

# Sleeptracker<sup>®</sup>

Better Sleep



## CONTACT

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## Reviewer's Guide

### Introducing the Sleeptracker<sup>®</sup> System: Make Your Bed a Smart Bed

The Sleeptracker<sup>®</sup> system is the latest technology breakthrough from Fullpower Technologies, the leading Silicon Valley sleep-science company. Fullpower has partnered with the best in the bedding industry to offer the first cloud-based, non-invasive IoT sleep optimization solution powered by artificial intelligence (AI) and integrated into the smart home. The "Sleeptracker<sup>®</sup> Artificial Intelligence Engine" (SAIE) patented technology powers the end-to-end system and enables the AI Sleep Coach to deliver unmatched personalized tips and insights to improve sleep every night, as well as an unprecedented level of accuracy and performance compared to other sleep monitoring solutions. The Fullpower IP portfolio includes over 125 patents and covers all aspects of the Sleeptracker<sup>®</sup> platform, including the SAIE.

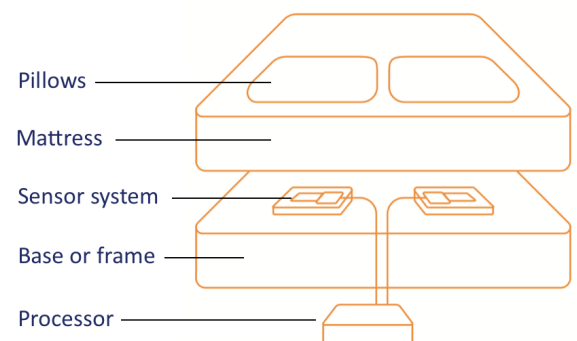
#### Sleeptracker<sup>®</sup> System Competitive Advantages:

Versus other sensor-based solutions (like Hello Sense): The Sleeptracker<sup>®</sup> system is the only completely non-invasive solution, invisible to the user once installed under the bed, capable of providing accurate detailed sleep analysis including REM sleep, deep sleep, and light sleep for one or two sleepers simultaneously. Furthermore, the AI Sleep Coach delivers unmatched personalized tips and insights to improve sleep every night.

Versus wrist-worn wearable devices (like Fitbit Alta): Unlike wrist-worn wearables that are invasive, need to be recharged, and can't monitor the sleeper's respiration (respiration is the most important vital sign when sleeping, including snoring and apnea) the Sleeptracker<sup>®</sup> system is completely non-invasive, and it accurately monitors both respiration and heart rate throughout the night to deliver a complete analysis of sleep. Furthermore, the AI Sleep Coach delivers unmatched personalized tips and insights to improve sleep every night.

#### How the Sleeptracker<sup>®</sup> Solution Makes Your Bed a Smart Bed:

- The Sleeptracker<sup>®</sup> system will work with any mattress, foundation (box spring, slat bed, etc), and any bedding, and it makes your bed a smart bed.
- Sensors are installed once between the mattress and the foundation under each sleeper's side of the bed, and connect to the small Sleeptracker<sup>®</sup> processor.
- The processor plugs directly into a wall outlet and integrates into the smart home IoT network, just like Amazon Echo.
- The Sleeptracker<sup>®</sup> artificial intelligence powered cloud monitors and analyzes your sleep throughout the night.
- The Sleeptracker<sup>®</sup> iOS/Android apps are your dashboard, displaying your sleep analysis by connecting to the Sleeptracker<sup>®</sup> cloud automatically, as well as AI Sleep Coach personalized tips and insights.
- The auto sleep feature detects when you fall asleep and wake up, so all you need to do is go to bed and your detailed sleep report and personalized insights are delivered automatically in the morning after you wake up.



