

HR Sensor	Low power (relative to others)	Reliability level at wrist
Dry electrode (ECG) [3][4]	Yes	Medium
IR receiver/transmitter (PPG) [5]	No	Low
Wireless Communication Method	Low power (relative to other methods)	Max data transfer speed (actual)
Bluetooth [6]	No	2 Mb/s
Bluetooth LE [6]	Yes	100 kb/s
Wifi	No	600 Mb/s
NFC	Yes	424 KP/s
Zigbee 2.4 Ghz	No	250 kb/s
Battery Type	Weight	Density
Lithium coin cell [7]	Light	High
Alkaline	Standard	Medium
Nickel Metal Hydride	Standard	High
Lithium-Ion & Lithium Polymer [8][13]	Ultra-light	High
Display	Voltage	Current
Nokia 5110/3110 monochrome LCD [9]	3.3v	10mA
TFT Display [10]	5v	120mA
E-ink Display	15v or 5v	.05 uA / cm ²
OLED Breakout Board [11][12]	3.3v	unknown
Mobile Device to Connect With	Software tools available	Hardware tools available
iPhone (iOS)	Yes	Yes
iPad (IOS)	Yes	Yes
Phone (Android)	Yes	Yes
Tablet (Andoid)	Yes	Yes
Windows phone (Windows 8)	Yes	No
Windows table (Windows 8)	Yes	No
Wearable fitness devices	Heart rate sensor	Motion tracking sensor
FitBit Force [14]	No	Yes
Fuel Band[15]	No	Yes
Jawbone [14]	No	Yes

Wahoo Blue HR Strap[14]	Electrode	No
Smart Watches	Heart rate sensor	Motion tracking sensor
Pebble [16]	No	No
Sony smartwatch [17]	No	No
Mio Alpha [18]	IR sensor	No
Basis B1 [B4]	IR sensor	Yes
Casio G-Shock GB-6900 [B5]	No	No
Citizen Eco-drive Proximity [B10]	No	No
WIMM One [B8]	No	No

Blood oxygen level data available	Firm contact with skin needed	Susceptible to interference			
No	No	Yes			
Yes	Yes	Yes			
Can be powered by coin cell	Easily affected by interference	Range	Connection setup speed	Low latency	Local system density
No	No	Up to 1000m	Weak	Strong	Strong
Yes	No	Up to 250m	Strong	Strong	Strong
No	No	Up to 92m	Weak	Strong	Strong
Yes	No	Less than 11 cm	Strong	Strong	Strong
yes	Yes	up to 100m	Strong	Strong	Strong
Size	Cost	Voltage	Stackable	Reusable	Current
Small	Low	High	Yes	No	Low
Standard	Low	High	No	No	High
Standard	Low	High	No	Yes	High
Small	High	High	No	Yes	High
Display driver	I/O pins needed	Cost	Size	Resolution (pixels)	
PCD8544	3 to 5	\$10	1.5" diag	84x48 mono	
NTSC/PAL	unknown	\$40	1.5" diag	160x240 RGB	
integrated driver	unknown	unknown	varies	varies	
SSD1331	4 wire SPI	\$30	0.96" diag	96x64 RGB	
Familiar with device	Portable				
Yes	Yes				
yes	No				
Yes	Yes				
Yes	No				
No	Yes				
No	No				
Display type	Calorie info	Sleep info	Steps	Smart phone app	Cost
OLED	Yes	Yes	Yes	Yes	\$130
Color LEDs	Yes	Yes	Yes	Yes	\$100
two LEDs	Yes	Yes	Yes	Yes	\$99

None	Yes	No	No	Yes	\$70
Display type	Cost	iPhone integration	Android integration	Wireless connectivity	Rechargeable
B&W LCD	\$150	Yes	Yes	Bluetooth	Yes
OLED	\$150	No	Yes	Bluetooth	Yes
LCD	\$200	No	Yes	Bluetooth	Yes
LCD	\$199	Yes	Yes	Bluetooth	Yes
LED	\$180	Yes	Yes	Bluetooth	No
Dial	\$345	Yes	No	Bluetooth	Solar powered
LCD	\$200	No	Yes	BT & Wi-Fi	Yes

[illegible]

No		
Water resistant	Touch Screen	Battery Life
Yes	No	7 days
No	Yes	3-4 days
Yes	No	8-10 hours
Yes	No	3-4 days
Yes	No	2 years
Yes	No	N/A
Yes	Yes	2 days