

Brand

URL

Application

Material

Function

Type of sensor

Measures up to

Accuracy

Wired

Wireless

Protocol

Interface

Programmable

Development Software

available

Data available

Industry Grade

Price



27.16kg
37.68kg
32.31kg



Oriori

<https://www.orioritech.com/shop/oriori-ball>

Fun, toy, but usable for more serious applications
when calibrated

Silicon

Force measurement of handstrength

Force/strength

60kg

Reasonably accurate(5 to 10% off)

No

Yes(BLE4)

Bluetooth 4

From USB to software

Maybe

No

Possibly

No, but sturdy through material

\$30 - \$50



K-Invent

<https://www.k-invent.com/k-force-grip/>

Fitness/ Medical application/hand strength apparatus

Silicon

Force measurement of hand strength

Force/strength

70-90kg

Accurate and calibrated (less than 3%)

No

Yes (BLE4)

Bluetooth 4

Provided by software

Yes

Yes

Yes

Yes

Forsentek

http://www.forsentek.com/prodetail_266.html

Medical- Fitness application/hand strength capacity

Aluminium casing

Force measurement of hand strength

Force/strength

5 - 50kilo

Accurate and calibrated (less than 3% + or - difference)

Yes

No

Serial to USB, analog output, need A/D converter

Data from the USB port

Yes

No

Yes

Yes

\$300

\$50 to \$80, only for the sensor



Vernier

<https://www.vernier.com/products/sensors>,

Fitness application/hand strength apparatus

Soft plastic

Force measurement of hand and
finger strength

Force/strength

0 - 90kilo

Accurate (less than 5% + or - difference)

Yes (USB)

No

Serial to USB

Provided by software

Yes

Yes

Yes

No, for test use, research & study

\$150



Vernier

<https://www.vernier.com/products/sensors/ekg-sensors/ekg-bta/>

Fitness application/hand strength apparatus

Plastic

Muscle tension through electro

Muscle tension(EKG, EMG)

EKG/EMG tables tension measurement

Accurate(less than 5% + or - difference)

Yes(USB)

No

Serial to USB

Provided by software

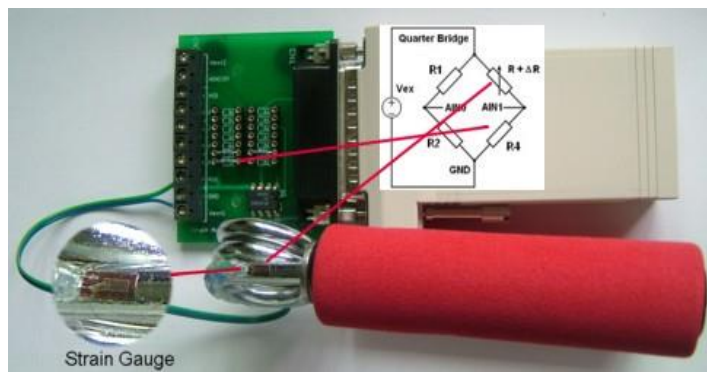
Yes

Yes

Yes

No, for test use, research & study

\$200



Self assembly from components, no soldering
<http://emant.com/80100.page>

Fitness application/hand strength apparatus

Silicon grip

Force measurement of hand strength

Force/strength

30kg

Accurate (less than 5% + or - difference)

Yes (USB)

No

Serial to USB

Code examples available

Yes

Yes

Yes

No

About \$200 total BOM cost



Fitbit Ionic

<https://dev.fitbit.com/>

Fitness and possibly medical applications

Metal, silicon wristband

Several sensors, temperature, heart rate, blood pressure, saturation

Several

NA

Accurate (less than 5% off)

Yes, USB

Yes, Bluetooth 5

Depending on connection

SDK/API and cloud service available

Yes

Yes

Yes

No, but very durable

About \$200