## Features and Benefits:

- The AI Sleep Coach delivers unmatched personalized tips and insights to improve sleep every night.
- Because of its advanced artificial intelligence engine, the Sleeptracker® monitor is the only device in its class that can monitor the sleep patterns of two individual sleepers simultaneously.
- The Sleeptracker® monitor's patented system monitors both respiration and heart rate accurately for deeper sleep analysis (wrist-worn wearables can't monitor the essential respiration vital sign and are notoriously inaccurate for continuous heart rate monitoring). The Sleeptracker® monitor is at least 90 percent accurate for breathing and heart rate for the vast majority of the population.\*\*
- While wrist-worn wearables like Fitbit must be worn on the wrist (which can lead to rashes) and charged regularly, the Sleeptracker® monitor is completely non-invasive and never needs to be recharged.
- The Sleeptracker® monitor integrates with Amazon Echo – enabling system controls, sleep reports, and soon allowing control of other smart home elements such as thermostats, lights, music, alarm systems, door locks and more from a single device.
- Users are provided with a minute-by-minute snapshot of their journey through each sleep cycle: light sleep, deep sleep and REM.
- The powerful Sleeptracker® cloud-based artificial intelligence engine is continually learning and improving algorithms, and it provides users with constructive feedback and relevant insights related to their sleep data.
- Premium Services: the Sleeptracker® monitor offers two levels of premium services, free and advanced. Over time, the Sleeptracker® monitor will offer more services focused on leveraging the SAIE for helping people sleep better and for example implement behavioral modification strategies. For the Q2 2017 launch, premium services are as follows:

Sleeptracker® Premium Feature/Benefits	Free	Advanced with subscription
AI Sleep Coach personalized insights	✓	✓
AI community insights	✓	✓
Wellness holistic sleep improvement tips	✓	✓
Daily sleep analysis reports	✓	Extended daily customized analysis reports
Monthly sleep analysis reports	No	Yes
Unlimited cloud sleep data storage	Rolling 3 months	Unlimited with active subscription, ability to track long term trends

## What the Sleeptracker® artificial intelligence engine provides in iOS/Android companion apps:

- **Complete sleep analysis graphs**
- **The AI Sleep Coach**, powered by the SAIE, utilizes a variety of sleep variables to generate a Personal Sleep Score that tracks improvement over time and provides effective, easy-to-implement, personal sleep tips based on a comprehensive analysis of individual sleep patterns
- **The Sleep Cycle Alarm** detects a light stage of sleep to wake the user at the ideal time in their sleep cycle
- **Advanced Sleep Analysis and Reporting\*\*\*** reports summaries of daily, weekly, and monthly trends and averages to offer long-term patterns and insights to the user
- **Long-Term Cloud Storage\*\*\*** stores sleep data for up to three months on the cloud; subscribers to the Sleeptracker® Advanced Premium Services can enjoy unlimited sleep history for as long as they maintain their subscription



The Sleeptracker® monitor is currently available via [amazon.com](https://www.amazon.com) for \$199 for a two sleeper solution. A single sleeper solution will be available nationwide in Q3 2017 for \$149, and a sensor for a second sleeper may be added for an additional \$99. For additional information and to find a retailer, visit [www.Sleeptracker.com](https://www.Sleeptracker.com).

## How to set up your Sleeptracker® monitor

Please visit [sleeptracker.com/setup](https://www.sleeptracker.com/setup).

<b>The Sleeptracker® monitor competitive analysis</b>	Sleeptracker® monitor	Sleep Number 360	Hello/Sense	Beddit	Fitbit Surge
Make your bed a smart bed	Yes	No (requires \$4,000 mattress purchase)	No (requires two pills clipped and unclipped every day)	No (must be placed above the mattress and depends on bedding)	No (wrist-worn invasive solution)
Always on, no charging	Yes	Yes	No (each one of the pills requires battery changes)	Yes	No (needs to be recharged periodically)
Non-invasive	Yes	Yes	No (two battery-powered pills to be clipped on pillows)	No (it is above the mattress)	No (wrist-worn, can induce rashes)
Two-sleeper	Yes	Yes	Inaccurate	Inaccurate	Inaccurate
All phases of sleep	Yes	Limited	No	Limited	No
AI-powered coaching	Yes	No	No	No	No
Amazon integration	Yes	No	No	No	No
Single sleeper	<b>\$149</b>	<b>\$4,000</b>	<b>\$149</b>	<b>\$150</b>	<b>\$250</b>
Two sleeper	<b>\$199</b>	<b>\$4,000</b>	<b>\$298</b>	<b>\$300</b>	<b>\$500</b>

