

Firstbeat Bodyguard 3 With Firstbeat Sports Device for Clinical Grade ECG-based HRV Monitoring

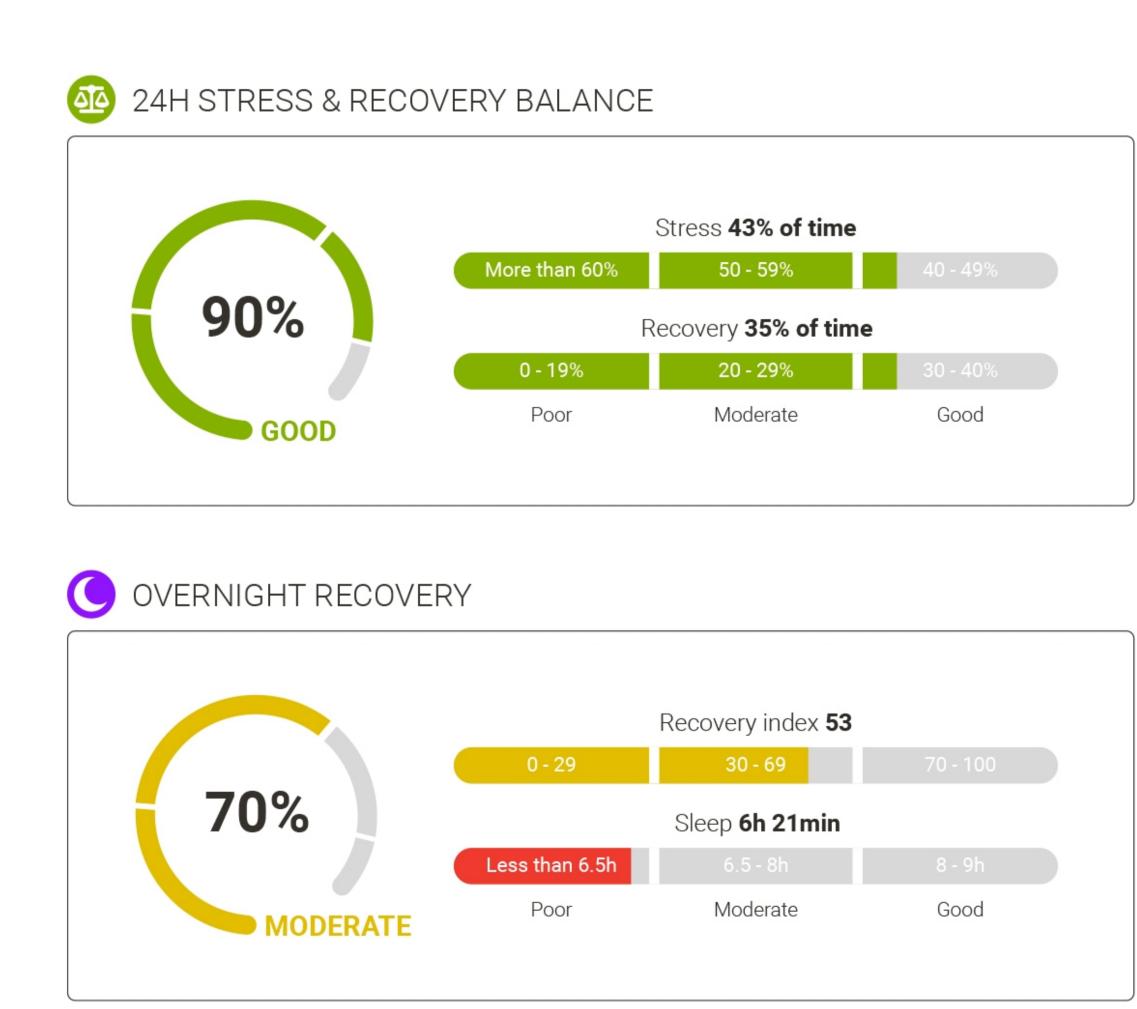


The **Firstbeat Bodyguard 3** is a personal measurement device used in **Firstbeat Sports** for observing an athletes' recovery and monitoring stress levels over a full 24-hour cycle, including sleep. It measures motion tracking data and heart rate to the nearest millisecond – more precisely than is possible with any other technology.

Firstbeat Bodyguard 3 sensor and electrodes enable ECG-based beat-to-beat heart rate data, the "gold standard" for heart rate variability (HRV) monitoring used in clinical settings.

The technology is reliable for all users, both during rest and in motion. Unlike optical sensors, accuracy is not dependent on, e.g., skin pigment or temperature, anatomy, or motion state.

From the accurate data, we confidently assess the physiological reactions.





