# **BUDGEE ROBOT**



Budgee is a personal assistant robot designed by Five Elements Robotics to carry items for you. It follows a user-worn or carried ultrasonic transceiver and can carry up to 50 pounds. Budgee can be folded for easy storage and transportation, and it communicates with its user via a smartphone or tablet.

## Key Features:

- Carrying Capacity: Budgee can carry loads up to 50 lbs (23 kg).
- Following Mechanism: It uses sonar sensors to track a transceiver worn by the user.
- **Communication:** Budgee communicates with the user via a smartphone or tablet, providing status updates.
- **Portability:** It folds up for easy storage and transportation, with dimensions of 18" x 20" x 12" when folded.
- **Friendly Interface:** Budgee is designed to be friendly, providing status updates and greetings.

#### How it works:

- 1. You attach a small ultrasonic transceiver (like a pinger) to your clothing or bag.
- 2. Budgee detects the signal from the transceiver and follows you.
- 3. You can communicate with Budgee through an app on your phone, receiving status updates and potentially adjusting settings.
- 4. Budgee can carry your belongings in its basket, which has a locking mechanism.
- 5. It also includes sensors to avoid obstacles and detect falls.

# **SLEEPIQ KIDS BED**



Sleep Number introduced the SleepIQ Kids bed at the International Consumer Electronics Show (CES). The kid bed was selected as an Honoree in the 2015 CES Innovations Awards in the home appliances category.

According to a national Sleep Number sleep survey, a majority of parents find it difficult to ensure their kids get enough quality sleep each night. Almost 80% say sleep impacts their child's performance in school, and 68% say it affects their child's extracurricular activities. The SleepIQ Kids bed helps parents learn about their kids' sleep and how it impacts their day, and gives parents and kids the tools they need to improve their sleep.

"Every parent can relate to the nightly family bedtime ritual and wanting it to be a meaningful time to connect with their children. As parents know, bedtime doesn't always turn out that way," says Annie Bloomquist, senior vice president and chief product officer, Sleep Number, in a release. "The SleepIQ Kids bed turns bedtime into quality time, making it a fun, enjoyable experience. It shows parents and kids how to achieve great sleep habits with smart features that help guide and coach, giving kids a great night's sleep tonight to be their best tomorrow."

The SleepIQ Kids bed features eight smart solutions that improve sleep for both parents and children:

- The SleepIQ technology sleep dashboard lets parents see how the whole family is sleeping.
- The bed adjusts and grows with kids. They can adjust the firmness of their bed for comfort and support—their Sleep Number® setting.
- Head-tilt feature is for reading in bed or comforting stuffy heads.
- Alerts parents when their child is out of bed or restless.
- Make bedtime fun again with rewards for good sleep.
- Soft under-bed light guides children when they get up during the night.
- Sleepyheads rest easy with a fearless monster detector.

The SleepIQ technology monitors presence in bed, average breathing, average heart rate, and movement, using a full-body algorithm to assess quality of sleep, assigning a SleepIQ score for each night's sleep.

Parents and kids can monitor routines that affect sleep, such as exercise, caffeine, and screen time; learn their child's individual level of comfort and support of their bed (Sleep Number setting); and make adjustments to give their kids quality sleep, helping them develop healthy sleep routines now and for life.

Four- to six-year-olds need help with their sleep routines, but by age seven to nine, kids start managing their own sleep and using smart devices. They can use the SleepIQ technology to coach and encourage them, the manufacturer says. Around ages 10 to 12, kids become more independent and have more to manage with homework, exams, and other activities. At this age, they can use the SleepIQ technology to help them manage their own sleep and SleepIQ score.

# **Bionic Bird**



The Bionic Bird is a smartphone-controlled, biomimetic ornithopter, meaning it flies by flapping its wings like a bird. It is designed to mimic the flight of a bird and can be controlled via a smartphone app. The Bionic Bird has a range of over 100 meters and can attract real birds, who often mistake it for one of their own.

#### Key Details:

# Flapping Wing Flight:

Unlike traditional drones, the Bionic Bird achieves flight by flapping its wings, mimicking the natural movement of birds.

## • Smartphone Control:

The bird is controlled via a dedicated smartphone app, allowing for intuitive control and flight maneuvers.

## Biomimicry:

The design is inspired by the mechanics of bird flight, with a focus on replicating natural movements and behaviors.

## Range and Attraction:

It has a range of over 100 meters and is known for attracting real birds, who often approach it as if it were a fellow bird.