<b>The Sleeptracker® monitor competitive analysis</b>	Sleeptracker® monitor	Sevenhugs HugOne	RestOn Sleepace	Withings Aura	ResMed S+
Make your bed a smart bed	Yes	No (limited sleep cycle information)	No (must be placed above the mattress and depends on bedding)	No (limited sleep cycle information)	No (completely invasive)
Always on, no charging	Yes	No (requires battery changes)	No (needs to be recharged periodically)	Yes	Yes
Non-invasive	Yes	Yes	No (it is above the mattress)	No (it is above the mattress)	No (completely invasive, harmful radio waves)
Two-sleeper	Yes	Inaccurate	Inaccurate	Inaccurate	Inaccurate
All phases of sleep	Yes	No	No	No	Limited
AI-powered coaching	Yes	No	No	No	No
Amazon integration	Yes	No	No	No	No
Single sleeper	<b>\$149</b>	<b>\$179</b>	<b>\$149</b>	<b>\$300</b>	<b>\$50</b>
Two sleeper	<b>\$199</b>	<b>\$179</b>	<b>\$298</b>	<b>\$600</b>	Cannot be used with two sleepers

## Q&A

### **Q: How is this product different from other products on the market that monitor sleep?**

**A:** The AI Sleep Coach delivers unmatched personalized tips and insights to improve sleep every night.

The Sleeptracker® monitor sensors slip discreetly underneath your mattress (where you rest your head) to accurately monitor sleep without affecting your comfort throughout the night. Additionally, you never have to worry if the device is charged and ready for use as the monitor plugs directly into a standard power outlet. The Sleeptracker® monitor is completely non-invasive.

The Sleeptracker® monitor's patented system can monitor two sleepers simultaneously to an individual sleep score based on a variety of key sleep metrics – including sleep efficiency, progress toward sleep goal, how long it takes to fall asleep, how long users spend in each sleep cycle and how many times they were awake throughout the night, all specific to each individual sleeper.

And unlike wrist-worn wearable devices, the Sleeptracker® system accurately monitors both respiration and heart rate throughout the night to deliver a complete analysis of sleep.

### **Q: How can the Sleeptracker® monitor be so accurate under a mattress when others have tried and aren't accurate under the sheets? Is it better sensors?**

**A:** It's all about the Sleeptracker® AI engine that turns all night sensor data into accurate sleep analysis. The Sleeptracker® AI engine (SAIE) is the result of 10 years of development and more than a \$20 million investment. The SAIE machine learning component is continually improving the overall performance and accuracy of the system.

The Sleeptracker® system is also unique in that it offers breakthrough technology from Fullpower Technologies, the leading Silicon Valley AI/ IoT/ sleep-science company, partnered with the best in the bedding industry.

### **Q: Why can't I check my sleep in the middle of the night?**

**A:** The model in use with auto sleep in particular is that the cloud "does all the work," as the SAIE is integrated into the cloud. The ability to ask the SAIE "How much have I slept so far?" is something that is on our roadmap.

### **Q: When is this product available and where can I find it?**

**A:** The Sleeptracker® monitor is available via [amazon.com](https://amazon.com) for \$199 for a two sleeper solution. A single sleeper solution will be available nationwide in Q3 2017 for \$149. For additional information and to find a retailer, visit [www.Sleeptracker.com](https://www.Sleeptracker.com).

### **Q: Will there be a single sleeper version and two sleeper versions? How much will each cost?**

**A:** There are two SKUs: one sleeper for \$149 and two sleeper for \$199. If a one sleeper customer wants to add two sleeper functionality, it's \$99.

### **Q: What other devices can I integrate this Sleeptracker® monitor with?**

**A:** The current version of the Sleeptracker® app integrates with Amazon Echo, and soon it will allow control of other smart home elements such as thermostats, lights, music, alarm systems, door locks and more, all from a single device.