Firstbeat Bodyguard 3 | Technical Specifications

Device for Clinical Grade ECG-based HRV Monitoring

RR-interval Measurement

BG3 measures beat-by-beat intervals as time between consecutive R-peaks in ECG. Measurement resolution: 1ms.

1-Channel ECG

- 256 Hz
- 18-bit per sample
- Motion noise suppression with HP 4.4Hz
 → optimal for wearable rhythm monitoring

Data Export*

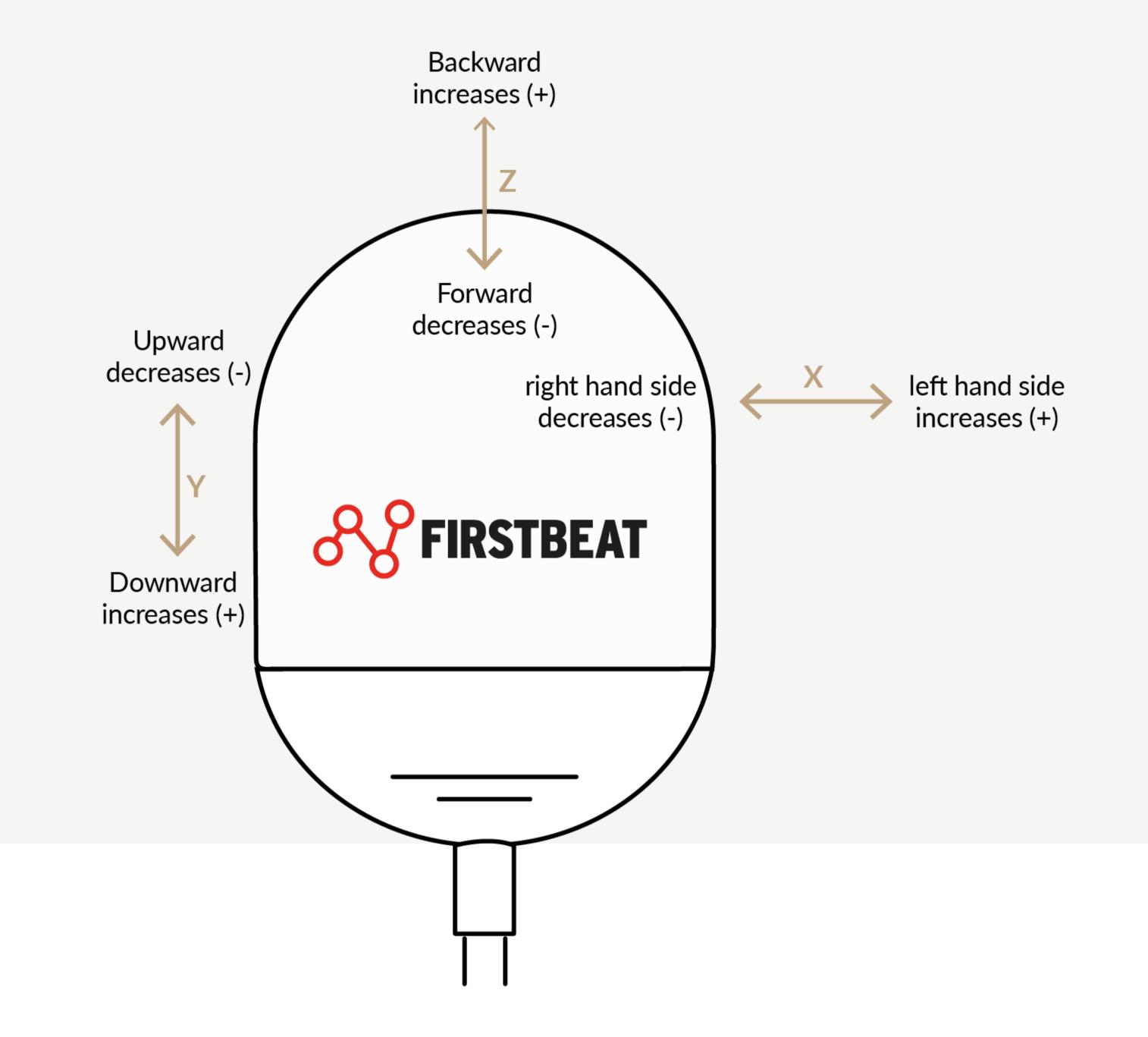
to CSV (ECG, ACC, RRI) format.

Accelerometer

Accelerometer provides measurement data for three (3) dimensions (X, Y, Z). When device is attached to a person to correct position, the dimensions are as follows (see the picture on right):

- Dimension X measures acceleration right and left.
- Dimension Y measures acceleration up and down.
- Dimension Z measures acceleration forward and backward.

