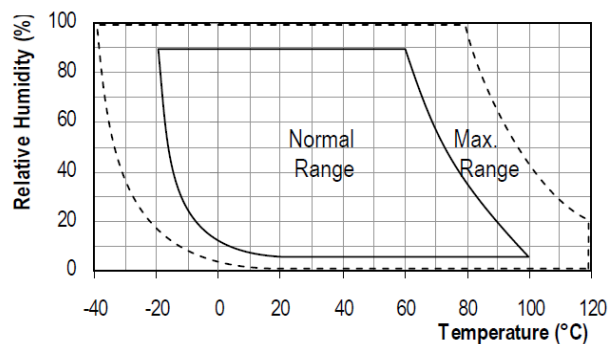
- Cold chain monitoring (food, ...)
- Transport of precious objects
- Etc.

### Humidity

- Range: typ 5 to 90% (see graph)
- Accuracy: typ  $\pm 2.0\%$
- Max  $\pm 3.0\%$  between 20 and 80% RH,  $\pm 5.0\%$  outside of this range

### Temperature

- Range: typ: -20 to 100°C (see graph)
- Accuracy: typ  $\pm 0.3^\circ\text{C}$
- Max:  $\pm 0.4^\circ\text{C}$  between 5 and 60°C,  $\pm 1.6^\circ\text{C}$  outside of this range



### Dimensions / Battery

- PCB diameter: 20mm
- PCB height: Diam + 1mm
- Thickness: 6.7mm without the box
- Button cell: CR1632

### Autonomy / Consumption

Consumption :

- $\sim 7\mu\text{A}$  in standby (with an ad every 10 seconds)
- + 50uAs for each measurement

Autonomy (with a 130mAh battery) :

- 76 days with one measurement per second
- 360 days with one measurement / 10 seconds
- 550 days with one measurement/minute

Amount of recordable values

(Temperature on 11bit, res  $0.09^\circ\text{C}$  / Humidity on 11bit, res 0.06%) :

- 174'000 Temperature / Humidity measurements
- ➔ Autonomy of 120 days with one measurement per minute

### Communication

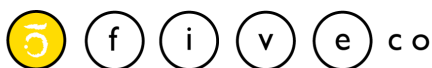
Bluetooth 5 LE

### Application

Secure application for recording temperature and relative humidity data

### For more information

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