### **Q: What inputs does the Sleeptracker® monitor use to analyze your sleep?**

**A:** In addition to factors that contribute to the sleep score, the Sleeptracker® monitor actively measures your respiration rate, heart rate and motion to analyze your sleep stages throughout the night and automatically provide personalized tips and techniques when you wake up.

**Q: What goes in to calculating my sleep score?**

**A:** There are roughly five different factors that work together to calculate your sleep score. To arrive at this number, the Sleeptracker® monitor's sensors assesses the time it takes to fall asleep, sleep efficiency (the percentage of time in bed actually spent in one of the four stages of sleep), how you are sleeping compared to the total sleep goal you set, how many times you are awake during the night, the amount of time spent in each sleep cycle, as well as how you perform compared to similar people in the community

**Q: Can the Sleeptracker® monitor distinguish between when someone is reading or watching television in bed vs. trying to fall asleep?**

**A:** Yes, the Sleeptracker® AI Engine can differentiate between when a user is awake in bed and when they are actually entering early stages of sleep. To do so, the SAIE uses machine learned algorithms that take into account the breathing rate, heart rate and micro motion sensed by the Sleeptracker® system.

**Q: How is my sleep information being used?**

**A:** Your sleep information is used to inform you of your sleep patterns and to provide personalized coaching on how to get a better night's sleep.

**Q: Is my personal data being shared?**

**A:** The Sleeptracker® platform is safe and secure. Demographic information and vitals are stored anonymously and shared privately only with you. The Sleeptracker® monitor is certified with U.S., European and Asian privacy shield regulations. Your information is private to you, safe and secure. The Sleeptracker® monitor privacy is audited periodically by independent certified organizations.

**Q: How long is my data stored?**

**A:** Data recorded by the Sleeptracker® monitor stored in the Sleeptracker® cloud for up to six months. Sleeptracker® users who have a subscription to the Advanced Premium Service can enjoy unlimited sleep history for as long as they maintain their subscription.

**Q: Where should I place the sensors to ensure the most accurate monitoring?**

**A:** For the most accurate reading, place the sensor underneath your mattress where you rest your head. This will pick up your breathing rate and heart rate most effectively. Refer to the narrated setup video in the app for a visual demonstration.

**Q: Do I need to manually start and stop my sleep recordings? What if I forget?**

**A:** The auto sleep feature will automatically record your sleep when you are in bed for over two hours and actually fall asleep. These automatic sleep recordings will be available about one hour after everyone leaves the bed, at which point you'll receive a coaching notification that the recording is ready. If you choose not to enable auto sleep and forget to initiate a sleep recording, you can specify your bedtime and rise time to create a new recording from a previous night's data.

**Q: What if my pet sleeps with me? Will that interfere with the data?**

**A:** Pets on the bed will not interfere with your sleep data. The Sleeptracker® monitor's sensors can distinguish between the two types of heart rates.

**Q: What is the alarm function of the Sleeptracker® smartphone app?**

**A:** The Sleeptracker® app offers a Sleep Cycle Alarm for which the Sleeptracker® monitor detects a light stage of sleep to wake up users at the ideal time in their sleep cycle – within 30 minutes of time when you are hoping to get out of bed.

**Q: How much does the Sleeptracker® Advanced Premium Service cost?**

**A:** The Advanced Premium Service is recommended to get the most out of your smart bed. First time subscribers receive a free 30-day trial and can enjoy its benefits for \$29.99 per year thereafter.

**Q: What advanced features are included with the Sleeptracker® Advanced Premium Service?**

**A:** The Advanced Premium Service offers additional features designed to help users monitor and analyze long-term trends. This includes storing sleep data for as long as the subscription is maintained and thorough daily reporting with trends and advanced statistics (as well as quarterly and yearly summaries), and offering new benefits as the Sleeptracker® community continues to grow.

\* Results may vary depending on type of mattress and foundation used

\*\* Results may vary

\*\*\* Requires a subscription to Sleeptracker® Advanced Premium Service, \$29.99 per year