Professional sleep and activity monitoring solutions

Actiwatch monitoring systems
Valid and accurate data collection couldn’t be easier

Our scientifically-valid Actiwatch systems are designed to provide accurate and objective activity, sleep, wake, and light-exposure data. Due to the many advantages of Actiwatch technology, thousands of people around the world have worn our devices day in and day out in a multitude of sleep labs, research programs, and clinical trials.

**The Actiwatch advantage:**
Compact, reliable devices that are easy to implement
- Small size, comfortable, and waterproof
- Easy to wear for days, weeks, and even months
- Data is recorded 24/7 to help you obtain real-world insights into subjects’ sleep/wake patterns

**Valuable endpoints for a variety of applications**
- Collect up to nine different parameters (depending on model)
- Gather important outcome measures for pharma, academic research, and clinical applications
- Record valuable sleep\(^{1,2,3}\) and activity endpoints for studies in areas such as pain\(^{4,5,6,7}\), fatigue\(^{8,9}\), and depression\(^{10}\)

**Scientifically-valid technology from a leader in sleep**
- Validated against PSG gold standard for sleep measures\(^{1,2,3}\)
- Used in hundreds of studies in a variety of environments
- Used on infants through the elderly

Actiwatch devices are designed to be rugged, waterproof and worn 24/7.
Solutions for the scient

Each Actiwatch model provides different feature combinations so you can select the one that best fits your specific needs. All are comfortable, rugged, and waterproof to fit seamlessly with different lifestyles.

Actiwatch 2
Compact size is ideal for small wrists
Our simplest option for a robust device that collects activity and sleep information along with photopic light and event marker button entries for up to 30 days; great for all ages.

Features
• Three data channels – illuminance, activity, and event marking
• Waterproof case – ultrasonically welded to provide a durable seal
• Event marker – record the time of events with a single button press
• Rechargeable battery – power to support 30 days of data collection
• High-quality biocompatible materials – holds up to daily, weekly and monthly use

Sleek, comfortable band designed to help enhance patient comfort and acceptance

Integrated light sensor to allow for recording of photopic light

Lightweight and compact (only 43 x 32 x 10 mm and 16 grams)

Actiwatch 2 is lightweight and compact – ideal for children.
Activewatch Spectrum Plus collects up to seven data channels simultaneously.

**Activewatch Spectrum Plus**
**Wristwatch with advanced sensing capabilities**
Collect activity and sleep information along with multiple light measurements, event marker button entries and patient compliance over days, weeks and even months.

Activewatch Spectrum PRO can collect subjective numerical rating scale responses (e.g., pain, fatigue, depression) in real time from your subjects. These scores can be used in association with, or independently from, other questionnaires.

**Activewatch Spectrum PRO**
**Real-time subjective scoring**
Incorporates all of the features of the Activewatch Spectrum Plus and provides subjective scoring capabilities and audible and vibrational alarms. The alarms remind subjects to enter subjective scores on a pre-programmed schedule or on a manual basis. This capability adds another dimension to data collection when studying parameters such as pain and fatigue.

**Features**
- **Off-wrist detection** – software indicates when the device was not worn
- **Long-term recording** – supports months of data recording
- **Advanced light sensing** – records photopic, red, green, and blue light
- **Audible off-wrist reminder** – reminds the user to put the device back on
- **Direct USB connectivity** – enables rapid charging and data retrieval
- **Rechargeable battery** – eliminates need for battery changes
- **Subjective scoring (Activewatch Spectrum PRO only)** – record two subjective scores manually or on a programmed schedule
For more than 15 years, we have helped researchers and pharmaceutical companies around the world, as they implement actigraphy for their small and large scale studies. We take pride in helping your trials go smoothly and reducing the burden on you and your staff.

“The employees were extremely professional, but also extremely personable and I thoroughly enjoyed working with them and would love to work with them in the future.”
– H.M., Vanda Pharmaceuticals, Clinical Research

<table>
<thead>
<tr>
<th>Feature</th>
<th>Actiwatch 2</th>
<th>Actiwatch Spectrum Plus*</th>
<th>Actiwatch Spectrum PRO*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Waterproof</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Rechargeable</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Event marker</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Light sensing</td>
<td>Photopic</td>
<td>Photopic, RGB</td>
<td>Photopic, RGB</td>
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<tr>
<td>Watch face/status display</td>
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<td>X</td>
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<td>Off wrist</td>
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<td>X</td>
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<tr>
<td>Audible/vibratory score reminder</td>
<td>NA</td>
<td>NA</td>
<td>2 channels</td>
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</tbody>
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*Coming soon

Actiware software supports all Actiwatch devices

Actiware software simplifies data management, analysis and exportation to help you process data into meaningful endpoints quickly and easily. Data is displayed in an actogram format to help you identify sleep/wake periods visually. Sleep parameters are automatically quantified and displayed in statistics tables and printed reports.

Bibliography of publications available on request.