

TELTOHEART

Smart wristband for medical purpose with an exceptional set of features and design which can record 6-lead electrocardiogram and continual detection of atrial fibrillation.



KEY FEATURES AND VALUES



MEDICAL INSTITUTION

- ◆ The possibility to offer new telemedicine services remotely
- ◆ The possibility to increase the number of customers/patients
- ◆ API for integration to existing software/platform
- ◆ Patient history and real-time medical data
- ◆ Directly communication with customer/patients

DISTRIBUTOR

- ◆ Easy management of all clients
- ◆ Remote device diagnostic and FOTA
- ◆ Billing system



END USER

- ◆ The possibility to perform an electrocardiogram at home
- ◆ Real-time notification of Atrial fibrillation detection
- ◆ History of medical and health data
- ◆ Remote sharing of medical and health data with the doctor
- ◆ The possibility to get diagnostic from the doctor

KEY FEATURES AND VALUES



FEATURE	COMING SOON
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Man-down detection	✓
Physical activity tracking	✓
Medication reminder	✓
SpO2	✓

 **6-lead ECG**

BODY

Dimensions (Width x Length x Height) in mm:	40.5 (1.6") x 47 (1.9") x 14.7 (0.6")
Weight:	52 g
Chip:	nRF5340 2x ARM Cortex M33 cores for application and network
Platform (OS):	Zephyr RTOS

DISPLAY

Brightness:	250 NITS
Resolution:	240 x 240 px
Type:	LCD TFT
Size:	1.3"
Cover lens:	Corning gorilla glass 3
Surface hardness:	>8 H
Display area:	547.56 sq mm

TELTOHEART MEMORY

Capacity:	128 Mb
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CONNECTIVITY

Bluetooth:	5.3
Remote access:	Cloud

FEATURES

- ECG sensors for electrocardiogram
- PPG sensors for AFib detection
- Heart rate monitoring
- Low/High heart rate
- Cloud-based firmware updates, configuration app (Bluetooth)
- Water resistant 1 m (for 30 minutes)
- Protection level against access to hazardous parts and ingress of solid objects: IP 67

POWER SUPPLY

Build-in rechargeable Li-Po battery (not replaceable by the user):	410 mAh 1.56 Wh
Charging voltage:	5 V
Operating voltage:	• Internal Battery 3.8 V • External power supply 5 V
Max. Input current:	0.5 A

SENSORS AND COMPONENTS

- Accelerometer
- Gyroscope

BUTTONS

One (Turn on, Restart, Back)

STRAPS

The wristband with an electrode is made of silicone rubber with an integrated stainless-steel electrode

Strap material: Silicone

Strap sizes • S • M

SUPPORTED PERIPHERALS

Accessories: TelloHeart charging dock

Compatibility with other manufacturer accessories:

- Any CE marked wall charger with 5 V/1A output and USB type-A connector
- Any CE certified USB-A to USB-C cable
- Any smartphone operating on Android OS version 10 or above with Google play store service.
- Any smartphone using iOS version 14 or above

Compatibility with MRI or CT was not checked and use of device in MRI or CT environment is prohibited

Bluetooth compatibility: Devices that use Bluetooth v5.0 in 2.4 GHz (2.402 – 2.480 GHz) band and SMP protocol are compatible with the device

CONDITIONS FOR USE

Operation temperature range: -10 °C ~ +45 °C

Charging temperature range: 0 ~ +45°C

Storage temperature range:

- 1 Month: -20 ~ +35 °C
- 6 Months: -20 ~ 30 °C

PPG/ECG MEASUREMENTS SPECIFICATIONS

PPG features Continuous heart rate and atrial fibrillation monitoring

ECG features Electrocardiogram (ECG) measurement: 6 leads.

ECG electrode location Bottom surface, top upper surface, wrist band.

ECG and electrodes Lead I and Lead III (measured). Lead II and augmented aVL, aVR, aVF (calculated).

ATRIAL FIBRILLATION

Measurement method Non-invasive

Technology Bio-optical (photoplethysmography, PPG), 6-lead electrocardiography (ECG).

CERTIFICATES

Approved CE/RED, UKCA, FCC, IC

Pending MDR FDA