Apple Watch Series 4 Aluminium 40mm LTE model (GPS + Cellular)

* Bigger Screen & redesign of the utilized hardware components 🡪 new speakers, a set of new more accurate sensors, better reception through usage of ceramic
* Measurement of heartrate and rhythm very accurate (new ECG feature on bottom and digital crown included) using electrical heart sensor and checking atrial fibrillation (AFib), form of irregular rhythm (especially detection of low heartrate & regular heartrates)
* Fall and hurt yourself 🡪 not responding from 2 – 10 min 🡪 calling emergency services & contact of your emergency contacts
* Sending a pdf to doctor possible
* Checking pulses to obtain heart rate and check whether upper and lower chambers are in rhythm
* Bluetooth 5.0
* Improvement in terms of speed
* Relative good battery lifetime 🡪 but still regular charging required





Click on the icons to see actual usage!

Further notes:

* **Kardia**
* Separate sensor that you can carry around to conduct accurate heart monitoring 🡪 creates an ECG record on the go & works in combination with Kardia app
* 98 % reliable
* <https://damoastore.co.kr/mall/view/goodsNo/10297911?NaPm=ct%3Djtz1upg0%7Cci%3Deba86c4b11074d5014ab6cab51a1b01f0e8f3029%7Ctr%3Dslsl%7Csn%3D302513%7Chk%3D41d69934e0d9011a1550011ec583938974967c9e>
* **Apple Smartwatch 4 series**
* Putting finger and pressing it on digital crown (sensor pad included) (for 30 seconds) to measure heart rhythm/heartbeat pattern
* Maybe notify user through message to do so to initiate the ECG functionality
* Capable of 97 % accuracy to detect irregular heart rhythms outperform Kardia Band
* Backed up by FDA & Stanford University 🡪 declared device to be safe & accurate
* Apple Watch most favorable error rate & Samsung Gear least favorable error rate
* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5491979/>
* **Garmin models & Fitbit models**
* Do not score well & can be inaccurate due to effects of environment and size that do not fit users properly
* **Customizable Smartwatch**
* <https://www.chooseblocks.com/> (modified Android version)