3D ACC: 25.6Hz, +-8G, 16- bit integer per channel, 1G corresponds to 1024 LSB



Battery and Charging Procedures

Battery life: up to 7 days in a continuous 24/7 measurement, 6 months in standby mode **Charging time from empty to full:** approximately 75 minutes

Measurement and Storage

Measurement temperature: +5 - +45 C° Storage temperature: -20 - +60 C°

Storage capacity: Up to 36 hours of full RAW data (ECG, ACC, RRI). Up to one month of RRI recording only.

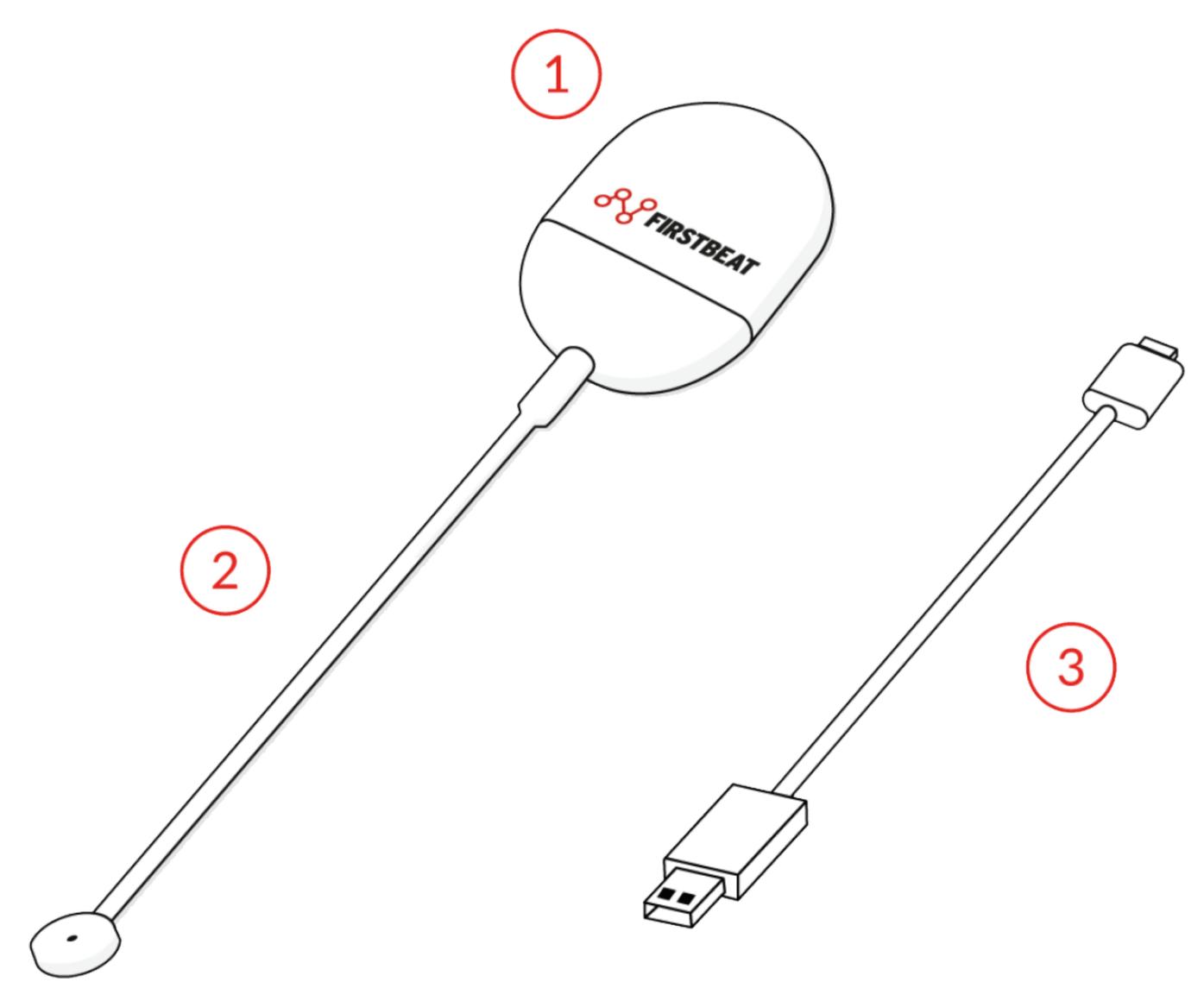
IP Class Information

IP class during measurement: IP54

Dimension

Weight: 26 grams

Size: 54mm x 38mm x 7,7mm



1 Firstbeat BG3 recorder | 2 Firstbeat BG3 electrode cable | 3 USB charging cable