



## TECHNICAL DATASHEET

### General

- Microcontroller: Kinetis L ARM Cortex M0+ 32 bits
- Battery: LiPo-350mAh
- Autonomy: 24 hours ; charge mode: USB
- Silicon band medical grade
- User Interface: 2 buttons, 4 leds
- Weight: 38g
- Overall dimensions: 238.8 x 30 x 17.2mm

### Bluetooth Communication

- BLE 4.0 Classe 2

### Flash Memory

- 6 hours data recording on full log mode.
- stream mode operates a live data transfer to the mobile App

### Mouvements

- 3 axis Accelerometer
- Measurement range: +/-8g
- ADC resolution: 12 bits

### Skin Temperature

- Measurement range: 20°C to 50°C, +/-0,3°C
- Sampling Frequency: 20Hz
- ADC resolution: 16 bits

### Electrodermal Activity (EDA)

- 2 Ag/AgCl electrodes
- Measurement range: 0,01uS to 100uS, +/- 7,5% max.
- Sampling Frequency: 20Hz
- Frequency range: DC to 7,5Hz
- DC exosomatic measurement at 0,5V
- ADC resolution: 16 bits

### Heart Rate (HR, IBI)

- Green LED Photoplethysmograph
- Sampling Frequency: 50Hz - 100Hz
- ADC resolution: 24 bits

### Embedded Processing

- Calibration
- EDA mouvement artefact removal
- EDA decomposition and peaks detection
- HRV, IBI
- Emotional & Cognitive Indicators real time calculation

### IHM

- Blue LED: BLE connection
- Green LED: USB charge connection
- Orange LED: charging
- Red LED: Low Battery
- + et - buttons